Volume 3 - HEC-1 Input/Output "Without CIP" Conditions

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

Flood Control District of Maricopa County

Registered Professional Engineer (Civil)
CERTIFICATE NO
35571
LINDA A.
POTTER
Date Signed 9/4/09
ARIZONA U.S.A.
Expires 12/31/09

Version 1.2 / September 2009
HDR Project No. 079902
FCD Contract No. 2007C031

Existing Conditions HEC-1 (MB01)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   19AUG09  TIME  09:08:36  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 756-1104              *
*                                      *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX        XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID        Flood Control District of Maricopa County
  2           ID        L303_EX_MB01 - Loop 303/ White Tanks ADMPU AHA
  3           ID        100 YEAR
  4           ID        24 Hour Storm
  5           ID        Unit Hydrograph: S-Graph
  6           ID        08/19/2009
  7           ID            FCDMC CONTRACT 2007C031
  8           ID            BY HDR ENGINEERING (#79902)
  9           ID            EXISTING CONDITIONS-AUGUST 2009
 10           ID            MAJOR BASIN 01
 11           ID            FILE NAME: EX-MB01.DAT
 12           IT       5        0       0    2000
 13           IN      15
 14           IO       3
              *DIAGRAM
              *
 15           JD   3.480  0.0001
 16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
 18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
 19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
 26           JD   3.393     5.0
 27           JD   3.306    10.0
 28           JD   3.219    20.0
 29           JD   3.132    30.0
 30           JD   3.028    60.0
 31           JD   2.965    90.0
 32           JD   2.927   120.0
              *

 33           KK     N07BASIN
 34           KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
 35           BA   0.570
 36           LG    0.35    0.38    5.40    0.23       0
 37           UI       0      84     319     594     769     794     595     407     278     187
 38           UI     132      86      57      36      21      20      21       0       0       0
 39           UI       0       0       0       0       0       0       0       0       0       0
 40           UI       0       0       0       0       0       0       0       0       0       0
 41           UI       0       0       0       0       0       0       0       0       0       0
              *

 42           KK   DN07ADIVERT
 43           KM        Divert portion through openings in Corte Bella perimeter walls
 44           DT  DN07AS     0.0     0.0
 45           DI     0.0     9.0    64.0   243.0  1000.0     0.0     0.0     0.0     0.0     0.0
 46           DQ     0.0     0.0    26.0   116.0   116.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 47           KK   DN07BDIVERT
 48           KM        Divert portion through openings in Corte Bella perimeter walls
 49           DT  DN07BS     0.0     0.0
 50           DI     0.0    11.4    22.9   152.3   289.9  1000.0     0.0     0.0     0.0     0.0
 51           DQ     0.0     0.0     4.9    69.1   127.9   127.9     0.0     0.0     0.0     0.0
              *

 52           KK   DN07CDIVERT
 53           KM        Divert portion through openings in Corte Bella perimeter walls
 54           DT  DN07CS     0.0     0.0
 55           DI     0.0    64.4   209.0   452.0  1000.0     0.0     0.0     0.0     0.0     0.0
 56           DQ     0.0     0.0    38.0   107.0   107.0     0.0     0.0     0.0     0.0     0.0
              *

 57           KK   DN07DDIVERT
 58           KM        Divert at Corte Bella
 59           DT  DN07DS     0.0     0.0
 60           DI     0.0   138.7   164.6   352.2   558.0  1000.0     0.0     0.0     0.0     0.0
 61           DQ     0.0   138.7   159.8   299.2   450.0   450.0     0.0     0.0     0.0     0.0
              *

 62           KK  N07N06ROUTE
 63           KM        Pleasant Valley Country Club Master Drainage Plan
 64           KM        by DEI dated May 17, 2001
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 65          RS      10    FLOW
 66          RC   0.035   0.035   0.035    6607  0.0045    0.00
 67          RX  100.00  120.00  140.00  152.00  156.00  168.00  183.00  198.00
 68          RY  1042.5 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1042.20
             *

 69          KK     N01BASIN
 70          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION BOUNDARY
 71          KM        GRAND AVE AND MCMICKEN DAM
 72          BA   0.345
 73          LG    0.33    0.33    4.60    0.34       1
 74          UI       0     145     559     766     560     302     161      85      46      20
 75          UI      20       0       0       0       0       0       0       0       0       0
 76          UI       0       0       0       0       0       0       0       0       0       0
 77          UI       0       0       0       0       0       0       0       0       0       0
 78          UI       0       0       0       0       0       0       0       0       0       0
             *

 79          KK    N02ABASIN
 80          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER
 81          KM        DRAINAGE PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT
 82          KM        AS-BUILT CONDITIONS AND MC MICKEN DAM
 83          BA   0.083
 84          LG    0.34    0.35    5.00    0.27       0
 85          UI       0      10      27      55      79      94      93      76      57      41
 86          UI      31      21      17      11       9       7       4       2       3       2
 87          UI       3       0       0       0       0       0       0       0       0       0
 88          UI       0       0       0       0       0       0       0       0       0       0
 89          UI       0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 90          KK  N2AN01ROUTE
 91          KM        Cross-section: cross-section from aerial
 92          KM        Manning's N Value: Natural desert wash with vegetation
 93          RS       5    FLOW
 94          RC   0.035   0.035   0.035    2386  0.0010    0.00
 95          RX  100.00  120.00  140.00  149.00  150.00  160.00  180.00  200.00
 96          RY  1000.0  999.50  999.00  997.00  997.10  999.00  999.50 1000.00
             *

 97          KK   CPN01COMBINE
 98          HC       2   0.428
             *

 99          KK  N01N02ROUTE
100          KM        Cross-section:  / Manning's N Value: Concrete channel
101          KM        10-ft bottom, with 2:1 side slopes, left and right
102          KM        Mannings N Value: clean earth, straight
103          RS       1    FLOW
104          RC   0.022   0.016   0.022    3902  0.0051    0.00
105          RX  100.00  100.10  112.00  122.00  132.00  142.00  153.90  154.00
106          RY  1300.0 1295.25 1295.00 1290.00 1290.10 1295.00 1295.25 1300.00
             *

107          KK     N02BASIN
108          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
109          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
110          BA   0.510
111          LG    0.20    0.25    5.20    0.33      21
112          UI       0     150     511     824    1102     698     371     157      71      31
113          UI      31       0       0       0       0       0       0       0       0       0
114          UI       0       0       0       0       0       0       0       0       0       0
115          UI       0       0       0       0       0       0       0       0       0       0
116          UI       0       0       0       0       0       0       0       0       0       0
             *

117          KK  DN02REDIVERT
118          KM        Sun City West Expansion Area 2
119          DT    RN02    38.4     0.0
120          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
121          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

122          KK    N03ABASIN
123          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
124          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
125          KM        MICKEN DAM
126          BA   0.065
127          LG    0.33    0.33    4.90    0.29       2
128          UI       0      11      45      81      99      90      62      40      26      18
129          UI      11       7       5       2       3       2       0       0       0       0
130          UI       0       0       0       0       0       0       0       0       0       0
131          UI       0       0       0       0       0       0       0       0       0       0
132          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

133          KK  N3AN02ROUTE
134          KM        Cross-section:  / Manning's N Value: Golf course channel
135          RS      10    FLOW
136          RC   0.025   0.025   0.025    5514  0.0054    0.00
137          RX  100.00  120.00  140.00  180.00  280.00  340.00  360.00  380.00
138          RY  1000.0  998.50  997.40  995.00  995.00  997.70  998.70 1000.00
             *

139          KK   CPN02COMBINE
140          HC       3   1.003
             *

141          KK  N02N3BROUTE
142          KM        Cross-section:  / Manning's N Value: Golf course channel
143          KM        Route is from CPN02 to CPN03B
144          RS       3    FLOW
145          RC   0.025   0.025   0.025    3992  0.0020    0.00
146          RX  100.00  130.00  150.00  155.00  215.00  220.00  230.00  245.00
147          RY  1288.5 1286.00 1283.00 1282.50 1282.60 1283.00 1285.00 1286.00
             *

148          KK    N03BBASIN
149          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
150          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
151          BA   0.285
152          LG    0.23    0.25    4.80    0.36      30
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153        UI       0     109     342     619     573     335     131      58      19      20
154        UI       0       0       0       0       0       0       0       0       0       0
155        UI       0       0       0       0       0       0       0       0       0       0
156        UI       0       0       0       0       0       0       0       0       0       0
157        UI       0       0       0       0       0       0       0       0       0       0
           *

158        KK  DN3BREDIVERT
159        KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
160        DT   RN03B     8.0     0.0
161        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
162        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
           *

163        KK  CPN03BCOMBINE
164        HC       2   1.288
           *

165        KK  N3BN04ROUTE
166        KM        Cross-section:  / Manning's N Value: Golf course channel
167        KM        Route is from CPN03B to CPN04
168        RS       7    FLOW
169        RC   0.025   0.025   0.025    5663  0.0020    0.00
170        RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
171        RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

172        KK     N04BASIN
173        KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
174        KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
175        BA   0.992
176        LG    0.21    0.25    5.40    0.29      26
177        UI       0     109     275     516     663     871    1299    1124     873     660
178        UI     493     272     185     123      79      33      34      34      34       0
179        UI       0       0       0       0       0       0       0       0       0       0
180        UI       0       0       0       0       0       0       0       0       0       0
181        UI       0       0       0       0       0       0       0       0       0       0
           *

182        KK     N03BASIN
183        KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
184        KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
185        BA   0.358
186        LG    0.24    0.26    4.65    0.39      27
187        UI       0     105     359     578     774     490     261     110      50      21
188        UI      22       0       0       0       0       0       0       0       0       0
189        UI       0       0       0       0       0       0       0       0       0       0
190        UI       0       0       0       0       0       0       0       0       0       0
191        UI       0       0       0       0       0       0       0       0       0       0
           *

192        KK  DN03REDIVERT
193        KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
194        DT    RN03    10.0     0.0
195        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
196        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
           *

197        KK  N03N04ROUTE
198        KM        Cross-section:  / Manning's N Value: Golf course channel
199        RS       8    FLOW
200        RC   0.025   0.025   0.025    7853  0.0035    0.00
201        RX  100.00  140.00  175.00  260.00  350.00  415.50  445.00  475.00
202        RY  1000.0  999.00  998.00  995.00  995.00  998.00  999.00 1000.00
           *

203        KK    N04ABASIN
204        KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
205        KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
206        KM        MICKEN DAM
207        BA   0.199
208        LG    0.34    0.36    5.20    0.25       1
209        UI       0      58     223     361     351     227     133      79      47      28
210        UI      12      10       9       0       0       0       0       0       0       0
211        UI       0       0       0       0       0       0       0       0       0       0
212        UI       0       0       0       0       0       0       0       0       0       0
213        UI       0       0       0       0       0       0       0       0       0       0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

214        KK  N4AN04ROUTE
215        KM        Cross-section:  / Manning's N Value: Golf course channel
216        KM        Route is from N04A to CPN04
217        RS      10    FLOW
218        RC   0.025   0.025   0.025    7932  0.0044    0.00
219        RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
220        RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
           *

221        KK    N04BBASIN
222        KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
223        BA   0.131
224        LG    0.34    0.34    4.80    0.30       1
225        UI       0     203     487     217      73      22       0       0       0       0
226        UI       0       0       0       0       0       0       0       0       0       0
227        UI       0       0       0       0       0       0       0       0       0       0
228        UI       0       0       0       0       0       0       0       0       0       0
229        UI       0       0       0       0       0       0       0       0       0       0
           *

230        KK  N4BN04ROUTE
231        KM        Cross-section:  / Manning's N Value: Golf course channel
232        KM        Route is from N04B to CPN04
233        RS       8    FLOW
234        RC   0.025   0.025   0.025    6839  0.0050    0.00
235        RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
236        RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
           *

237        KK   CPN04COMBINE
238        HC       5   2.968
           *
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239          KK  DN04REDIVERT
240          KM       Master Drainage Plan for Del Webb's Sun City West - Expansion Area
241          DT    RN04     96.0     0.0
242          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
243          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

244          KK  N04N05ROUTE
245          KM       Cross-section:  / Manning's N Value: Golf course channel
246          RS       6    FLOW
247          RC   0.025   0.025   0.025    5405  0.0019    0.00
248          RX  100.00  120.00  136.00  153.00  236.00  253.00  270.00  290.00
249          RY  1270.5 1268.50 1266.70 1265.00 1264.90 1266.70 1268.50 1270.50
             *

250          KK     N05BASIN
251          KM       BASIN BOUNDARY FROM CORTEBELLA MASTER DRAINAGE REPORT, DEI
252          BA   0.995
253          LG    0.21    0.19    6.60    0.18      27
254          UI       0      94     174     388     510     626     795    1151     988     786
255          UI     624     502     363     200     159     108      86      30      28      29
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

256          UI      29      29       0       0       0       0       0       0       0       0
257          UI       0       0       0       0       0       0       0       0       0       0
258          UI       0       0       0       0       0       0       0       0       0       0
             *

259          KK  DN05REDIVERT
260          KM       First flush volume estimated based on aerial and Preliminary Plat Final
261          KM       Report for Corte Bella Country Club Phase II
262          KM       Route through Corte Bella
263          DT    RN05     15.6     0.0
264          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
265          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

266          KK   DN07ARETRIEVE
267          DR  DN07AS
             *

268          KK  N7AN05ROUTE
269          KM       Route through Corte Bella
270          RS      10    FLOW
271          RC   0.035   0.030   0.035   10408  0.0050    0.00
272          RX  1000.0 1004.00 1262.00 1272.00 1282.00 1290.00 1296.00 1300.00
273          RY  1288.0 1286.00 1286.00 1284.00 1283.90 1286.00 1286.00 1288.00
             *

274          KK   DN07BRETRIEVE
275          DR  DN07BS
             *

276          KK  N7BN05ROUTE
277          KM       Pleasant Valley Country Club Master Drainage Plan
278          KM       by DEI dated May 17, 2001
279          RS      11    FLOW
280          RC   0.035   0.030   0.035    8067  0.0067    0.00
281          RX  100.00  120.00  196.00  200.00  300.00  301.00  380.00  400.00
282          RY  1285.0 1284.00 1281.00 1280.00 1279.90 1281.00 1284.00 1285.00
             *

283          KK   DN07CRETRIEVE
284          DR  DN07CS
             *

285          KK  N7CN05ROUTE
286          KM       Pleasant Valley Country Club Master Drainage Plan
287          KM       by DEI dated May 17, 2001
288          RS       6    FLOW
289          RC   0.035   0.030   0.035    6212  0.0050    0.00
290          RX  1000.0 1004.00 1264.00 1272.00 1282.00 1290.00 1296.00 1300.00
291          RY  1279.0 1277.00 1277.00 1275.00 1274.90 1277.00 1277.00 1279.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

292          KK   CPN05COMBINE
293          HC       5   4.533
             *

294          KK  N05N06ROUTE
295          KM       Cross-section:  / Manning's N Value: clean earth, earth
296          KM       with sparse trees and shrubs, and pavement
297          RS       1    FLOW
298          RC   0.032   0.022   0.013    2139  0.0010    0.00
299          RX  100.00  250.00  306.00  326.00  338.00  360.00  414.00  415.00
300          RY  1001.0  999.50  999.00  996.00  996.10  999.00  999.50 1002.00
             *

301          KK     N06BASIN
302          KM       BASIN BOUNDARY FROM CORTE BELLA, SUN CITY WEST AND MCMICKEN DAM
303          BA   0.219
304          LG    0.34    0.34    4.40    0.39       2
305          UI       0      39     155     270     337     303     206     135      88      60
306          UI      37      24      14       9       8       9       0       0       0       0
307          UI       0       0       0       0       0       0       0       0       0       0
308          UI       0       0       0       0       0       0       0       0       0       0
309          UI       0       0       0       0       0       0       0       0       0       0
             *

310          KK   CPN06COMBINE
311          HC       3   4.752
             *

312          KK     N08BASIN
313          KM       BASIN BOUNDARY FROM SUN CITY WEST
314          BA   1.723
315          LG    0.21    0.23    6.20    0.21      26
316          UI       0     137     157     482     653     788     924    1129    1601    1617
317          UI    1248    1089     868     725     591     341     238     226     137     129
318          UI      42      42      42      42      42      42       0       0       0       0
319          UI       0       0       0       0       0       0       0       0       0       0
320          UI       0       0       0       0       0       0       0       0       0       0
             *
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321          KK     N10BASIN
322          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
323          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
324          BA   0.638
325          LG    0.21    0.25    4.60    0.43      24
326          UI       0      82     259     433     568     882     875     636     474     314
327          UI     150     111      65      25      26      25       0       0       0       0
328          UI       0       0       0       0       0       0       0       0       0       0
329          UI       0       0       0       0       0       0       0       0       0       0
330          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  9

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

331          KK  N10N11ROUTE
332          KM        Cross-section:  / Manning's N Value: Golf course channel, Section E
333          RS       5    FLOW
334          RC   0.025   0.025   0.025    5755  0.0023    0.00
335          RX  100.00  110.00  120.00  140.00  280.00  300.00  310.00  320.00
336          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

337          KK     N11BASIN
338          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
339          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
340          BA   0.699
341          LG    0.22    0.25    5.10    0.33      25
342          UI       0      95     338     534     733    1142     888     651     464     225
343          UI     147      91      29      30      29       0       0       0       0       0
344          UI       0       0       0       0       0       0       0       0       0       0
345          UI       0       0       0       0       0       0       0       0       0       0
346          UI       0       0       0       0       0       0       0       0       0       0
             *

347          KK   CPN11COMBINE
348          HC       2   1.337
             *

349          KK  N11N09ROUTE
350          KM        Cross-section: cross section determined from aerial
351          KM        street section / Manning's N Value: Street
352          RS       3    FLOW
353          RC   0.032   0.013   0.032    9488  0.0029    0.00
354          RX  100.00  100.50  106.00  106.10  150.00  150.10  155.50  156.00
355          RY  1003.0  999.90  999.90  999.30  999.30  999.80 1000.00 1003.00
             *

356          KK     N09BASIN
357          KM        BASIN BOUNDARY FROM SUN CITY WEST
358          BA   0.877
359          LG    0.19    0.25    5.20    0.33      30
360          UI       0      87     178     377     484     616     825    1063     834     662
361          UI     517     405     241     150     120      87      33      27      27      26
362          UI      27       0       0       0       0       0       0       0       0       0
363          UI       0       0       0       0       0       0       0       0       0       0
364          UI       0       0       0       0       0       0       0       0       0       0
             *

365          KK     N14BASIN
366          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
367          KM        MODIFIED FOR AS-BUILT CONDITIONS. APPROXIMATED ON-SITE RETENTION
368          KM        NO TOPO AVAILABLE
369          BA   0.509
370          LG    0.14    0.23    5.40    0.31      18
371          UI       0     110     399     604     993     787     512     268     134      66
372          UI      27      28       0       0       0       0       0       0       0       0
373          UI       0       0       0       0       0       0       0       0       0       0
374          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 10

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

375          UI       0       0       0       0       0       0       0       0       0       0
             *

376          KK  DN14REDIVERT
377          KM        Hillcrest Golf Course and Lake
378          KM        No topo available
379          DT    RN14   224.8     0.0
380          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
381          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

382          KK   CPN09COMBINE
383          HC       3   2.723
             *

384          KK  N09N18ROUTE
385          KM        Cross-section: Street section
386          RS       1    FLOW
387          RC   0.032   0.013   0.032    4145  0.0072    0.00
388          RX  100.00  100.50  105.00  105.50  132.50  133.00  137.50  138.00
389          RY  1004.0  999.90  999.80  999.30  999.29  999.80  999.90 1004.00
             *

390          KK     N18BASIN
391          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
392          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
393          BA   0.441
394          LG    0.24    0.25    5.40    0.27      37
395          UI       0     121     413     650     950     623     367     151      77      25
396          UI      26       0       0       0       0       0       0       0       0       0
397          UI       0       0       0       0       0       0       0       0       0       0
398          UI       0       0       0       0       0       0       0       0       0       0
399          UI       0       0       0       0       0       0       0       0       0       0
             *

400          KK   CPN18COMBINE
401          HC       2   3.164
             *

402          KK  N18N15ROUTE
403          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
404          RS       1    FLOW
405          RC   0.016   0.016   0.016    6125  0.0039    0.00
406          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
407          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
             *
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408          KK     N12BASIN
409          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
410          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
411          BA   0.782
412          LG    0.17     0.15     8.40     0.10       28
413          UI       0       66       91      245      325      398      475      610      837      672
414          UI     550      460      370      297      193      115      109       67       58       20
415          UI      21       20       20       20        0        0        0        0        0        0
1                                          HEC-1 INPUT                                                    PAGE 11

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

416          UI       0        0        0        0        0        0        0        0        0        0
417          UI       0        0        0        0        0        0        0        0        0        0
             *

418          KK  N12N13ROUTE
419          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section H
420          RS       1    FLOW
421          RC   0.016    0.016    0.016     1089   0.0055     0.00
422          RX  100.00   101.00   102.00   109.00   131.00   140.00   141.00   142.00
423          RY  1000.2  1000.10  1000.00   993.50   993.60  1000.00  1000.10  1000.20
             *

424          KK     N13BASIN
425          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
426          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
427          BA   0.724
428          LG    0.22     0.23     6.20     0.20       38
429          UI       0       58       73      211      286      342      408      500      727      654
430          UI     518      445      359      294      220      128      100       82       59       39
431          UI      18       18       18       19       18        0        0        0        0        0
432          UI       0        0        0        0        0        0        0        0        0        0
433          UI       0        0        0        0        0        0        0        0        0        0
             *

434          KK   CPN13COMBINE
435          HC       2   1.506
             *

436          KK  N13N15ROUTE
437          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
438          RS       2    FLOW
439          RC   0.016    0.016    0.016     7633   0.0039     0.00
440          RX  100.00   101.00   102.00   112.00   150.00   160.00   161.00   162.00
441          RY  1180.2  1180.10  1180.00  1173.00  1172.90  1180.00  1180.10  1180.20
             *

442          KK     N16BASIN
443          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
444          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
445          BA   0.285
446          LG    0.23     0.29     5.10     0.32       35
447          UI       0       88      296      492      619      376      188       82       33       18
448          UI       0        0        0        0        0        0        0        0        0        0
449          UI       0        0        0        0        0        0        0        0        0        0
450          UI       0        0        0        0        0        0        0        0        0        0
451          UI       0        0        0        0        0        0        0        0        0        0
             *

452          KK  N16N15ROUTE
453          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
454          RS       1    FLOW
455          RC   0.016    0.016    0.016     1241   0.0012     0.00
456          RX  100.00   101.00   102.00   112.00   150.00   160.00   161.00   162.00
457          RY  1180.2  1180.10  1180.00  1173.00  1172.90  1180.00  1180.10  1180.20
             *
1                                          HEC-1 INPUT                                                    PAGE 12

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

458          KK     N15BASIN
459          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
460          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
461          BA   0.852
462          LG    0.23     0.25     5.40     0.27       37
463          UI       0      106      324      548      727     1066     1212      871      655      458
464          UI     226      164      106       35       33       32       33        0        0        0
465          UI       0        0        0        0        0        0        0        0        0        0
466          UI       0        0        0        0        0        0        0        0        0        0
467          UI       0        0        0        0        0        0        0        0        0        0
             *

468          KK   CPN15COMBINE
469          HC       4   5.807
             *

470          KK  N15N17ROUTE
471          KM        Cross-section: From Sun City West Development Master Plan
472          RS       1    FLOW
473          RC   0.016    0.016    0.016     3182   0.0031     0.00
474          RX  100.00   101.00   101.50   108.00   140.00   147.50   149.00   150.00
475          RY  1000.0   999.90   999.80   993.00   992.90   999.80   999.90  1000.00
             *

476          KK     N17BASIN
477          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
478          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
479          BA   1.291
480          LG    0.22     0.25     5.40     0.28       29
481          UI       0      125      245      530      691      855     1107     1555     1250      998
482          UI     790      631      417      221      198      126       79       39       38       38
483          UI      39        0        0        0        0        0        0        0        0        0
484          UI       0        0        0        0        0        0        0        0        0        0
485          UI       0        0        0        0        0        0        0        0        0        0
             *

486          KK   CPN17COMBINE
487          HC       2   7.098
             *

488          KK     N20BASIN
489          KM        BASIN BOUNDARY FROM APS YARD AND ATSF RR ALIGNMENT
490          BA   0.088
491          LG    0.17     0.28     5.40     0.29       41
492          UI       0       72      228      245       98       27        8        0        0        0
493          UI       0        0        0        0        0        0        0        0        0        0
494          UI       0        0        0        0        0        0        0        0        0        0
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495          UI       0       0       0       0       0       0       0       0       0       0
496          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 13

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

497          KK  N20N21ROUTE
498          KM        Cross-section: estimated from aerial
499          KM        Manning's N Value: clean earth
500          RS       3    FLOW
501          RC   0.022   0.022   0.022    5119  0.0043    0.00
502          RX  100.00  101.00  102.00  114.00  188.00  200.00  203.00  206.00
503          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.50 1001.00
             *

504          KK     N21BASIN
505          KM        BASIN BOUNDARY FROM VASQUEZ CRT AND ATSF RR ALIGNMENT
506          BA   0.193
507          LG    0.24    0.18    6.80    0.16      35
508          UI       0      60     198     330     415     257     132      56      24      12
509          UI       0       0       0       0       0       0       0       0       0       0
510          UI       0       0       0       0       0       0       0       0       0       0
511          UI       0       0       0       0       0       0       0       0       0       0
512          UI       0       0       0       0       0       0       0       0       0       0
             *

513          KK   CPN21COMBINE
514          HC       2   0.281
             *

515          KK  DN21SEDIVERT
516          KM        Split based on ADMS for Old Town Site and 30%
517          KM        ADMP dated 7-24-07 prepared by Neals Engineering
518          DT   DN21S     0.0     0.0
519          DI     0.0   688.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
520          DQ     0.0   255.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

521          KK  N21N25ROUTE
522          KM        Cross-section: cross section based on aerial
523          KM        Manning's N Value: earth with sparse trees and shrubs
524          RS       4    FLOW
525          RC   0.032   0.032   0.032    7742  0.0057    0.00
526          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
527          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

528          KK     N22BASIN
529          KM        BASIN BOUNDRY FROM NORTH EL MIRAGE AND NORTH SURPRISE DEV
530          BA   0.108
531          LG    0.25    0.25    6.00    0.21      31
532          UI       0      75     219     317     155      48      14       0       0       0
533          UI       0       0       0       0       0       0       0       0       0       0
534          UI       0       0       0       0       0       0       0       0       0       0
535          UI       0       0       0       0       0       0       0       0       0       0
536          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 14

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

537          KK  DN21SERETRIEVE
538          DR   DN21S
             *

539          KK  N21N22ROUTE
540          KM        Cross-section: cross section estimated from aerial
541          KM        Manning's N Value: street, clean earth
542          RS       1    FLOW
543          RC   0.022   0.013   0.022    1624  0.0062    0.00
544          RX  100.00  105.00  115.00  115.10  155.00  155.10  165.00  170.00
545          RY  1000.0  999.60  999.50  999.00  999.10  999.50  999.60 1000.00
             *

546          KK   CPN22COMBINE
547          HC       2   0.389
             *

548          KK  N22N25ROUTE
549          KM        Cross-section: cross section based on aerial
550          KM        Manning's N Value: earth with sparse trees and shrubs
551          RS       4    FLOW
552          RC   0.032   0.032   0.032    6306  0.0056    0.00
553          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
554          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

555          KK     N25BASIN
556          KM        BASIN BOUNDARY FROM THOMPSON RANCH
557          KM        BNSF RAIL YARD AND ATSF RR ALIGNMENT
558          BA   0.491
559          LG    0.27    0.29    4.15    0.51      25
560          UI       0      79     325     481     750     837     558     374     178     103
561          UI      52      24      24       0       0       0       0       0       0       0
562          UI       0       0       0       0       0       0       0       0       0       0
563          UI       0       0       0       0       0       0       0       0       0       0
564          UI       0       0       0       0       0       0       0       0       0       0
             *

565          KK   CPN25COMBINE
566          HC       3    0.88
             *

567          KK  N25N26ROUTE
568          KM        Cross-section:Based on aerial and site visit
569          KM        Manning's N Value: Clean earth
570          RS       2    FLOW
571          RC   0.022   0.022   0.022    2815  0.0010    0.00
572          RX  100.00  103.00  105.00  120.00  200.00  206.00  220.00  250.00
573          RY  1116.2 1116.10 1116.00 1106.00 1105.90 1116.00 1116.50 1120.00
             *
1                                          HEC-1 INPUT                                          PAGE 15

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

574          KK     N26BASIN
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575          KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
576          BA   0.257
577          LG    0.33    0.34    2.86    0.86       3
578          UI       0      30      82     151     192     266     369     272     214     157
579          UI     102      53      39      25       9      10       9       9       0       0
580          UI       0       0       0       0       0       0       0       0       0       0
581          UI       0       0       0       0       0       0       0       0       0       0
582          UI       0       0       0       0       0       0       0       0       0       0
             *

583          KK   CPN26COMBINE
584          HC       2   1.137
             *

585          KK     N19BASIN
586          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
587          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
588          BA   0.176
589          LG    0.22    0.15    9.70    0.06      39
590          UI       0     164     517     464     162      39       0       0       0       0
591          UI       0       0       0       0       0       0       0       0       0       0
592          UI       0       0       0       0       0       0       0       0       0       0
593          UI       0       0       0       0       0       0       0       0       0       0
594          UI       0       0       0       0       0       0       0       0       0       0
             *

595          KK     N23BASIN
596          KM        BASIN BOUNDARY FROM BELL RD TOWN CENTER
597          KM        NORTH SURPRISE, BELL COMMERC DEVLP
598          BA   0.517
599          LG    0.23    0.28    5.70    0.24      36
600          UI       0     156     529     863    1117     698     358     154      66      32
601          UI       0       0       0       0       0       0       0       0       0       0
602          UI       0       0       0       0       0       0       0       0       0       0
603          UI       0       0       0       0       0       0       0       0       0       0
604          UI       0       0       0       0       0       0       0       0       0       0
             *

605          KK  N23N24ROUTE
606          KM        Cross-section:  / Manning's N Value: Grouted rip rap bottom
607          KM        earth with sparse trees and shrubs (sideslopes)
608          RS       1    FLOW
609          RC   0.032   0.032   0.032    4874  0.0041    0.00
610          RX  100.00  143.80  154.00  162.60  181.30  201.40  228.20  229.00
611          RY  1154.0 1152.00 1150.00 1148.00 1147.90 1150.00 1152.00 1152.20
             *

612          KK     N24BASIN
613          KM        BASIN BOUNDARY FROM MOBILE HOME PARK
614          KM        3J'S COUNTRY ESTATES, ROCK QUARY AND AGUA FRIA RIVER
615          BA   0.254
616          LG    0.28    0.28    4.45    0.40      18
617          UI       0      84     270     464     544     330     153      69      26      16
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

618          UI       0       0       0       0       0       0       0       0       0       0
619          UI       0       0       0       0       0       0       0       0       0       0
620          UI       0       0       0       0       0       0       0       0       0       0
621          UI       0       0       0       0       0       0       0       0       0       0
             *

622          KK   CPN24COMBINE
623          HC       2   0.771
             *

624          KK     N27BASIN
625          KM        BASIN BOUNDARY FROM ROCK QUARY, AGUA FRIA RIVER AND ATSF RR ALIGNMENT
626          BA   0.126
627          LG    0.35    0.35    2.80    0.90       0
628          UI       0      34     115     180     271     181     107      45      24       7
629          UI       8       0       0       0       0       0       0       0       0       0
630          UI       0       0       0       0       0       0       0       0       0       0
631          UI       0       0       0       0       0       0       0       0       0       0
632          UI       0       0       0       0       0       0       0       0       0       0
             *

633          KK   DUMMYCOMBINE
634          HC       4
             *

635          KK   DUMMYCOMBINE
636          HC       4
             *

637          KK     D03BASIN
638          KM        BASIN BOUNDARY FROM KINGSWOOD PARKE
639          BA   0.723
640          LG    0.23    0.25    4.80    0.37      35
641          UI       0     121     484     719    1140    1220     811     548     245     149
642          UI      70      36      35       0       0       0       0       0       0       0
643          UI       0       0       0       0       0       0       0       0       0       0
644          UI       0       0       0       0       0       0       0       0       0       0
645          UI       0       0       0       0       0       0       0       0       0       0
             *

646          KK  DD03REDIVERT
647          KM        Master Drainage Report Update for Kingswood Parke Phase One
648          KM        (excess retention provided for future development was
649          KM        subtracted from total retenttion provided)
650          DT    RD03    51.7     0.0
651          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
652          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

653          KK  D03D04ROUTE
654          KM        Cross-section: Cross-section determined from aerial
655          KM        Manning's N Value: street and earth with sparse trees and shrubs
656          RS       4    FLOW
657          RC   0.032   0.013   0.032    4458  0.0038    0.00
658          RX  100.00  108.00  119.00  119.10  155.00  155.10  160.00  165.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

659          RY  1000.3 1000.00  999.50  999.00  999.70 1000.20 1000.30 1000.40
             *

660          KK     D04BASIN
```

```
661          KM        BASIN BOUNDARY FROM GRAND VILLAGE NORTH/SOUTH, BELLAZANO CONDOS,
662          KM        HOPI VILLAGE, PIMA VILLAGE, SUN VILLAGE, ZUNI VILLAGE, PUEBLO VILLAGE,
663          KM        GRAND AVE PROFF PLAZA AND GRAND AVE CHANNEL
664          BA   0.891
665          LG    0.22    0.27    5.70    0.25      36
666          UI       0     122     430     681     934    1456    1132     830     591     287
667          UI     186     117      37      38      38       0       0       0       0       0
668          UI       0       0       0       0       0       0       0       0       0       0
669          UI       0       0       0       0       0       0       0       0       0       0
670          UI       0       0       0       0       0       0       0       0       0       0
             *

671          KK  DD04REDIVERT
672          KM        Master Drainage Report Update for Kingswood Parke Phase One (Sun Village
673          KM        Final Drainage Report for Grand Village Center Phase 6, Drainage Report
674          KM        Grand Point Plaza, Final Drainage Report -Revised  For Grand Pointe
675          KM        Plaza Montessori of Surprise SP06-41
676          DT    RD04    46.9     0.0
677          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
678          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

679          KK   CPD04COMBINE
680          HC       2   1.614
             *

681          KK  DD04SEDIVERT
682          KM        Split flow Bell Rd at Litchfield Rd intersection
683          DT   DD04S     0.0     0.0
684          DI     0.0    86.1   158.5   512.0   904.0  1940.0     0.0     0.0     0.0     0.0
685          DQ     0.0     0.0    42.4   259.0   534.0  1278.0     0.0     0.0     0.0     0.0
             *

686          KK  D04D05ROUTE
687          KM        Cross-section: Cross-section determined from aerial
688          KM        Manning's N Value: street and earth with sparse trees and shrubs
689          RS       3    FLOW
690          RC   0.032   0.013   0.013    2993  0.0027    0.00
691          RX  100.00  119.00  135.00  135.10  180.00  180.10  181.00  182.00
692          RY  1000.0  999.80  999.50  999.00  999.80 1000.30 1000.40 1000.50
             *

693          KK     D05BASIN
694          KM        BASIN BOUNDARY FROM WAL MART STORE
695          KM        SURPRISE TOWN CENTER AND GRAND AVE CHANNEL
696          BA   0.163
697          LG    0.11    0.26    4.90    0.39      73
698          UI       0     126     392     467     196      58      15       0       0       0
699          UI       0       0       0       0       0       0       0       0       0       0
700          UI       0       0       0       0       0       0       0       0       0       0
701          UI       0       0       0       0       0       0       0       0       0       0
```



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LINE         ID.....1.......2.......3.......4.......5.......6.......7.......8.......9......10

702          UI       0       0       0       0       0       0       0       0       0       0
             *

703          KK  DD05REDIVERT
704          KM        West Point Towne Center Final Master Infrastructure Drainage Report
705          DT    RD05     8.2     0.0
706          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
707          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

708          KK   CPD05COMBINE
709          HC       2   1.777
             *

710          KK  D05D14ROUTE
711          KM        Cross-section: Cross-section determined from aerial, assumed
712          KM        3' depth / Manning's N Value: earth with grass and forbs
713          RS       2    FLOW
714          RC   0.032   0.032   0.032    3385  0.0053    0.00
715          RX  100.00  101.00  102.00  122.00  142.00  162.00  163.00  164.00
716          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
             *

717          KK   DD141DIVERT
718          KM        culvert crossing under Dysart Road - once the capacity is reached
719          KM        under the road, the flow will split with some continuing under
720          KM        the road and some will go south along the roadway
721          DT  DD141S     0.0     0.0
722          DI     0.0   122.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
723          DQ     0.0     0.0   378.0   878.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

724          KK  D05D15ROUTE
725          KM        Cross-section: Cross-section determined from aerial, assumed
726          KM        3' depth  / Manning's N Value: concrete
727          RS       3    FLOW
728          RC   0.016   0.016   0.016    4588  0.0044    0.00
729          RX  100.00  101.00  102.00  127.00  131.00  140.00  141.00  142.00
730          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
             *

731          KK     D11BASIN
732          KM        BASIN BOUNDARY FROM ORCHIDS DEVELOPMENT
733          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
734          BA   0.662
735          LG    0.25    0.25    5.60    0.26      37
736          UI       0      78     212     387     495     687     946     705     551     403
737          UI     262     136     100      67      24      24      24      24       0       0
738          UI       0       0       0       0       0       0       0       0       0       0
739          UI       0       0       0       0       0       0       0       0       0       0
740          UI       0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

741          KK  DD11REDIVERT
742          KM        Final Drainage Report for Parkway Bank, Drainage Report for Deer Valley
743          KM        Credit Union Final Drainage Report for Jiffy Lube at Bell and Reems
744          KM        for The Orchard Estates Apartments, Drainage Report
745          KM        for Mountainside Fitness Center Lot 7 a
746          DT    RD11    32.4     0.0
747          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
748          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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          *
749       KK   DD111DIVERT
750       KM        Greenway at Parkview intersection split flow
751       DT  DD111S      0.0      0.0
752       DI     0.0     33.8    453.4  1486.3  2998.5      0.0      0.0      0.0      0.0      0.0
753       DQ     0.0     25.6    376.5  1210.3  2419.3      0.0      0.0      0.0      0.0      0.0
          *

754       KK   DD112DIVERT
755       KM        Greenway at Parkview intersection split flow
756       DT  DD112S      0.0      0.0
757       DI     0.0      8.2     77.0   276.0   579.1      0.0      0.0      0.0      0.0      0.0
758       DQ     0.0      5.4     35.1    78.9   133.0      0.0      0.0      0.0      0.0      0.0
          *

759       KK  D11D12ROUTE
760       KM        Cross-section: Cross-section determined from aerial
761       KM        Manning's N Value: clean earth; straight
762       RS       2    FLOW
763       RC  0.022   0.022   0.022    2668  0.0037    0.00
764       RX  100.00  124.00  154.00  155.00  156.00  157.00  158.00  159.00
765       RY  1208.0 1203.00 1208.00 1208.10 1208.20 1208.30 1208.40 1208.50
          *

766       KK     D12BASIN
767       KM        BASIN BOUNDARY FROM ORCHIDS PARK
768       KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
769       BA   0.347
770       LG    0.24    0.25    5.80    0.28      33
771       UI       0      27      26      54     113     153     167     209     226     221
772       UI     210     186     199     137     146     103      84      79      60      46
773       UI      39      33      26      25      19      15      15      14       4       4
774       UI       3       3       3       4       3       3       4       3       3       4
775       UI       3       3       4       3       0       0       0       0       0       0
          *

776       KK  DD12REDIVERT
777       KM        Final Drainage Report for Residence Inn by Marriot
778       KM        Final Drainage Report for The Orchards Parcel 5
779       KM        (Includes Parcels 9,11,12 and 1/2 of 8), Final Drainage Report for
780       KM        Stadium Village (South) Residences
781       KM        Final Drainage Report for Stadium Village Residences
782       DT    RD12     15.3      0.0
783       DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
784       DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
          *
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

785       KK   CPD12COMBINE
786       HC       2   1.009
          *

787       KK   DD121DIVERT
788       KM        Greenway at Bullard intersection split flow
789       DT  DD121S      0.0      0.0
790       DI     0.0     68.7    371.0  1186.5  2407.4      0.0      0.0      0.0      0.0      0.0
791       DQ     0.0     19.7    166.4   705.0  1553.4      0.0      0.0      0.0      0.0      0.0
          *

792       KK   DD122DIVERT
793       KM        Greenway at Bullard intersection split flow
794       DT  DD122S      0.0      0.0
795       DI     0.0     48.9    204.6   481.5   854.0      0.0      0.0      0.0      0.0      0.0
796       DQ     0.0     24.3     82.0   159.0   251.4      0.0      0.0      0.0      0.0      0.0
          *

797       KK  D12D13ROUTE
798       KM        Cross-section: determined from aerial and contours
799       KM        Manning's N Value: earth with sparse trees and shrubs for left
800       KM        overbank and main channel, right overbank is pavement
801       RS      10    FLOW
802       RC   0.032   0.032   0.013    5345  0.0031    0.00
803       RX  100.00  100.10  100.20  155.00  198.00  205.00  215.00  220.00
804       RY  1000.2 1000.10 1000.00  998.00  998.40  998.50  998.60  998.70
          *

805       KK     D13BASIN
806       KM        BASIN BOUNDARY FROM GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
807       BA   1.030
808       LG    0.29    0.33    4.90    0.31      17
809       UI       0     186     641    1123    1453    1310    1091     761     497     291
810       UI     194     141      97      46      22      22      21      22      21      22
811       UI       0       0       0       0       0       0       0       0       0       0
812       UI       0       0       0       0       0       0       0       0       0       0
813       UI       0       0       0       0       0       0       0       0       0       0
          *

814       KK  DD13REDIVERT
815       KM        Final Drainage Report for Surprise Festival, Final Drainage Report
816       KM        for The City at Surprise Office Building, Final Drainage Report for
817       KM        Surprise Tennis Center, Final Drainage Report for City of Surprise
818       KM        Central Utility Plant, Final Drainage Report for Hear
819       DT    RD13     17.1      0.0
820       DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
821       DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
          *
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

822       KK  DD04SERETRIEVE
823       DR   DD04S
          *

824       KK  D04D13ROUTE
825       KM        Cross-section: Cross-section determined from aerial
826       KM        Manning's N Value: Natural desert wash, sheet flow
827       RS      13    FLOW
828       RC   0.040   0.040   0.040    5483  0.0031    0.00
829       RX  100.00  101.00  102.00  150.00  155.00  700.00  710.00  720.00
830       RY  1000.0  999.90  999.80  997.80  997.90  999.80  999.90 1000.00
          *

831       KK   CPD13COMBINE
832       HC       3   3.653
```

```
*

KK   DD131DIVERT
KM        Greenway at Litchfield intersection split flow
DT  DD131S     0.0     0.0
DI     0.0   519.2   917.3  1650.7  2842.4     0.0     0.0     0.0     0.0     0.0
DQ     0.0    18.8   121.1   423.4   996.3     0.0     0.0     0.0     0.0     0.0
*

KK   DD132DIVERT
KM        Greenway at Litchfield intersection split flow
DT  DD132S     0.0     0.0
DI     0.0   500.4   796.2  1227.2  1846.1     0.0     0.0     0.0     0.0     0.0
DQ     0.0   112.4   318.0   584.2   899.4     0.0     0.0     0.0     0.0     0.0
*

KK  D13D14ROUTE
KM        Cross-section: Cross-section determined from FCDMC 69
KM        Manning's N Value: earth with grass and forbs
RS       5    FLOW
RC   0.025   0.025   0.025    5304  0.0015    0.00
RX  100.00  120.00  122.40  140.40  158.40  176.40  176.80  196.80
RY  1175.5 1175.40 1175.00 1172.00 1171.90 1175.00 1175.40 1175.50
*

KK     D14BASIN
KM        BASIN BOUNDARY FROM WEST POINT DEVELOPMENT AND GRANDE AVE CHANNEL
BA   0.942
LG    0.23    0.26    5.10    0.32      37
UI       0     114     330     577     752    1087    1356     973     755     543
UI     302     194     122      65      36      35      35       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DD14REDIVERT
KM        West Point Towne Center Final Master Infrastructure Drainage Report
DT    RD14    63.4     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   DD141RETRIEVE
DR  DD141S
*

KK  D0514AROUTE
KM        Cross-section: Cross-section determined from aerial
KM        Manning's N Value: street and ROW
KM        Route is from DD141 diversion to CPD14
RS       3    FLOW
RC   0.032   0.013   0.032    3147  0.0051    0.00
RX  100.00  120.00  140.00  140.10  200.00  200.10  220.00  240.00
RY  1000.0  999.50 1000.00  999.50  999.50 1000.00  999.50 1000.00
*

KK   CPD14COMBINE
HC       3   4.758
*

KK   SRD14STORAGE
KM        Storage in basin at Greenway and Dysart
KM        Volume estimated from topo
KO
RS       1    STOR
SV            0.30    4.10   17.00   40.40   95.20
SQ           23.60   83.80  162.00  645.50 2369.50
SE  1164.0 1165.00 1166.00 1167.00 1168.00 1169.00
ST
*

KK   DD142DIVERT
KM        Greenway at Dysart intersection split flow
DT  DD142S     0.0     0.0
DI     0.0   295.5   693.0  1325.3  2531.5     0.0     0.0     0.0     0.0     0.0
DQ     0.0   269.3   457.1   770.3  1405.9     0.0     0.0     0.0     0.0     0.0
*

KK  D14D15ROUTE
KM        Cross section: Cross-section determined from  aerial, 1/2 street section
KM        Manning's N Value: street, clean earth
RS       3    FLOW
RC   0.022   0.013   0.013    3351  0.0029    0.00
RX  100.00  100.10  110.00  110.10  120.00  125.00  133.90  134.00
RY  1003.0  999.80  999.70  999.20  999.40  999.50  999.70 1000.50
*
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     D15BASIN
KM        BASIN BOUNDARY FROM SUCCESS SCHOOL
BA   0.220
LG    0.19    0.15    7.00    0.15      52
UI       0     100     309     559     405     208      75      26      16       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK   CPD15COMBINE
HC       3   4.978
*

KK  D15D26ROUTE
KM        Cross-section: Concrete channel along Grand Ave, assumed slope
KM        2:1 side slopes, width and geometry based on aerial
RS       1    FLOW
RC   0.016   0.016   0.016    2959  0.0068    0.00
RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
*
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 915          KK  D15D28ROUTE
 916          KM        Concrete channel along Grand Ave, assumed
 917          KM        slope, 2:1 side slopes, width/ geometry based on aerial
 918          RS       1    FLOW
 919          RC   0.016   0.016   0.016    4040  0.0040    0.00
 920          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
 921          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
              *

 922          KK     D28BASIN
 923          KM        BASIN BOUNDARY FROM EL MIRAGE TR 1-3 AND GRAND AVE CHANNEL
 924          BA   0.255
 925          LG    0.22    0.25    4.50    0.44      36
 926          UI       0     121     375     665     462     221      83      25      19       0
 927          UI       0       0       0       0       0       0       0       0       0       0
 928          UI       0       0       0       0       0       0       0       0       0       0
 929          UI       0       0       0       0       0       0       0       0       0       0
 930          UI       0       0       0       0       0       0       0       0       0       0
              *

 931          KK   CPD28COMBINE
 932          HC       2   5.233
              *

 933          KK  D28AFRROUTE
 934          KM        Direct discharge into Agua Fria River, field verified by FCDMC
 935          KM        Concrete channel along Grand Ave, assumed slope,
 936          KM        2:1 side slopes, width and geometry based on aerial
 937          RS       1    FLOW
 938          RC   0.016   0.016   0.016    2990  0.0050    0.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 939          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
 940          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
              *

 941          KK   DUMMYCOMBINE
 942          HC       2
              *

 943          KK     L01BASIN
 944          KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
 945          BA   0.162
 946          LG    0.26    0.26    5.20    0.29      33
 947          UI       0      65     205     372     317     181      66      27      12       0
 948          UI       0       0       0       0       0       0       0       0       0       0
 949          UI       0       0       0       0       0       0       0       0       0       0
 950          UI       0       0       0       0       0       0       0       0       0       0
 951          UI       0       0       0       0       0       0       0       0       0       0
              *

 952          KK  DL01REDIVERT
 953          KM        Master Drainage Report for Del Webb's Grand Avenue Property
 954          DT    RL01     9.9     0.0
 955          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 956          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 957          KK  L01L03ROUTE
 958          KM        Cross-section: From Arizona Traditions Report
 959          KM        Manning's N Value: Channel along Arizona Traditons
 960          KM        Manning's for earth with grass and forbs
 961          RS       5    FLOW
 962          RC   0.025   0.025   0.025    5547  0.0032    0.00
 963          RX  100.00  114.00  116.00  118.00  120.00  122.00  124.00  138.00
 964          RY  1000.0  995.40  995.30  995.20  995.10  995.20  995.30 1000.00
              *

 965          KK     L03BASIN
 966          KM        BASIN BOUNDARY FROM ARIZONA TRADITIONS NORTH AND SOUTH
 967          BA   0.786
 968          LG    0.20    0.25    5.80    0.25      27
 969          UI       0     102     333     547     722    1142    1060     769     572     362
 970          UI     174     127      70      31      32      31       0       0       0       0
 971          UI       0       0       0       0       0       0       0       0       0       0
 972          UI       0       0       0       0       0       0       0       0       0       0
 973          UI       0       0       0       0       0       0       0       0       0       0
              *

 974          KK  DL03REDIVERT
 975          KM        Master Drainage Study for Arizona Traditions
 976          DT    RL03    68.1     0.0
 977          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 978          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 979          KK     L20BASIN
 980          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST
 981          KM        BEARDSLEY CSR ON THE EAST AND BELL POINT I
 982          BA   0.347
 983          LG    0.27    0.28    5.60    0.24      20
 984          UI       0      42     117     211     271     391     493     364     281     204
 985          UI     118      72      48      27      13      13      13       0       0       0
 986          UI       0       0       0       0       0       0       0       0       0       0
 987          UI       0       0       0       0       0       0       0       0       0       0
 988          UI       0       0       0       0       0       0       0       0       0       0
              *

 989          KK  DL20REDIVERT
 990          KM        Bell Pointe I and II, Arizona Traditions Parcel XIV
 991          DT    RL20    21.3     0.0
 992          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 993          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 994          KK  L20L03ROUTE
 995          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
 996          KM        width based on aerial
 997          KM        Manning's N Value: earth w/ sparse trees and shrubs
 998          RS       6    FLOW
 999          RC   0.032   0.032   0.032    5440  0.0055    0.00
1000          RX  100.00  106.00  112.00  124.00  136.00  148.00  168.00  188.00
1001          RY  1310.5 1310.30 1310.00 1307.00 1307.10 1310.00 1310.25 1310.50
              *
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1002          KK   CPL03COMBINE
1003          HC       3   1.295
              *

1004          KK  DL03SEDIVERT
1005          KM        Diversion at Bell Rd near Citrus
1006          KM        Culverts under Bell Rd to south
1007          DT   DL03S      0.0      0.0
1008          DI     0.0     37.0    237.0    537.0   1037.0      0.0      0.0      0.0      0.0      0.0
1009          DQ     0.0     37.0     37.0    337.0    837.0      0.0      0.0      0.0      0.0      0.0
              *

1010          KK  L03L04ROUTE
1011          KM        Cross-section:Cross section estimated from aerial for 1/2 street section
1012          KM        Manning's N Value: street, earth with sparse trees and shrubs
1013          RS       8    FLOW
1014          RC   0.032   0.013   0.013    3413  0.0046    0.00
1015          RX  100.00  103.00  123.00  123.10  162.00  162.10  165.00  169.00
1016          RY  1000.2 1000.10  999.50  999.00  999.80 1000.30 1000.40 1000.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1017          KK     L04BASIN
1018          KM        BASIN BOUNDARY FROM HAPPY TRAILS DEVLP
1019          BA   0.631
1020          LG    0.18     0.25     5.00     0.38       22
1021          UI       0       74      199      362      466      640      898      677      528      391
1022          UI     261      128      100       68       22       23       22       23        0        0
1023          UI       0        0        0        0        0        0        0        0        0        0
1024          UI       0        0        0        0        0        0        0        0        0        0
1025          UI       0        0        0        0        0        0        0        0        0        0
              *

1026          KK  DL04REDIVERT
1027          KM        Retention volume estimated based on aerial, Happy Trails
1028          DT    RL04     44.0      0.0
1029          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1030          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1031          KK   CPL04COMBINE
1032          HC       2   1.926
              *

1033          KK  DL04SEDIVERT
1034          KM        Intersection diversion Bell Rd at Cotton Ln
1035          DT   DL04S      0.0      0.0
1036          DI     0.0      0.0     56.3    171.0   1026.0   1998.0   4546.0      0.0      0.0      0.0
1037          DQ     0.0      0.0      0.0     36.0    526.0   1058.0   2453.0      0.0      0.0      0.0
              *

1038          KK  L04L05ROUTE
1039          KM        Cross-section: Cross-section determined from aerial
1040          KM        Manning's N Value: retention basins, earth w/ grass
1041          RS       1    FLOW
1042          RC   0.025   0.025   0.025    2571  0.0024    0.00
1043          RX  100.00  109.00  109.10  121.50  209.50  209.60  211.00  215.00
1044          RY  1283.3 1282.80 1282.30 1282.50 1282.60 1283.00 1283.10 1283.30
              *

1045          KK     L05BASIN
1046          KM        BASIN BOUNDARY FROM COMM DEVLP AND BELL WEST RANCH
1047          BA   0.486
1048          LG    0.23     0.25     5.70     0.24       43
1049          UI       0       68      250      386      542      820      606      439      299      141
1050          UI      92       53       21       21       22        0        0        0        0        0
1051          UI       0        0        0        0        0        0        0        0        0        0
1052          UI       0        0        0        0        0        0        0        0        0        0
1053          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1054          KK  DL05REDIVERT
1055          KM        Final Drainage Report for Cotton Lane Professional Park, Drainage Report
1056          KM        Bell West Ranch Shops, Final Drainage Report - Bell West Ranch Parcel 4
1057          KM        Master Drainage Report - Bell West Ranch
1058          DT    RL05     33.2      0.0
1059          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1060          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1061          KK   CPL05COMBINE
1062          HC       2   2.412
              *

1063          KK   DL051DIVERT
1064          KM        Diversion at L303 and Bell
1065          DT  DL051S      0.0      0.0
1066          DI     0.0    302.2   1308.0   3126.8   6532.9      0.0      0.0      0.0      0.0      0.0
1067          DQ     0.0      1.9    103.3    562.9   1938.1      0.0      0.0      0.0      0.0      0.0
              *

1068          KK   DL052DIVERT
1069          KM        Diversion at L303 and Bell
1070          DT  DL052S      0.0      0.0
1071          DI     0.0    300.3   1204.7   2563.8   4594.8      0.0      0.0      0.0      0.0      0.0
1072          DQ     0.0      7.6     25.6     49.7     78.6      0.0      0.0      0.0      0.0      0.0
              *

1073          KK  L05D06ROUTE
1074          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1075          KM        on aerial / Manning's N Value: half street and ROW
1076          RS       1    FLOW
1077          RC   0.032   0.013   0.032    3272  0.0062    0.00
1078          RX  100.00  101.00  102.00  114.00  153.00  165.00  166.00  167.00
1079          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *

1080          KK     L02BASIN
1081          KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
1082          BA   1.884
1083          LG    0.22     0.26     5.20     0.31       31
1084          UI       0      162      240      615      821      991     1195     1610     2036     1581
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1085          UI    1309    1077     863     670     386     277     230     164      99      50
1086          UI      50      50      49      51       0       0       0       0       0       0
1087          UI       0       0       0       0       0       0       0       0       0       0
1088          UI       0       0       0       0       0       0       0       0       0       0
              *

1089          KK  DL02REDIVERT
1090          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1091          DT    RL02   117.2     0.0
1092          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1093          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1094          KK  L02D06ROUTE
1095          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1096          KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
1097          KM        exist conditions: outfall to south into L303 ROW
1098          RS       6    FLOW
1099          RC   0.032   0.032   0.013    8306  0.0043    0.00
1100          RX  100.00  101.00  102.00  114.00  153.00  165.00  166.00  167.00
1101          RY  1000.4  999.90  999.80  997.00  997.10  999.80  999.90 1000.35
              *

1102          KK     D06BASIN
1103          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1104          BA   0.463
1105          LG    0.22    0.19    6.60    0.18      32
1106          UI       0      62     202     329     441     705     609     449     329     192
1107          UI     104      70      34      18      19      19       0       0       0       0
1108          UI       0       0       0       0       0       0       0       0       0       0
1109          UI       0       0       0       0       0       0       0       0       0       0
1110          UI       0       0       0       0       0       0       0       0       0       0
              *

1111          KK  DD06REDIVERT
1112          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1113          DT    RD06    32.0     0.0
1114          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1115          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1116          KK   CPD06COMBINE
1117          HC       3   4.759
              *

1118          KK  DD06SEDIVERT
1119          KM        Divert based on capacity at Bell Road. Bell Rd section from
1120          KM        Final Drainage Report for Westfield Commons Jan 2008
1121          DT   DD06S     0.0     0.0
1122          DI     0.0   100.0   200.0   300.0   370.0   400.0   800.0  1000.0 10000.0     0.0
1123          DQ     0.0     0.0     0.0     0.0     0.0    30.0   430.0   630.0  9630.0     0.0
              *

1124          KK  D06D07ROUTE
1125          KM        Cross-section: Cross-section determined from aerial
1126          KM        Manning's N Value: street and ROW, left overbank is
1127          KM        earth with sparse trees and shrubs
1128          RS       2    FLOW
1129          RC   0.013   0.013   0.013    2785  0.0052    0.00
1130          RX  100.00  100.10  118.70  118.80  165.00  211.10  211.20  230.00
1131          RY  1266.0 1264.00 1263.74 1263.24 1264.00 1263.50 1264.00 1264.38
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1132          KK     D07BASIN
1133          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1134          BA   0.886
1135          LG    0.21    0.23    6.20    0.22      27
1136          UI       0      85     162     361     465     582     741    1047     875     683
1137          UI     548     437     297     162     142      85      62      26      27      26
1138          UI      26       0       0       0       0       0       0       0       0       0
1139          UI       0       0       0       0       0       0       0       0       0       0
1140          UI       0       0       0       0       0       0       0       0       0       0
              *

1141          KK  DD07REDIVERT
1142          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1143          DT    RD07    61.2     0.0
1144          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1145          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1146          KK   CPD07COMBINE
1147          HC       2   5.645
              *

1148          KK  D07D02ROUTE
1149          KM        Cross-section: Estimated 3' deep, side slopes and width based
1150          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
1151          RS       1    FLOW
1152          RC   0.032   0.032   0.032    1520  0.0013    0.00
1153          RX  100.00  100.10  100.20  133.00  156.00  174.80  174.90  175.00
1154          RY  1001.0  999.90  999.80  997.00  997.10  999.80  999.90 1001.00
              *

1155          KK     D01BASIN
1156          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1157          BA   1.564
1158          LG    0.21    0.26    5.10    0.33      24
1159          UI       0     130     179     482     645     784     929    1194    1657    1358
1160          UI    1107     924     751     601     413     231     214     143     128      40
1161          UI      41      40      40      40      41       0       0       0       0       0
1162          UI       0       0       0       0       0       0       0       0       0       0
1163          UI       0       0       0       0       0       0       0       0       0       0
              *

1164          KK  DD01REDIVERT
1165          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1166          DT    RD01    97.0     0.0
1167          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1168          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE 30
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1169          KK  D01D02ROUTE
1170          KM        Cross-section: Golf course, assumed 0.5% side slopes, V-ditch
1171          KM        Manning's N Value: golf course
1172          RS       17    FLOW
1173          RC   0.025   0.025   0.025    9289  0.0038    0.00
1174          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1175          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

1176          KK     D02BASIN
1177          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1178          BA   1.844
1179          LG    0.21    0.26    5.40    0.29      28
1180          UI       0     170     295     687     895    1095    1371    1978    1914    1473
1181          UI    1195     973     750     439     296     239     169      91      52      52
1182          UI      53      52       0       0       0       0       0       0       0       0
1183          UI       0       0       0       0       0       0       0       0       0       0
1184          UI       0       0       0       0       0       0       0       0       0       0
              *

1185          KK  DD02REDIVERT
1186          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1187          DT    RD02   125.6     0.0
1188          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1189          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1190          KK   CPD02COMBINE
1191          HC       3   9.053
              *

1192          KK  D02D10ROUTE
1193          KM        Cross-section determined from site visit by John Holmes at FCDMC
1194          RS       8    FLOW
1195          RC   0.032   0.032   0.032    5395  0.0037    0.00
1196          RX  100.00  102.50  105.00  110.00  120.00  125.00  127.50  130.00
1197          RY  1242.0 1241.00 1240.00 1238.00 1237.90 1240.00 1241.00 1242.00
              *

1198          KK     D09BASIN
1199          KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
1200          BA   0.265
1201          LG    0.25    0.25    5.70    0.24      35
1202          UI       0      39     152     229     337     460     321     222     136      67
1203          UI      42      16      12      12       0       0       0       0       0       0
1204          UI       0       0       0       0       0       0       0       0       0       0
1205          UI       0       0       0       0       0       0       0       0       0       0
1206          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1207          KK  DD09REDIVERT
1208          KM        Drainage Report for Montain Vista Ranch
1209          DT    RD09    15.8     0.0
1210          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1211          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1212          KK  D09D10ROUTE
1213          KM        Cross-section: Estimated V-ditch w/ 4:1 side slopes
1214          KM        Manning's N Value: earth with grass, sparse trees and shrubs
1215          RS       1    FLOW
1216          RC   0.025   0.025   0.032     1657  0.0043    0.00
1217          RX  100.00  105.00  110.00  130.00  150.00  160.00  165.00  167.00
1218          RY  1000.0  999.90  999.80  996.80  996.70  998.70  999.80 1000.00
              *

1219          KK  DD06SERETRIEVE
1220          DR   DD06S
              *

1221          KK  D06D10ROUTE
1222          KM        Cross-section: From Final Drainage Report for Westfield Commons
1223          RS      13    FLOW
1224          RC   0.030   0.030   0.030     8002  0.0044    0.00
1225          RX  100.00  109.00  113.00  118.00  125.00  131.00  137.00  142.00
1226          RY  1240.0 1239.82 1238.04 1236.26 1236.16 1238.04 1239.60 1240.82
              *

1227          KK     D10BASIN
1228          KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
1229          KM        COMMERCIAL DEVLP AND AG LANG
1230          BA   0.628
1231          LG    0.24    0.26    5.80    0.23      34
1232          UI       0      80     252     417     553     850     871     628     468     316
1233          UI     155     112      69      24      25      24       0       0       0       0
1234          UI       0       0       0       0       0       0       0       0       0       0
1235          UI       0       0       0       0       0       0       0       0       0       0
1236          UI       0       0       0       0       0       0       0       0       0       0
              *

1237          KK  DD10REDIVERT
1238          KM        Mountain Vista Ranch Drainage Proposal for Reems Road
1239          KM        Drainage Report for Montain Vista Ranch, Final Drainage Report Westfiel
1240          KM        Commons Final Drainage Report for Greenway & Reems, Final Drainage
1241          KM        Report for the Interim Condition for Westfield Commons Subd
1242          DT    RD10    37.8     0.0
1243          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1244          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1245          KK   CPD10COMBINE
1246          HC       4   9.946
              *

1247          KK  D10D19ROUTE
1248          KM        Cross-section determined from Drainage Report
1249          KM        for Channelization of Reems Road Floodplain along Tash Project.
1250          RS      17    FLOW
```

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1251          RC   0.022   0.022   0.022    5364  0.0027    0.00
1252          RX  100.00  107.60  115.20  122.80  130.80  138.40  146.00  153.60
1253          RY  1220.0 1218.00 1216.00 1214.00 1213.90 1216.00 1218.00 1220.00
              *

1254          KK     L09BASIN
1255          KM        BASIN BOUNDARY FROM SURPRISE FARMS
1256          BA   0.489
1257          LG    0.27    0.27    5.70    0.24      31
1258          UI       0      60     170     304     397     569     696     509     392     278
1259          UI     153     100      62      33      18      19      18       0       0       0
1260          UI       0       0       0       0       0       0       0       0       0       0
1261          UI       0       0       0       0       0       0       0       0       0       0
1262          UI       0       0       0       0       0       0       0       0       0       0
              *

1263          KK  DL09REDIVERT
1264          KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8
1265          KM        (Basins A, B, C). Final Drainage Report for Safeway Store #1997,
1266          KM        Retention Calculations for New Dysart Elementary School No. 9
1267          KM        at Site J (excess of 3.30 ac-ft).
1268          DT    RL09    40.3     0.0
1269          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1270          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1271          KK   DL051RETRIEVE
1272          DR  DL051S
              *

1273          KK  L05L09ROUTE
1274          KM        Cross-section: Cross-section determined from aerial
1275          KM        Manning's N Value: earth w/ sparse trees and brush
1276          RS      15    FLOW
1277          RC   0.032   0.032   0.032    5376  0.0045    0.00
1278          RX  100.00  240.00  280.00  400.00  440.00  480.00  500.00  550.00
1279          RY  1258.0 1254.00 1253.00 1253.00 1253.00 1254.00 1255.00 1257.00
              *

1280          KK   CPL09COMBINE
1281          HC       2   2.901
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1282          KK   DL091DIVERT
1283          KM        L303 at Greenway intersection split flow
1284          DT  DL091S     0.0     0.0
1285          DI     0.0   139.8   574.5  1711.2  3567.8     0.0     0.0     0.0     0.0     0.0
1286          DQ     0.0    14.8   433.6  1380.6  2769.3     0.0     0.0     0.0     0.0     0.0
              *

1287          KK   DL092DIVERT
1288          KM        L303 at Greenway intersection split flow
1289          DT  DL092S     0.0     0.0
1290          DI     0.0   125.0   140.9   330.6   798.6     0.0     0.0     0.0     0.0     0.0
1291          DQ     0.0     0.0    15.9   177.9   429.6     0.0     0.0     0.0     0.0     0.0
              *

1292          KK  L09D08ROUTE
1293          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1294          KM        on aerial / Manning's N Value: retention basins, earth w/ grass
1295          RS       1    FLOW
1296          RC   0.025   0.025   0.025    2922  0.0014    0.00
1297          RX  100.00  101.00  102.00  114.00  133.00  145.00  146.00  147.00
1298          RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.10 1000.20
              *

1299          KK     D08BASIN
1300          KM        BASIN BOUNDARY FROM LOOP 303 AND NORTHWEST RANCH
1301          BA   0.514
1302          LG    0.28    0.26    5.40    0.29      30
1303          UI       0      44      62     162     219     264     316     417     549     440
1304          UI     357     300     242     190     120      75      69      44      35      13
1305          UI      13      14      13      13       0       0       0       0       0       0
1306          UI       0       0       0       0       0       0       0       0       0       0
1307          UI       0       0       0       0       0       0       0       0       0       0
              *

1308          KK  DD08REDIVERT
1309          KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A
1310          KM        only, Basin B/C same as Tract O), Final Drainage Report for
1311          KM        Parcel 13 of Surprise Farms (Tract O, P), Final Drainage Report
1312          KM        for Surprise Farms Parcel 9 (Tract K and 9), Final Drainage Report
1313          DT    RD08    26.0     0.0
1314          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1315          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1316          KK   DL052RETRIEVE
1317          DR  DL052S
              *

1318          KK  L05D08ROUTE
1319          KM        Cross-section: Estimated V ditch 2' deep , width based on aerial
1320          KM        Manning's N Value:  earth w/ grass
1321          RS      19    FLOW
1322          RC   0.022   0.022   0.022    7790  0.0039    0.00
1323          RX  100.00  120.00  130.00  150.00  151.00  170.00  180.00  200.00
1                                          HEC-1 INPUT                                          PAGE 34

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1324          RY  1000.0  999.20  998.80  998.00  997.90  998.80  999.20 1000.00
              *

1325          KK   CPD08COMBINE
1326          KM        Sarival at Greenway
1327          HC       3   3.415
              *

1328          KK  D08D16ROUTE
1329          KM        Cross-section: Ag field, assumed 0.5% side slopes
1330          KM        V-ditch / Manning's N Value: Ag field
1331          RS      11    FLOW
1332          RC   0.038   0.038   0.038    5348  0.0053    0.00
1333          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1334          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
```

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                *
1335            KK     L06BASIN
1336            KM        BASIN BOUNDARY FROM SURPRISE FARMS AND SF SCHOOL DISTRICT
1337            BA   0.696
1338            LG    0.28     0.29     5.30     0.27       23
1339            UI       0      103      394      599      875     1203      839      597      364      176
1340            UI     111       46       32       31        0        0        0        0        0        0
1341            UI       0        0        0        0        0        0        0        0        0        0
1342            UI       0        0        0        0        0        0        0        0        0        0
1343            UI       0        0        0        0        0        0        0        0        0        0
                *
1344            KK  DL06REDIVERT
1345            KM        Final Drainage Report for Surprise Farms Phase 5 (Tracts A1, B, C1, G,
1346            KM        KN, M1, N1, O, P, Q S1N, S1S, Z), Drainage Report for Surprise Farms
1347            KM        Phase 4 Parcel 1 (TR-1D, 1F, 3A1,  & 3A2 (3As in Parcel 4B)),
1348            KM        Drainage Report for City of Surprise Surprise Farms Park (Basins 1,2,5)
1349            KM        Drainage Report for Surprise Farms Phase 4B Infrastructure (Retention
1350            KM        in Surrounding Basins except for missing reports: TR-2B1, 2B2, 3N,
1351            KM        3H, 3K, 4J), Drainage Report for Surprise Farms Phase 4 Parcel 5
1352            KM        (TR-5A1, 5A2, 5B West, 5B East, 5D), Drainage Report for
1353            KM        Surprise Farms Phase 4 Parcel 6 (TR 6J), Drainage Report for
1354            KM        Surprise Farms Phase III Parcel 1 (Retention Basin 1,2,3,4)
1355            KM        Drainage Report for Surprise Farms Phase III Parcel 2
1356            KM        (Basins 1,2,3,4,5), Drainage Report for Surprise Farms Phase III Parcel
1357            KM        for Surprise Farms Phase III Parcel  4 (Basin 1,3,6), Drainage Report
1358            KM        for Surprise Farms Phase III Parcel 5 (Basin 1), Drainage
1359            KM        Report for Surprise Farms Phase III Parcel 3
1360            KM        (Basin 1, 2, 3, 4), Drainage Report for New
1361            KM        Dysart Preschool (One basin on N Corner), Drainage Report for
1362            KM        Dysart Elementary School No 15 and Preschool
1363            DT    RL06      59.3      0.0
1364            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1365            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
1                                          HEC-1 INPUT                                                    PAGE 35

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1366            KK  DL06SEDIVERT
1367            KM        179th at Greeway split flow
1368            DT   DL06S      0.0      0.0
1369            DI     0.0    125.4    973.2   2548.4   5028.3      0.0      0.0      0.0      0.0      0.0
1370            DQ     0.0    125.4    973.2   2275.2   4106.2      0.0      0.0      0.0      0.0      0.0
                *
1371            KK  L06L07ROUTE
1372            KM        Cross-section: Cross-section determined from A-team survey
1373            KM        Manning's N Value: street and earth channel with sparse trees and shrubs
1374            RS       1     FLOW
1375            RC   0.032    0.013    0.013     2771   0.0031     0.00
1376            RX  100.00   100.10   100.20   122.00   126.00   133.00   146.00   159.00
1377            RY  1286.2  1286.10  1286.00  1282.00  1282.00  1283.00  1283.00  1283.80
                *
1378            KK     L07BASIN
1379            KM        BASIN BOUNDARY FROM SURPRISE FARMS
1380            BA   0.632
1381            LG    0.28     0.29     5.30     0.28       26
1382            UI       0       88      314      493      682     1054      795      581      404      190
1383            UI     126       75       27       27       28        0        0        0        0        0
1384            UI       0        0        0        0        0        0        0        0        0        0
1385            UI       0        0        0        0        0        0        0        0        0        0
1386            UI       0        0        0        0        0        0        0        0        0        0
                *
1387            KK  DL07REDIVERT
1388            KM        Drainage Report for Surprise Farms Phase II Infrastructure, Drainage
1389            KM        Report for Surprise Farms Community Park (Community Parks Basin A, B)
1390            KM        Pavement Drainage Report for Surprise Farms School Site
1391            KM        (High School Basin A, B1, C1, D, E, F1), Drainage Report for
1392            KM        Surprise Farms Phase 2 Parcel 6, Drainage Report for Surprise
1393            KM        Farms Phase III Parcel 6 (Basins 1,2,3,4,5), Drainage Report for
1394            KM        Surprise Farms Phase 2 Parcel 1, Drainage Report for Surprise Farms
1395            KM        Phase 2 Parcel 5, Drainage Report for Surprise Farms Phase 2 Parcel 2,
1396            KM        Drainage Report for Surprise Farms Phase 2 Parcel 4,
1397            KM        Drainage Report for Surprise Farms
1398            KM        Phase 2 Parcel 3, Drainage Report for City of Surprise Surprise Farms
1399            KM        Drainage Report for Surprise Farms Phase 2 Parcel 1
1400            DT    RL07      46.3      0.0
1401            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1402            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
1403            KK  DL03SERETRIEVE
1404            DR   DL03S
                *
1                                          HEC-1 INPUT                                                    PAGE 36

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1405            KK  L0307AROUTE
1406            KM        Cross-section: Channel is 16' wide and 2' deep with 4: side slopes per
1407            KM        Surprise Farms Phase II Infrastructure Report (Report 287)
1408            KM        Manning's N Value: riprap and pavement
1409            RS       3     FLOW
1410            RC   0.013    0.032    0.032     3088   0.0052     0.00
1411            RX  100.00   119.00   119.50   155.00   163.00   171.00   172.00   173.00
1412            RY  1000.0   999.60  1000.10   999.50   997.50   999.50   999.70  1000.00
                *
1413            KK  L0307BROUTE
1414            KM        Cross-section: Cross section determined from aerial, 1/2 street section
1415            KM        Manning's N Value: pavement, earth with sparse trees and shrubs
1416            RS      12     FLOW
1417            RC   0.013    0.013    0.032     2848   0.0018     0.00
1418            RX  100.00   100.10   105.00   115.00   115.10   115.50   132.00   134.00
1419            RY  1001.0  1000.00   999.90   999.60  1000.10  1000.20  1000.30  1000.40
                *
1420            KK   CPL07COMBINE
1421            HC       3    2.623
                *
1422            KK  DL07SEDIVERT
1423            KM        Paradise at Greenway split flow
1424            DT   DL07S      0.0      0.0
```

```
1425          DI     0.0   233.4   660.0  1459.1  2912.5     0.0     0.0     0.0     0.0     0.0
1426          DQ     0.0    47.7   135.0   309.0   902.5     0.0     0.0     0.0     0.0     0.0
              *

1427          KK  L07L08ROUTE
1428          KM        Cross-section: Cross-section determined from A-team survey
1429          KM        Manning's N Value: clean earth; straight
1430          RS       1    FLOW
1431          RC   0.022   0.022   0.022    2557  0.0041    0.00
1432          RX  100.00  100.90  101.00  115.00  127.00  150.00  151.00  152.00
1433          RY  1279.6 1279.50 1277.50 1275.50 1278.50 1279.50 1279.60 1279.70
              *

1434          KK     L08BASIN
1435          KM        BASIN BOUNDARY FROM SURPRISE FARMS
1436          BA   0.485
1437          LG    0.27    0.17    7.30    0.13      31
1438          UI       0      55     144     267     341     463     668     535     415     309
1439          UI     219     114      85      55      25      17      17      17       0       0
1440          UI       0       0       0       0       0       0       0       0       0       0
1441          UI       0       0       0       0       0       0       0       0       0       0
1442          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                          PAGE 37

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1443          KK  DL08REDIVERT
1444          KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A
1445          KM        only, Basin B/C same as Tract O), Final Drainage Report for Parcel 13 of
1446          KM        Surprise Farms (Tract O, P), Final Drainage Report for Surprise Farms
1447          KM        Parcel 9 (Tract K and 9), Final Drainage Report for Parcel 10 & 11 of
1448          KM        Surprise Farms (Tract L, M, N), Drainage Report for Parcel 15 (Basins
1449          KM        A & B only, Basin C in School Site), Drainage Report for New Dysart
1450          KM        Elementary School No 18, Remaining retention volume estimated based
1451          KM        on aerial
1452          DT    RL08    39.4     0.0
1453          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1454          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1455          KK  DL04SERETRIEVE
1456          DR   DL04S
              *

1457          KK  L04L08ROUTE
1458          KM        Cross-section: Cross-section determined from aerial
1459          KM        Manning's N Value: street and earth with sparse trees and shrubs
1460          RS       1    FLOW
1461          RC   0.013   0.013   0.032    5352  0.0042    0.00
1462          RX  100.00  100.10  100.20  115.20  115.30  115.40  145.00  153.00
1463          RY  1000.0  999.90  999.80  999.50 1000.00 1000.10 1000.20 1000.30
              *

1464          KK   CPL08COMBINE
1465          HC       3   3.739
              *

1466          KK  L08L12ROUTE
1467          KM        Cross-section: Cross-section determined from aerial
1468          KM        Manning's N Value: street, earth with grass and forbs
1469          RS      14    FLOW
1470          RC   0.013   0.025   0.025    5397  0.0031    0.00
1471          RX  100.00  107.00  112.00  116.00  122.00  126.00  165.00  280.00
1472          RY  1248.5 1248.50 1248.00 1247.50 1247.51 1248.00 1248.20 1248.50
              *

1473          KK     L10BASIN
1474          KM        BASIN BOUNDARY FROM SIERRA MONTANA
1475          KM        WADDELL HACIENDAS AND BEARDSLEY CSR
1476          BA   0.844
1477          LG    0.27    0.25    4.55    0.38      18
1478          UI       0      95     240     449     577     766    1141     935     733     554
1479          UI     408     214     156      97      57      29      29      29       0       0
1480          UI       0       0       0       0       0       0       0       0       0       0
1481          UI       0       0       0       0       0       0       0       0       0       0
1482          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                          PAGE 38

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1483          KK  DL10REDIVERT
1484          KM        Final Drainage Report for Sierra Montana Parcel 4 (Basins 1, 2),
1485          KM        Drainage Report for Sierra Montana Parcel 1 (Basins 1,2,3,3A,3B),
1486          KM        Drainage Report for Sierra Montana Parcel 3 (Basins 3,3A,3B,3C),
1487          KM        Drainage Report for Sierra Montana Infastructure Phase II (P2 Retention)
1488          KM        Sierra Montana Final Drainage Report Parcel 5 (Basins 1,2,3,4,7,8)
1489          KM        Sierra Montana Final Drainage Report Parcel 6 (Basins 1,2,3,4,6)
1490          DT    RL10    34.2     0.0
1491          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1492          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1493          KK  L10L11ROUTE
1494          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1495          KM        on aerial / Manning's N Value: earth with sparse trees and shrubs
1496          RS       3    FLOW
1497          RC   0.032   0.032   0.032    3249  0.0031    0.00
1498          RX  100.00  100.10  100.20  112.00  154.00  166.00  183.00  185.00
1499          RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.30 1000.40
              *

1500          KK  DL06SERETRIEVE
1501          DR   DL06S
              *

1502          KK  L06L11ROUTE
1503          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1504          KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
1505          RS       1    FLOW
1506          RC   0.032   0.032   0.032    8226  0.0043    0.00
1507          RX  100.00  106.00  112.00  124.00  154.00  166.00  172.00  178.00
1508          RY  1290.5 1290.30 1290.00 1287.00 1287.10 1290.00 1290.25 1290.50
              *

1509          KK     L11BASIN
1510          KM        BASIN BOUNDARY FROM SIERRA MONTANA
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1511    KM        WADDELL CHANNEL DESIGNED FOR 512 CFS PER DEVELOPMENT RPT
1512    BA   0.622
1513    LG    0.25     0.25     4.90     0.34       34
1514    UI       0       80      264      433      572      903      839      608      452      287
1515    UI     139      100       55       25       25       25        0        0        0        0
1516    UI       0        0        0        0        0        0        0        0        0        0
1517    UI       0        0        0        0        0        0        0        0        0        0
1518    UI       0        0        0        0        0        0        0        0        0        0
        *

1519    KK  DL11REDIVERT
1520    KM        Sierra Montana Parcel 8 (Basins 8, 8A, 8B), Parcel 9 (Basins 9, 9A, 8C),
1521    KM        Parcel 7 (Basins 1-4), Parcel 12 (included in Parcel 14 report), P
1522    KM        arcel 14 (Basins 1,2,3a,3b,4a,4b,5,6,7,8,OS2,OS4,OS5 (Includes
1523    KM        Retention for P14 &12)), Parcel 20 (Basins R20C, R20, R20A),
1524    KM        Phase 1S and 1N estimated from aerial, Infrastructure Phase I
1525    KM        (Retention from Parcel 21)
1526    DT    RL11     47.6      0.0
```



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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1527    DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1528    DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
        *

1529    KK  DL07SERETRIEVE
1530    DR   DL07S
        *

1531    KK  L07L11ROUTE
1532    KM        Cross-section: 3' deep, 6:1 side slope and 6' bottom width per
1533    KM        Drainage Report for Sierra Montana Infrastructure Phase I (Report 909)
1534    KM        Manning's N Value: earth with sparse trees and shrubs
1535    RS       16     FLOW
1536    RC    0.032    0.032    0.032     8463   0.0026     0.00
1537    RX   100.00   101.00   102.00   120.00   126.00   144.00   145.00   146.00
1538    RY   1000.0   999.90   999.80   996.80   996.70   999.80   999.90  1000.00
        *

1539    KK   CPL11COMBINE
1540    HC        4    4.089
        *

1541    KK  DL11SEDIVERT
1542    KM        Waddell at 173rd alignment split flow
1543    DT   DL11S      0.0      0.0
1544    DI     0.0    309.0   1207.7   2631.3   4439.4      0.0      0.0      0.0      0.0      0.0
1545    DQ     0.0      0.0     22.5    147.6    353.8      0.0      0.0      0.0      0.0      0.0
        *

1546    KK  L11L12ROUTE
1547    KM        Cross-section: Cross-section determined from aerial
1548    KM        Manning's N Value: earth with grass and forbs
1549    RS        2     FLOW
1550    RC    0.025    0.025    0.025     2002   0.0032     0.00
1551    RX   100.00   110.00   180.00   190.00   200.00   220.00   240.00   240.10
1552    RY   1249.5  1249.00  1248.50  1247.00  1248.50  1248.70  1248.80  1249.50
        *

1553    KK     L12BASIN
1554    KM        BASIN BOUNDARY FROM SIERRA MONTANA, AG LAND AND 1990 TOPO
1555    BA   0.358
1556    LG    0.39     0.25     6.20     0.22       10
1557    UI       0       30       40      111      150      179      214      274      383      308
1558    UI     255      211      170      137       93       53       48       33       29        9
1559    UI       9        9        9        9        0        0        0        0        0        0
1560    UI       0        0        0        0        0        0        0        0        0        0
1561    UI       0        0        0        0        0        0        0        0        0        0
        *

1562    KK  DL12REDIVERT
1563    KM        Sierra Montana Parcel 16 (Basins 10A, 16B), Parcel 15 (Basins 15A,
1564    KM        15B, 15C), Parcel 18 (Basins 18A-D), Sierra Montana Crossings
1565    DT    RL12      9.0      0.0
1566    DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1567    DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
        *
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1568    KK   CPL12COMBINE
1569    HC        3    5.563
        *

1570    KK   DL121DIVERT
1571    KM        Waddell at Cotton split flow
1572    DT  DL121S      0.0      0.0
1573    DI     0.0   3141.9   7409.3  13063.4  20317.2      0.0      0.0      0.0      0.0      0.0
1574    DQ     0.0    550.7   2126.5   4314.6   7195.9      0.0      0.0      0.0      0.0      0.0
        *

1575    KK   DL122DIVERT
1576    KM        Waddell at Cotton split flow
1577    DT  DL122S      0.0      0.0
1578    DI     0.0   2591.2   5282.9   8748.8  13121.3      0.0      0.0      0.0      0.0      0.0
1579    DQ     0.0     31.8     90.0    165.3    254.6      0.0      0.0      0.0      0.0      0.0
        *

1580    KK  L12L13ROUTE
1581    KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1582    KM        Manning's N Value: Ag field
1583    RS        3     FLOW
1584    RC    0.038    0.038    0.038     2537   0.0051     0.00
1585    RX   100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
1586    RY   1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
        *

1587    KK     L13BASIN
1588    KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
1589    KM        EASTERN BOUNDARY LOOP 303
1590    BA   0.483
1591    LG    0.49     0.25     4.90     0.43        3
1592    UI       0       29       29       43       68      125      171      157      226      222
1593    UI     244      245      242      214      205      223      160      163      145      110
1594    UI      98       83       90       56       50       46       36       36       26       27
1595    UI      25       16       17       16       17        8        4        3        4        4
1596    UI       3        4        3        4        4        3        4        3        4        3
```

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                *

1597            KK   DL091RETRIEVE
1598            DR  DL091S
                *

1599            KK  L09L13ROUTE
1600            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1601            KM        Manning's N Value: Ag field
1602            RS      61    FLOW
1603            RC   0.038   0.038   0.038    5317  0.0039    0.00
1604            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1605            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1606            KK   CPL13COMBINE
1607            HC       3   7.021
                *

1608            KK   DL131DIVERT
1609            KM        L303 at Waddell split flow
1610            KM        Orig calc's by KHA, 2008. Modified for SE component
1611            DT  DL131S      0.0     0.0
1612            DI     0.0    100.5   491.9  1284.7  2545.0     0.0     0.0     0.0     0.0     0.0
1613            DQ     0.0     99.9   470.6  1082.3  1928.4     0.0     0.0     0.0     0.0     0.0
                *

1614            KK   DL132DIVERT
1615            KM        L303 at Waddell split flow
1616            KM        Orig calc's by KHA, 2008. Modified for SE component
1617            DT  DL132S      0.0     0.0
1618            DI     0.0      0.6    21.3   202.4   616.6     0.0     0.0     0.0     0.0     0.0
1619            DQ     0.0      0.6    14.2    36.5    64.9     0.0     0.0     0.0     0.0     0.0
                *

1620            KK  L13D16ROUTE
1621            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1622            KM        Manning's N Value: Ag field
1623            RS      17    FLOW
1624            RC   0.038   0.038   0.038    2781  0.0033    0.00
1625            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1626            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *

1627            KK     D16BASIN
1628            KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
1629            BA   0.517
1630            LG    0.48    0.25    4.90    0.43       5
1631            UI       0      32      32      50      81     146     188     187     240     264
1632            UI     269     273     262     223     240     217     167     186     128     117
1633            UI      94      96      74      57      52      41      40      31      29      29
1634            UI      18      18      19      18       9       4       4       4       4       4
1635            UI       4       4       4       4       4       4       4       4       4       4
                *

1636            KK   DL092RETRIEVE
1637            DR  DL092S
                *

1638            KK  L09D16ROUTE
1639            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1640            KM        Manning's N Value: Ag. Field
1641            RS       1    FLOW
1642            RC   0.038   0.038   0.038    5960  0.0060    0.00
1643            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1644            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *
1                                          HEC-1 INPUT                                                    PAGE 42

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1645            KK   CPD16COMBINE
1646            HC       4   8.052
                *

1647            KK   DD161DIVERT
1648            KM        Waddell at Sarival split flow
1649            DT  DD161S      0.0     0.0
1650            DI     0.0     52.0   492.4  1578.2  3317.0     0.0     0.0     0.0     0.0     0.0
1651            DQ     0.0     38.3   403.6  1166.1  2341.9     0.0     0.0     0.0     0.0     0.0
                *

1652            KK   DD162DIVERT
1653            KM        Waddell at Sarival split flow
1654            DT  DD162S      0.0     0.0
1655            DI     0.0     13.7    88.8   412.0   975.1     0.0     0.0     0.0     0.0     0.0
1656            DQ     0.0      7.4    32.2    66.7   108.7     0.0     0.0     0.0     0.0     0.0
                *

1657            KK  D16D18ROUTE
1658            KM        Cross-section: Cross-section determined from aerial
1659            KM        Manning's N Value: street and ROW
1660            RS       3    FLOW
1661            RC   0.032   0.013   0.013    2183  0.0035    0.00
1662            RX  100.00  101.00  102.00  148.00  148.10  176.00  177.00  178.00
1663            RY  1000.0  999.90  999.80  999.70  999.20  999.80  999.90 1000.00
                *

1664            KK     D18BASIN
1665            KM        BASIN BOUNDARY FROM LEGACY PARK
1666            BA   0.199
1667            LG    0.25    0.25    4.60    0.39      30
1668            UI       0      83     260     477     382     211      74      30      15       0
1669            UI       0       0       0       0       0       0       0       0       0       0
1670            UI       0       0       0       0       0       0       0       0       0       0
1671            UI       0       0       0       0       0       0       0       0       0       0
1672            UI       0       0       0       0       0       0       0       0       0       0
                *

1673            KK  DD18REDIVERT
1674            KM        Master Drainage Report for Legacy Parc (has excess retention)
1675            DT    RD18    17.2     0.0
1676            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1677            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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1678          KK   CPD18COMBINE
1679          HC       2   8.251
              *
1                                          HEC-1 INPUT                                                    PAGE 43

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1680          KK  D18D19ROUTE
1681          KM        Cross-section: Cross-section determined from aerial
1682          KM        Manning's N Value: street and ROW
1683          RS       2    FLOW
1684          RC   0.032   0.013   0.013    2766  0.0024    0.00
1685          RX  100.00  101.00  132.50  133.00  133.10  151.00  152.00  153.00
1686          RY  1000.1 1000.00  999.50  999.40  998.90  999.30  999.40  999.50
              *

1687          KK     D17BASIN
1688          KM        BASIN BOUNDARY FROM LEGACY PARK
1689          BA   0.197
1690          LG    0.25    0.25    3.95    0.40      30
1691          UI       0      88     269     487     369     197      69      25      15       0
1692          UI       0       0       0       0       0       0       0       0       0       0
1693          UI       0       0       0       0       0       0       0       0       0       0
1694          UI       0       0       0       0       0       0       0       0       0       0
1695          UI       0       0       0       0       0       0       0       0       0       0
              *

1696          KK  DD17REDIVERT
1697          KM        Master Drainage Report for Kenly Farms Subdivision, Master Drainage
1698          KM        Report for Legacy Parc (has excess retention)
1699          DT    RD17    16.5     0.0
1700          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1701          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1702          KK  D17D19ROUTE
1703          KM        Cross-section: Cross-section from Drainage Report for Channelization of
1704          KM        Reems Road (Report 691) / Manning's N Value: channel w/ grass
1705          KM        bottom and riprap sides
1706          RS      18    FLOW
1707          RC   0.032   0.025   0.032    5422  0.0042    0.00
1708          RX  100.00  101.00  102.00  125.00  133.00  156.00  157.00  159.00
1709          RY  1000.0  999.90  999.80  993.80  993.70  999.80  999.90 1000.00
              *

1710          KK     D19BASIN
1711          KM        BASIN BOUNDARY FROM TASH, WADDEL SQUARE, LME,  AND SCHOOL
1712          BA   0.506
1713          LG    0.27    0.26    4.65    0.38      26
1714          UI       0      69     175     383     535     590     521     461     355     232
1715          UI     180     114      81      64      41      39       9       8       9       9
1716          UI       8       9       9       8       9       0       0       0       0       0
1717          UI       0       0       0       0       0       0       0       0       0       0
1718          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                                    PAGE 44

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1719          KK  DD19REDIVERT
1720          KM        Drainage Report for Greenway Parc at Surprise One, Final Drainage
1721          KM        Report for Retail Center for Venture Development  SP06-411, Stormwater
1722          KM        Management Report for Jack in the Box, Final Drainage Report for
1723          KM        Greenway Parc at Surprise Three, Drainage Report for Greenway Parc at
1724          KM        Surprise Two, Drainage Report for Walgreens at Waddell & Reems Case
1725          KM        # SPA04-297, Drainage Report for Waddell Square, Final Drainage Report
1726          KM        for Waddell Square Phase 2-Wells Fargo, Final Drainage Report for
1727          KM        Waddell Square NWC Reems and Waddell, Final Drainage Rpt for Tash
1728          DT    RD19    33.7     0.0
1729          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1730          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1731          KK   CPD19COMBINE
1732          HC       4  16.488
              *

1733          KK   DD191DIVERT
1734          KM        Waddell at Reems split flow
1735          DT  DD191S     0.0     0.0
1736          DI     0.0   107.6   404.8  1261.9  2553.0     0.0     0.0     0.0     0.0     0.0
1737          DQ     0.0    58.0   241.1   802.7  1649.6     0.0     0.0     0.0     0.0     0.0
              *

1738          KK   DD192DIVERT
1739          KM        Waddell at Reems split flow
1740          DT  DD192S     0.0     0.0
1741          DI     0.0    49.6   163.7   459.2   903.4     0.0     0.0     0.0     0.0     0.0
1742          DQ     0.0    27.9    69.2   121.4   182.6     0.0     0.0     0.0     0.0     0.0
              *

1743          KK  D19D20ROUTE
1744          KM        Cross-section: Cross-section determined from aerial
1745          KM        Manning's N Value: street and earth with sparse trees and shrubs
1746          RS       4    FLOW
1747          RC   0.032   0.013   0.013    2674  0.0050    0.00
1748          RX  100.00  101.00  125.00  150.00  150.10  175.00  189.90  190.00
1749          RY  1003.0  999.90  998.90  999.90  999.40  999.60  999.80 1000.25
              *

1750          KK     D20BASIN
1751          KM        BASIN BOUNDARY FROM COUNTRYSIDE UNITS 1-4 AND COTTON GIN
1752          BA   0.498
1753          LG    0.26    0.26    4.65    0.39      30
1754          UI       0      67     234     367     503     791     641     472     341     178
1755          UI     111      68      25      20      21       0       0       0       0       0
1756          UI       0       0       0       0       0       0       0       0       0       0
1757          UI       0       0       0       0       0       0       0       0       0       0
1758          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                                    PAGE 45

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1759          KK  DD20REDIVERT
1760          KM        Final Drainage Report Greenway Marketplace Wal-mart Neighborhood
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1761        KM        Market #4218-00, Drainage Report for Countryside Elementary School,
1762        KM        Ashton Ranch Water Supply Facility Expansion, Countryside -
1763        KM        Preliminary Drainage  Report, Final Drainage Report for Cotton Gin
1764        DT    RD20     38.1      0.0
1765        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1766        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

1767        KK   DD111RETRIEVE
1768        DR  DD111S
            *

1769        KK  D11D20ROUTE
1770        KM        Cross-section: Cross-section determined from aerial
1771        KM        Manning's N Value: retention basins, earth w/ grass
1772        RS       5    FLOW
1773        RC   0.025    0.025    0.025     6256  0.0032     0.00
1774        RX  100.00   101.00   102.00   114.00  190.00   202.00   203.00   204.00
1775        RY  1000.2 1000.10 1000.00   997.00  996.90 1000.00 1000.10 1000.20
            *

1776        KK   CPD20COMBINE
1777        HC       3  17.648
            *

1778        KK  D20D21ROUTE
1779        KM        Cross-section:  / Manning's N Value: street and earth with sparse
1780        KM        trees and shrubs
1781        RS       5    FLOW
1782        RC   0.032    0.032    0.013     5323  0.0023     0.00
1783        RX  100.00   100.50   112.00   150.00  162.00   198.00   198.00   220.00
1784        RY  1000.1 1000.00   997.00   997.00 1000.00   999.46   998.90   999.40
            *

1785        KK     D21BASIN
1786        KM        BASIN BOUNDARY FROM ASHTON RANCH MULTI UNITS
1787        BA   0.496
1788        LG    0.25     0.25     4.65     0.39       32
1789        UI       0       63      199      330      436      672      687      496      370      250
1790        UI     123       87       55       19       20       19        0        0        0        0
1791        UI       0        0        0        0        0        0        0        0        0        0
1792        UI       0        0        0        0        0        0        0        0        0        0
1793        UI       0        0        0        0        0        0        0        0        0        0
            *

1794        KK  DD21REDIVERT
1795        KM        Final Drainage Report for Ashton Ranch Unit 3, Final Drainage Report for
1796        KM        Ashton Ranch Unit 1, Final Drainage Report for Ashton Ranch Unit 2,
1797        KM        Final Drainage Report for Ashton Ranch Unit 4
1798        DT    RD21     39.9      0.0
1799        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1800        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1801        KK   DD112RETRIEVE
1802        DR  DD112S
            *

1803        KK  D11D21ROUTE
1804        KM        Cross-section:determined from aerial, street section through subdivision
1805        KM        Manning's N Value: street, earth with sparse trees and shrubs
1806        RS      10    FLOW
1807        RC   0.032    0.013    0.032     8031  0.0035     0.00
1808        RX  100.00   106.00   115.00   115.10  167.00   167.10   174.00   179.00
1809        RY  1000.0   999.80   999.50   999.00  998.90   999.50   999.80  1000.00
            *

1810        KK   DD121RETRIEVE
1811        DR  DD121S
            *

1812        KK  D12D21ROUTE
1813        KM        Cross-section: Cross-section determined from aerial
1814        KM        Manning's N Value: street and earth with sparse trees and shrubs
1815        RS       2    FLOW
1816        RC   0.013    0.013    0.032     2810  0.0078     0.00
1817        RX  100.00   105.00   110.00   115.00  140.00   140.10   176.00   177.00
1818        RY  1000.0   999.90   999.80   999.70  999.20   999.70   999.80  1000.00
            *

1819        KK   CPD21COMBINE
1820        HC       4  18.491
            *

1821        KK   DD211DIVERT
1822        KM        Waddell at Bullard split flow
1823        DT  DD211S      0.0      0.0
1824        DI     0.0    184.9    770.2   1884.9  3510.6      0.0      0.0      0.0      0.0      0.0
1825        DQ     0.0    139.4    462.9   1049.1  1871.4      0.0      0.0      0.0      0.0      0.0
            *

1826        KK   DD212DIVERT
1827        KM        Waddell at Bullard split flow
1828        DT  DD212S      0.0      0.0
1829        DI     0.0     45.5    307.3    835.8  1639.2      0.0      0.0      0.0      0.0      0.0
1830        DQ     0.0     36.2    111.1    209.5   326.8      0.0      0.0      0.0      0.0      0.0
            *

1831        KK  D21D22ROUTE
1832        KM        Cross-section: Cross-section determined from aerial
1833        KM        Manning's N Value: earth with grass and forbs (main channel)
1834        KM        earth with sparse trees and shrubs (overbanks)
1835        RS       4    FLOW
1836        RC   0.032    0.025    0.032     2720  0.0029     0.00
1837        RX  100.00   103.00   105.00   116.00  151.00   160.00   165.00   170.00
1838        RY  1000.2 1000.10 1000.00   997.00  997.10 1000.00 1000.10 1000.20
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1839        KK     D22BASIN
1840        KM        BASIN BOUNDARY FROM ROYAL RANCH UNIT I AND II
1841        BA   0.454
1842        LG    0.24     0.25     4.70     0.37       32
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1843        UI       0      63     233     357     500     764     567     411     284     135
1844        UI      87      50      20      20      20       0       0       0       0       0
1845        UI       0       0       0       0       0       0       0       0       0       0
1846        UI       0       0       0       0       0       0       0       0       0       0
1847        UI       0       0       0       0       0       0       0       0       0       0
            *

1848        KK  DD22REDIVERT
1849        KM        Drainage Report for Royal Ranch Unit 2 (Basins P1&N in D23), Final
1850        KM        Drainage Report for Royal Ranch Unit 2, Parcel 5, Final Drainage
1851        KM        Report for Royal Ranch Unit 2 Parcel 8, portion estimated by aerial for
1852        KM        Del Webb
1853        DT    RD22    37.5     0.0
1854        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1855        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1856        KK   DD122RETRIEVE
1857        DR  DD122S
            *

1858        KK  D12D22ROUTE
1859        KM        Cross-section: Cross section determined from aerial
1860        KM        Manning's N Value: street and earth with sparse trees and shrubs
1861        RS       7    FLOW
1862        RC   0.032   0.013   0.013    7744  0.0040    0.00
1863        RX  100.00  105.00  145.00  145.10  160.00  174.00  178.00  180.00
1864        RY  1000.0  999.90  999.50  999.00  999.20  999.50  999.60  999.65
            *

1865        KK   CPD22COMBINE
1866        HC       3  18.945
            *

1867        KK  D22D23ROUTE
1868        KM        Cross-section: Cross-section determined from aerial
1869        KM        Manning's N Value: earth with sparse trees and shrubs/ riprap
1870        RS       2    FLOW
1871        RC   0.032   0.032   0.032    2705  0.0037    0.00
1872        RX  100.00  104.00  106.00  110.00  118.00  122.00  126.00  138.00
1873        RY  1161.0 1160.00 1159.00 1158.00 1158.10 1159.00 1160.00 1161.00
            *

1874        KK     D23BASIN
1875        KM        BASIN BOUNDARY FROM SIERRA VERDE
1876        BA   0.541
1877        LG    0.27    0.27    5.00    0.32      26
1878        UI       0      59     138     272     346     448     673     629     483     371
1879        UI     284     172     101      76      56      17      18      18      18       0
1880        UI       0       0       0       0       0       0       0       0       0       0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1881        UI       0       0       0       0       0       0       0       0       0       0
1882        UI       0       0       0       0       0       0       0       0       0       0
            *

1883        KK  DD23REDIVERT
1884        KM        Final Drainage Report for Sierra Verde Parcel 5, Infrastructure Drainage
1885        KM        Report for Sierra Verde (temporary basins removed), Final Drainage
1886        KM        Report for Sierra Verde Parcel 4Final Drainage Report for Harmony
1887        KM        Apartments, Drainage Report for Royal Ranch Unit 2 Final Drainage
1888        KM        Report for Sierra Verde Parcel 9, Final Drainage Report for Sierra Verde
1889        KM        Parcel 3, Final Drainage Report for Sierra Verde Parcel 2, Final Drainag
1890        KM        Report for Sierra Verde Parcel 1, Drainage Report for Fry's at Waddell
1891        KM        and Litchfield Roads
1892        DT    RD23    36.3     0.0
1893        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1894        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

1895        KK   DD131RETRIEVE
1896        DR  DD131S
            *

1897        KK  D13D23ROUTE
1898        KM        Cross-section: Cross-section determined from aerial 1/2 street section
1899        KM        Manning's N Value: street, earth with sparse trees and shrubs
1900        RS       3    FLOW
1901        RC   0.032   0.013   0.032    5460  0.0044    0.00
1902        RX  100.00  100.00  109.00  109.00  148.00  148.00  197.00  198.00
1903        RY  1180.0 1176.28 1176.28 1175.78 1175.00 1175.50 1177.00 1177.10
            *

1904        KK   CPD23COMBINE
1905        HC       3   22.13
            *

1906        KK   DD231DIVERT
1907        KM        Waddell at Litchfield split flow
1908        DT  DD231S     0.0     0.0
1909        DI     0.0   518.8   867.4  1680.6  2985.0     0.0     0.0     0.0     0.0     0.0
1910        DQ     0.0    51.3   223.3   727.6  1503.5     0.0     0.0     0.0     0.0     0.0
            *

1911        KK   DD232DIVERT
1912        KM        Waddell at Litchfield split flow
1913        DT  DD232S     0.0     0.0
1914        DI     0.0   467.5   644.1   953.0  1481.6     0.0     0.0     0.0     0.0     0.0
1915        DQ     0.0    55.8   138.4   242.9   365.2     0.0     0.0     0.0     0.0     0.0
            *

1916        KK  D23D24ROUTE
1917        KM        Manning's N Value: Litchfield Manor, CS 400 HDR 896
1918        RS       2    FLOW
1919        RC   0.025   0.025   0.025    2496  0.0020    0.00
1920        RX  100.00  100.10  104.10  108.10  112.10  123.70  143.60  151.60
1921        RY  1157.0 1155.00 1154.00 1153.00 1153.10 1155.00 1156.00 1157.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1922        KK     D24BASIN
1923        KM        BASIN BOUNDARY FROM LITCHFIELD MANOR
1924        BA   0.492
1925        LG    0.27    0.25    5.10    0.31      28
1926        UI       0      56     145     267     346     467     677     539     421     315
```

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1927          UI     227     116      89      56      26      17      17      17       0       0
1928          UI       0       0       0       0       0       0       0       0       0       0
1929          UI       0       0       0       0       0       0       0       0       0       0
1930          UI       0       0       0       0       0       0       0       0       0       0
              *

1931          KK  DD24REDIVERT
1932          KM        Final Drainage Report for Litchfield Manor (excess retention per report)
1933          DT    RD24    40.9     0.0
1934          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1935          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1936          KK   DD132RETRIEVE
1937          DR  DD132S
              *

1938          KK  D13D24ROUTE
1939          KM        Cross-section: Cross-section determined from aerial 1/2 street section
1940          KM        Manning's N Value: street, earth with sparse trees and shrubs
1941          RS       3    FLOW
1942          RC   0.032   0.013   0.013    5460  0.0044    0.00
1943          RX  100.00  100.10  145.00  145.10  175.00  175.10  184.90  185.00
1944          RY  1178.0 1176.50 1175.50 1175.00 1175.78 1176.28 1176.28 1180.00
              *

1945          KK   CPD24COMBINE
1946          HC       3  22.622
              *

1947          KK  DD24SEDIVERT
1948          KM        Waddell near Dysart split flow (subdivision boundary)
1949          DT   DD24S     0.0     0.0
1950          DI     0.0    55.3   366.8  1137.9  2658.6     0.0     0.0     0.0     0.0     0.0
1951          DQ     0.0     0.0    81.5   397.9  1115.4     0.0     0.0     0.0     0.0     0.0
              *

1952          KK  D24D25ROUTE
1953          KM        Cross-section: Cross-section determined from aerial
1954          KM        Manning's N Value: Grass, earth with sparse trees and shrubs
1955          RS       3    FLOW
1956          RC   0.032   0.025   0.032    2701  0.0017    0.00
1957          RX  100.00  105.00  120.00  130.00  150.00  165.00  200.00  210.00
1958          RY  1000.0  999.50  997.20  996.00  995.90  997.20  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1959          KK     D25BASIN
1960          KM        BASIN BOUNDARY FROM ROSEVIEW MULTI PHASE
1961          BA   0.497
1962          LG    0.25    0.25    4.80    0.35      30
1963          UI       0      63     200     335     439     678     685     499     371     247
1964          UI     120      87      53      19      20      19       0       0       0       0
1965          UI       0       0       0       0       0       0       0       0       0       0
1966          UI       0       0       0       0       0       0       0       0       0       0
1967          UI       0       0       0       0       0       0       0       0       0       0
              *

1968          KK  DD25REDIVERT
1969          KM        Drainage Report for Roseview - Parcels 1-6, Master Drainage
1970          KM        Report for Roseview, Retention for Parcels 7 and 8 were estimated
1971          KM        based on aerial, Parcel 5a has no retention
1972          DT    RD25    37.1     0.0
1973          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1974          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1975          KK   CPD25COMBINE
1976          HC       2  23.119
              *

1977          KK   SRD25STORAGE
1978          KM        Storage in basin behind Waddell/Dysart/RR Tracks
1979          KO
1980          RS       1    STOR
1981          SV            7.32   20.24   39.02   58.47
1982          SQ                           780.00 4053.00
1983          SE  1146.0 1148.00 1150.00 1152.00 1154.00
1984          ST
              *

1985          KK   DD251DIVERT
1986          KM        Waddell/Dysart/RR split flow
1987          DT  DD251S     0.0     0.0
1988          DI     0.0    69.9  1206.6  4171.1  8464.1     0.0     0.0     0.0     0.0     0.0
1989          DQ     0.0    69.9  1097.4  3288.4  6292.9     0.0     0.0     0.0     0.0     0.0
              *

1990          KK   DD252DIVERT
1991          KM        Waddell/Dysart/RR split flow
1992          DT  DD252S     0.0     0.0
1993          DI     0.0     0.0   109.3   882.7  2171.2     0.0     0.0     0.0     0.0     0.0
1994          DQ     0.0     0.0   109.3   363.0   701.2     0.0     0.0     0.0     0.0     0.0
              *

1995          KK  D2542AROUTE
1996          KM        Cross-section: Cross-section estimated from aerial, estimated 3' deep
1997          KM        Manning's N Value: earth with sparse trees and shrubs
1998          KM        Route is from D25 to D42 (broken into 2 routes, 1st route)
1999          RS       1    FLOW
2000          RC   0.032   0.032   0.032    2090  0.0057    0.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2001          RX  100.00  101.00  102.00  122.00  128.00  145.00  146.00  147.00
2002          RY  1000.0  999.90  999.80  997.00  997.10  999.80  999.90 1000.00
              *

2003          KK  D2542BROUTE
2004          KM        Cross-section: Cross-section from Lower El Mirage Channelization
2005          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2006          KM        Route is from D25 to D42 (broken into 2 routes, 2nd route)
2007          RS       1    FLOW
2008          RC   0.022   0.022   0.022    4791  0.0042    0.00
2009          RX  100.00  103.00  105.50  137.50  187.50  219.50  222.00  225.00
2010          RY  1000.0  999.50  998.50  990.50  990.40  998.50  999.50 1000.00
```

```
*

KK     D37BASIN
KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
BA   0.197
LG    0.50     0.25     5.60     0.32        0
UI       0       18       24       50      100      109      142      151      151      128
UI     135       94       92       66       52       46       32       25       21       17
UI      15       10       10        8        2        2        2        3        2        2
UI       3        2        2        2        3        2        2        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK   DD232RETRIEVE
DR  DD232S
*

KK  D23D37ROUTE
KM        Cross-section: Ag field, assumed 0.5%
KM        side slopes, V-ditch Manning's N Value: avg value for cultivated
KM        areas from Estimated Manning's Roughness
KM        Coefficient for Stream Channels and Flood Plains in MC
RS       36     FLOW
RC   0.038    0.038    0.038     3332  0.0024     0.00
RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50  1000.00
*

KK   DD251RETRIEVE
DR  DD251S
*

KK  D25D37ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
RS        7     FLOW
RC   0.032    0.032    0.032     2711  0.0007     0.00
RX  100.00   115.00   130.00   138.00  144.00   152.00   165.00   185.00
RY  1000.0   999.50   999.00   996.00  996.10   999.00   999.50  1000.00
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DD24SERETRIEVE
DR   DD24S
*

KK  D24D37ROUTE
KM        Cross-section: Ag field, assumed 0.5% side
KM        slopes, V-ditch  Manning's N Value: Ag field
RS        5     FLOW
RC   0.038    0.038    0.038     1422  0.0028     0.00
RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50  1000.00
*

KK   CPD37COMBINE
HC        4  23.316
*

KK  DD37SEDIVERT
KM        split flow across low point in RR tracks
DT   DD37S      0.0      0.0
DI     0.0   1457.6   3118.3   5527.2  9114.3      0.0      0.0      0.0      0.0      0.0
DQ     0.0      0.0      4.6    291.9  1203.2      0.0      0.0      0.0      0.0      0.0
*

KK  D37D39ROUTE
KM        Cross-section: Ag field, assumed 0.5%
KM        side slopes, V-ditch / Manning's N Value: Ag field
RS        1     FLOW
RC   0.038    0.038    0.038     2643  0.0030     0.00
RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50  1000.00
*

KK     D35BASIN
KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
BA   0.254
LG    0.50     0.25     4.55     0.52        0
UI       0       21       26       55      108      126      162      180      183      171
UI     150      153      116      103       77       63       56       38       32       26
UI      21       19       13       13       12        6        3        2        3        3
UI       2        3        3        2        3        3        2        3        3        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK   DD231RETRIEVE
DR  DD231S
*

KK  D23D35ROUTE
KM        Cross-section: Ag field, assumed 0.5%
KM        side slopes, V-ditch / Manning's N Value: Ag field
RS       14     FLOW
RC   0.038    0.038    0.038     2692  0.0037     0.00
RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50  1000.00
*

KK   CPD35COMBINE
HC        2  22.384
*

KK  DD35SEDIVERT
KM        Litchfield at 1/2 mi S. of Waddell split flow
DT   DD35S      0.0      0.0
DI     0.0     112.5    584.6   1947.2  4136.3      0.0      0.0      0.0      0.0      0.0
DQ     0.0      18.8     97.4    368.7   900.0      0.0      0.0      0.0      0.0      0.0
*

KK  D35D38ROUTE
KM        Cross-section: Cross-section from Surprise Pointe Master
KM        Drainage Report / Manning's N Value: riprap
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```
2091          RS       3    FLOW
2092          RC   0.032   0.032   0.032    2588  0.0023    0.00
2093          RX  100.00  105.00  110.00  125.50  131.50  151.00  155.00  160.00
2094          RY  1000.0  999.90  999.80  996.10  996.00  999.80  999.90 1000.00
              *

2095          KK     D38BASIN
2096          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2097          BA   0.124
2098          LG    0.50    0.25    4.45    0.56       0
2099          UI       0      11      15      33      64      70      91      94      96      81
2100          UI      84      60      57      40      34      27      19      16      14      10
2101          UI       9       6       6       5       1       1       2       1       2       1
2102          UI       1       2       1       2       1       1       2       0       0       0
2103          UI       0       0       0       0       0       0       0       0       0       0
              *

2104          KK  DD37SERETRIEVE
2105          DR   DD37S
              *

2106          KK  D37D38ROUTE
2107          KM        Cross-section: Cross-section estimated from aerial and topo-railroad
2108          KM        Manning's N Value: earth w/ sparse trees and brush
2109          RS       1    FLOW
2110          RC   0.032   0.032   0.032    1505  0.0040    0.00
2111          RX  100.00  120.00  127.00  134.00  155.00  170.00  190.00  290.00
2112          RY  1148.1 1148.00 1147.00 1146.00 1146.10 1147.00 1148.00 1148.10
              *

2113          KK   CPD38COMBINE
2114          HC       3  23.694
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2115          KK   DD381DIVERT
2116          KM        RR tracks btwn Cactus and Waddell split flow
2117          DT  DD381S     0.0     0.0
2118          DI     0.0   178.5  1607.5  4129.9  7990.7     0.0     0.0     0.0     0.0     0.0
2119          DQ     0.0   156.9  1414.9  3582.1  6821.6     0.0     0.0     0.0     0.0     0.0
              *

2120          KK   DD382DIVERT
2121          KM        RR tracks btwn Cactus and Waddell split flow
2122          DT  DD382S     0.0     0.0
2123          DI     0.0    21.7   192.6   547.8  1169.1     0.0     0.0     0.0     0.0     0.0
2124          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *

2125          KK  D38D39ROUTE
2126          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2127          KM        Manning's N Value: Earth with grass and forbs
2128          RS      20    FLOW
2129          RC   0.025   0.025   0.025    2996  0.0013    0.00
2130          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2131          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2132          KK     D39BASIN
2133          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2134          BA   0.182
2135          LG    0.50    0.25    5.60    0.32       0
2136          UI       0      17      25      56      97     121     137     146     140     125
2137          UI     112      98      69      53      50      32      26      21      16      14
2138          UI      10      10       7       2       2       2       2       3       2       2
2139          UI       2       2       2       3       2       0       0       0       0       0
2140          UI       0       0       0       0       0       0       0       0       0       0
              *

2141          KK   DD252RETRIEVE
2142          DR  DD252S
              *

2143          KK  D25D39ROUTE
2144          KM        Cross-section: Cross-section from Surprise Pointe Master
2145          KM        Drainage Report / Manning's N Value: clean earth
2146          RS       1    FLOW
2147          RC   0.022   0.022   0.022    2101  0.0029    0.00
2148          RX  100.00  101.00  102.00  120.00  120.50  132.20  133.00  134.00
2149          RY  1000.0  999.90  999.80  996.80  996.90  999.80  999.90 1000.00
              *

2150          KK   CPD39COMBINE
2151          HC       4  23.876
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2152          KK  D39D42ROUTE
2153          KM        Cross-section: Cross-section from Lower El Mirage Channelization
2154          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2155          RS       5    FLOW
2156          RC   0.022   0.022   0.022    5691  0.0035    0.00
2157          RX  100.00  103.00  105.50  137.50  187.50  219.50  222.00  225.00
2158          RY  1000.0  999.50  998.50  990.50  990.40  998.50  999.50 1000.00
              *

2159          KK     D26BASIN
2160          KM        BASIN BOUNDARY FROM RACHO EL MIRAGE, SCHOOL
2161          KM        MOBILE HOME PARK, SUNWEST CEMETARY AND GRAND AVE CHANNEL
2162          BA   0.642
2163          LG    0.24    0.25    5.80    0.24      34
2164          UI       0     163     566     876    1350     940     579     247     140      44
2165          UI      37       0       0       0       0       0       0       0       0       0
2166          UI       0       0       0       0       0       0       0       0       0       0
2167          UI       0       0       0       0       0       0       0       0       0       0
2168          UI       0       0       0       0       0       0       0       0       0       0
              *

2169          KK  DD26REDIVERT
2170          KM        Retention volume estimated based on aerial
2171          DT    RD26    52.4     0.0
2172          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2173          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```

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2174        KK   DD142RETRIEVE
2175        DR  DD142S
            *

2176        KK  D14D26ROUTE
2177        KM        Cross-section: Cross-section from Lower El Mirage Channelization
2178        KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2179        RS       2    FLOW
2180        RC   0.022   0.022   0.022    5050  0.0048    0.00
2181        RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2182        RY  1000.0  999.50  999.00  991.00  991.10  999.00  999.80 1000.00
            *

2183        KK   CPD26COMBINE
2184        HC       2     5.4
            *

2185        KK  D26D27ROUTE
2186        KM        Cross-section: Cross-section determined from FCDMC 18
2187        KM        Manning's N Value: Clean earth
2188        RS       2    FLOW
2189        RC   0.022   0.022   0.022    2050  0.0039    0.00
2190        RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2191        RY  1000.0  999.50  999.00  991.00  991.00  999.00  999.50 1000.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2192        KK     D27BASIN
2193        KM        BASIN BOUNDARY FROM RANCHO EL MIRAGE
2194        KM        WEST EL MIRAGE AND BNSF RR ALIGNMENT
2195        BA   0.316
2196        LG    0.20    0.24    4.90    0.35      42
2197        UI       0     101     334     573     674     411     197      89      33      20
2198        UI       0       0       0       0       0       0       0       0       0       0
2199        UI       0       0       0       0       0       0       0       0       0       0
2200        UI       0       0       0       0       0       0       0       0       0       0
2201        UI       0       0       0       0       0       0       0       0       0       0
            *

2202        KK  DD27REDIVERT
2203        KM        Retention volume estimated based on aerial
2204        DT    RD27     8.2     0.0
2205        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2206        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2207        KK   CPD27COMBINE
2208        HC       2   5.716
            *

2209        KK   SRD27STORAGE
2210        KM        Storage at culvert under TB Road
2211        KO
2212        RS       1    STOR
2213        SV                                                  22.80   51.41
2214        SQ            52.00  202.00  415.00  658.00  906.00 1127.00 2999.00
2215        SE  1140.0 1142.00 1144.00 1146.00 1148.00 1150.00 1152.00 1154.00
2216        ST
            *

2217        KK  D27D42ROUTE
2218        KM        Cross-section: Cross-section from Lower El Mirage Channelization
2219        KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2220        RS       3    FLOW
2221        RC   0.022   0.022   0.022    5598  0.0032    0.00
2222        RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2223        RY  1000.0  999.50  999.00  991.00  991.10  999.00  999.50 1000.00
            *

2224        KK     D42BASIN
2225        KM        BASIN BOUNDARY FROM PARQUE VERDE MULTI PHASE
2226        KM        DYSART SCHOOL DISTRICT, AND BUENA VISTA
2227        BA   0.994
2228        LG    0.24    0.24    5.20    0.29      32
2229        UI       0     150     594     890    1330    1722    1186     816     463     246
2230        UI     148      46      46      45       0       0       0       0       0       0
2231        UI       0       0       0       0       0       0       0       0       0       0
2232        UI       0       0       0       0       0       0       0       0       0       0
2233        UI       0       0       0       0       0       0       0       0       0       0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2234        KK  DD42REDIVERT
2235        KM        Retention volume estimated based on aerial, Cactus and Dysart
2236        KM        Subdivision and Parque Verde - No Reports available
2237        DT    RD42    71.8     0.0
2238        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2239        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2240        KK   CPD42COMBINE
2241        HC       4  26.933
            *

2242        KK   SRD42STORAGE
2243        KM        Storage behind Cactus Road
2244        KO
2245        RS       1    STOR
2246        SV            0.64    4.60   17.30   27.60   56.00
2247        SQ                  139.00  426.00  827.00 1295.00
2248        SE  1105.3 1108.00 1110.00 1112.00 1114.00 1116.00
2249        ST
            *

2250        KK  D42D53ROUTE
2251        KM        Cross-section: Cross-section estimated from aerial and topo data
2252        KM        from West Cactus Basin CAR (with average width of 2 channel segments)
2253        KM        Manning's N Value: clean earth; straight
2254        RS       1    FLOW
2255        RC   0.022   0.022   0.022    1558  0.0026    0.00
2256        RX  100.00  103.00  105.00  145.00  271.00  311.00  313.00  315.00
2257        RY  1000.0  999.90  999.80  995.80  995.90  999.80  999.90 1000.00
            *
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2258        KK     D53BASIN
2259        KM        BASIN BOUNDARY FROM EL MIRAGE MARKET PLACE, RANCHO MIRAGE UNIT 3
2260        BA   0.118
2261        LG    0.31     0.32     4.60     0.36       11
2262        UI       0       55      169      306      215      107       39       12        9        0
2263        UI       0        0        0        0        0        0        0        0        0        0
2264        UI       0        0        0        0        0        0        0        0        0        0
2265        UI       0        0        0        0        0        0        0        0        0        0
2266        UI       0        0        0        0        0        0        0        0        0        0
            *

2267        KK  DD53REDIVERT
2268        KM        Retention volume estimated based on aerial
2269        DT    RD53     12.1      0.0
2270        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2271        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *
1                                          HEC-1 INPUT                                                    PAGE 58

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2272        KK   CPD53COMBINE
2273        HC       2  27.051
            *

2274        KK   SRD53STORAGE
2275        KM        West Cactus Basin
2276        KM        Calculations based on field visit and existing topo
2277        KO
2278        RS       1     STOR
2279        SV             7.69    15.72    24.09    33.37    38.57    48.05    57.88    68.06
2280        SQ                                                106.00   329.00   547.00   731.00
2281        SE  1103.5 1104.50 1105.50 1106.50 1107.50 1109.00 1110.00 1111.00 1112.00
2282        ST
            *

2283        KK  D53D54ROUTE
2284        KM        Cross-section: Golf course, Cross-section determined from
2285        KM        aerial-golf course / Manning's N Value: earth w/ grass
2286        RS       4     FLOW
2287        RC   0.025    0.025    0.025     3999   0.0045     0.00
2288        RX  100.00   174.00   228.00   298.00   357.50   413.00   468.00   486.00
2289        RY  1106.0 1104.00 1103.00 1102.00 1101.90 1103.00 1104.00 1104.10
            *

2290        KK     D43BASIN
2291        KM        BASIN BOUNDARY FROM MONTA BLANCA ESTATES, SUNNYVALE AND SUNDIAL
2292        BA   0.500
2293        LG    0.25     0.25     4.70     0.37       33
2294        UI       0       75      299      448      669      867      596      410      233      124
2295        UI      75       23       23       23        0        0        0        0        0        0
2296        UI       0        0        0        0        0        0        0        0        0        0
2297        UI       0        0        0        0        0        0        0        0        0        0
2298        UI       0        0        0        0        0        0        0        0        0        0
            *

2299        KK  DD43REDIVERT
2300        KM        Retention volume estimated based on aerial
2301        DT    RD43     35.5      0.0
2302        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2303        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

2304        KK  D43D54ROUTE
2305        KM        Cross-section: Golf course, assumed 0.5%
2306        KM        side slopes, V-ditch / Manning's N Value: grass - golf course
2307        RS      14     FLOW
2308        RC   0.025    0.025    0.025     3872  0.0023     0.00
2309        RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
2310        RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
            *
1                                          HEC-1 INPUT                                                    PAGE 59

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2311        KK     D54BASIN
2312        KM        BASIN BOUNDARY FROM FAIRWAYS GOLF COURSE DIVISION
2313        KM        AND PUEBLO EL MIRAGE RV RESORT
2314        BA   0.271
2315        LG    0.20     0.27     4.45     0.49       14
2316        UI       0       65      226      345      557      406      260      119       64       25
2317        UI      15       15        0        0        0        0        0        0        0        0
2318        UI       0        0        0        0        0        0        0        0        0        0
2319        UI       0        0        0        0        0        0        0        0        0        0
2320        UI       0        0        0        0        0        0        0        0        0        0
            *

2321        KK  DD54REDIVERT
2322        KM        NO REPORTS - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
2323        KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
2324        DT    RD54      3.0      0.0
2325        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2326        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

2327        KK   CPD54COMBINE
2328        HC       3  27.822
            *

2329        KK     D44BASIN
2330        KM        BASIN BOUNDARY FROM SUNDIAL MULTI PHASE, AGULAR HOMES, TERROVES,
2331        KM        EL MIRAGE HOUSING, ARIZONA BRISAS, MOUNTAIN TRAILE DEVELPMENTS AND
2332        KM        AGUA FRIA RIVER
2333        BA   0.535
2334        LG    0.26     0.27     3.78     0.45       23
2335        UI       0       70      230      379      496      793      718      520      385      234
2336        UI     120       84       43       21       22       22        0        0        0        0
2337        UI       0        0        0        0        0        0        0        0        0        0
2338        UI       0        0        0        0        0        0        0        0        0        0
2339        UI       0        0        0        0        0        0        0        0        0        0
            *

2340        KK  DD44REDIVERT
2341        KM        Retention volume estimated based on aerial
2342        DT    RD44     19.4      0.0
2343        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2344        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
```

```
                *
2345            KK     D55BASIN
2346            KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
2347            BA   0.187
2348            LG    0.28     0.28     3.48     0.55       24
2349            UI       0       45      158      242      387      279      175       80       44       17
2350            UI      10       11        0        0        0        0        0        0        0        0
2351            UI       0        0        0        0        0        0        0        0        0        0
2352            UI       0        0        0        0        0        0        0        0        0        0
2353            UI       0        0        0        0        0        0        0        0        0        0
                *
1                                                HEC-1 INPUT                                                          PAGE 60

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2354            KK  DD55REDIVERT
2355            KM        Retention volume estimated based on aerial
2356            DT    RD55      9.8      0.0
2357            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2358            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

2359            KK     D56BASIN
2360            KM        BASIN BOUNDARY FROM SUNDIAL UNIT 1 & 2 AND AGUA FRIA RIVER
2361            BA   0.225
2362            LG    0.20     0.26     4.40     0.50       24
2363            UI       0       35      144      214      333      385      259      176       88       51
2364            UI      27       10       11        0        0        0        0        0        0        0
2365            UI       0        0        0        0        0        0        0        0        0        0
2366            UI       0        0        0        0        0        0        0        0        0        0
2367            UI       0        0        0        0        0        0        0        0        0        0
                *

2368            KK  DD56REDIVERT
2369            KM        NO REPORT - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
2370            KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
2371            DT    RD56      3.1      0.0
2372            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2373            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

2374            KK   DUMMYCOMBINE
2375            HC       3
                *

2376            KK   DUMMYCOMBINE
2377            HC       3
                *

2378            KK     L14BASIN
2379            KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
2380            BA   0.229
2381            LG    0.35     0.35     4.15     0.44        0
2382            UI       0       63      244      397      407      270      159       95       58       34
2383            UI      18       11       11        0        0        0        0        0        0        0
2384            UI       0        0        0        0        0        0        0        0        0        0
2385            UI       0        0        0        0        0        0        0        0        0        0
2386            UI       0        0        0        0        0        0        0        0        0        0
                *

2387            KK  L14L15ROUTE
2388            KM        Cross-section: Cross-section determined from aerial
2389            KM        Manning's N Value: earth w/ sparse trees and brush
2390            RS       1    FLOW
2391            RC   0.032    0.032    0.032     3624   0.0055     0.00
2392            RX  100.00   101.00   145.00   159.00   171.00   180.00   196.00   197.00
2393            RY  1295.0  1295.00  1294.00  1292.00  1292.00  1294.00  1295.00  1295.00
                *
1                                                HEC-1 INPUT                                                          PAGE 61

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2394            KK     L15BASIN
2395            KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
2396            BA   0.372
2397            LG    0.34     0.34     4.35     0.39        0
2398            UI       0       87      339      575      634      479      294      181      118       67
2399            UI      46       19       16       17        0        0        0        0        0        0
2400            UI       0        0        0        0        0        0        0        0        0        0
2401            UI       0        0        0        0        0        0        0        0        0        0
2402            UI       0        0        0        0        0        0        0        0        0        0
                *

2403            KK   CPL15COMBINE
2404            HC       2    0.601
                *

2405            KK  L15L16ROUTE
2406            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditchmoved)
2407            KM        Manning's N Value: earth with grass and forbs (route is in area that
2408            KM        was an orchard but all trees have been removed)
2409            RS       2    FLOW
2410            RC   0.025    0.025    0.025     2662   0.0068     0.00
2411            RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
2412            RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
                *

2413            KK     L16BASIN
2414            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND 1990 TOPO
2415            BA   0.502
2416            LG    0.46     0.27     4.25     0.58        0
2417            UI       0       34       35       63      105      192      191      260      272      288
2418            UI     288      279      242      256      205      192      157      133      100      103
2419            UI      77       60       52       43       39       31       32       21       19       20
2420            UI      20        5        4        4        5        4        4        5        4        4
2421            UI       4        5        4        4        4        5        4        4        4        0
                *

2422            KK   CPL16COMBINE
2423            HC       2    1.103
                *

2424            KK  L16L17ROUTE
2425            KM        Cross-section: Cross-section determined from Sarah Ann Ranch
2426            KM        report and aerial / Manning's N Value: earth w/grass and forbs
2427            RS       1    FLOW
2428            RC   0.025    0.025    0.025     2699   0.0067     0.00
```

```
2429          RX  100.00  101.00  102.00  118.00  138.00  154.00  154.50  155.00
2430          RY  1000.0  999.90  999.80  996.00  996.00  999.80  999.90 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2431          KK     L17BASIN
2432          KM        BASIN BOUNDARY FROM SARAH ANN RANCH UNIT1 AND UNIT2
2433          BA   0.504
2434          LG    0.25    0.25    4.30    0.48      34
2435          UI       0      68     236     373     508     801     649     477     346     180
2436          UI     112      69      25      21      21       0       0       0       0       0
2437          UI       0       0       0       0       0       0       0       0       0       0
2438          UI       0       0       0       0       0       0       0       0       0       0
2439          UI       0       0       0       0       0       0       0       0       0       0
              *

2440          KK  DL17REDIVERT
2441          KM        Final Drainage Report for Sarah Ann Ranch
2442          DT    RL17    49.0     0.0
2443          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2444          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2445          KK   CPL17COMBINE
2446          HC       2   1.607
              *

2447          KK  DL17SEDIVERT
2448          KM        Cactus at 175th Ave split flow
2449          DT   DL17S     0.0     0.0
2450          DI     0.0   513.8   736.5  1344.5  2447.7     0.0     0.0     0.0     0.0     0.0
2451          DQ     0.0     8.1    70.1   289.8   732.1     0.0     0.0     0.0     0.0     0.0
              *

2452          KK  L17L18ROUTE
2453          KM        Cross-section: Ag field, assumed 0.5% side
2454          KM        slopes, V-ditch / Manning's N Value: Ag field
2455          RS       4    FLOW
2456          RC   0.038   0.038   0.038    2641  0.0047    0.00
2457          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2458          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2459          KK     L18BASIN
2460          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2461          BA   0.500
2462          LG    0.50    0.25    4.65    0.49       0
2463          UI       0      30      31      45      75     137     178     170     233     244
2464          UI     254     257     257     216     218     230     158     176     136     116
2465          UI      94      88      84      59      48      44      39      34      27      28
2466          UI      21      18      17      18      15       4       4       4       4       3
2467          UI       4       4       4       4       3       4       4       4       4       3
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2468          KK  DL11SERETRIEVE
2469          DR   DL11S
              *

2470          KK  L11L18ROUTE
2471          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2472          KM        Manning's N Value: Ag. Field
2473          RS      41    FLOW
2474          RC   0.038   0.038   0.038    5630  0.0064    0.00
2475          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2476          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2477          KK   DL121RETRIEVE
2478          DR  DL121S
              *

2479          KK  L12L18ROUTE
2480          KM        Cross-section: Cross-section determined from aerial
2481          KM        Manning's N Value: earth with grass and forbs, Ag field
2482          RS       6    FLOW
2483          RC   0.025   0.025   0.038    5298  0.0044    0.00
2484          RX  100.00  100.50  101.00  127.00  145.00  160.70  266.00  375.00
2485          RY  1245.0 1244.90 1244.80 1244.00 1243.90 1244.80 1244.60 1245.00
              *

2486          KK   CPL18COMBINE
2487          HC       4    7.67
              *

2488          KK   DL181DIVERT
2489          KM        Cactus at Cotton split flow
2490          DT  DL181S     0.0     0.0
2491          DI     0.0   266.3   983.8  2332.9  4215.1     0.0     0.0     0.0     0.0     0.0
2492          DQ     0.0     0.0    18.6    70.5   191.6     0.0     0.0     0.0     0.0     0.0
              *

2493          KK   DL182DIVERT
2494          KM        Cactus at Cotton split flow
2495          DT  DL182S     0.0     0.0
2496          DI     0.0   266.3   965.1  2262.4  4023.5     0.0     0.0     0.0     0.0     0.0
2497          DQ     0.0    12.7    36.0    66.1   101.8     0.0     0.0     0.0     0.0     0.0
              *

2498          KK  L18L19ROUTE
2499          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2500          KM        Manning's N Value: Ag field
2501          RS       4    FLOW
2502          RC   0.038   0.038   0.038    2608  0.0042    0.00
2503          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2504          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2505          KK     L19BASIN
2506          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
```

```
2507          BA   0.487
2508          LG    0.49    0.25    4.45    0.56       4
2509          UI       0      30      30      46      76     139     175     175     225     250
2510          UI     253     254     251     208     226     204     158     175     122     110
2511          UI      89      90      71      55      49      39      37      29      27      28
2512          UI      17      17      17      18       8       4       4       4       3       4
2513          UI       4       4       3       4       4       4       3       4       4       4
              *

2514          KK   DL122RETRIEVE
2515          DR   DL122S
              *

2516          KK   L12L19ROUTE
2517          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2518          KM        Manning's N Value: Ag field
2519          RS      33    FLOW
2520          RC   0.038   0.038   0.038    5877  0.0045    0.00
2521          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2522          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2523          KK   DL131RETRIEVE
2524          DR   DL131S
              *

2525          KK   L13L19ROUTE
2526          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2527          KM        Manning's N Value: Ag field
2528          RS       7    FLOW
2529          RC   0.038   0.038   0.038    5306  0.0051    0.00
2530          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2531          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2532          KK   CPL19COMBINE
2533          HC       4   9.615
              *

2534          KK   DL191DIVERT
2535          KM        Cactus at L303 split. Orig Calcs by KHA, 2008
2536          KM        modified for SE flow component
2537          DT   DL191S     0.0     0.0
2538          DI     0.0   123.5   566.7  1449.9  2937.5     0.0     0.0     0.0     0.0     0.0
2539          DQ     0.0   123.5   564.7  1378.3  2622.8     0.0     0.0     0.0     0.0     0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2540          KK   DL192DIVERT
2541          KM        Cactus at L303 split. Orig Calcs by KHA, 2008
2542          KM        modified for SE flow component
2543          DT   DL192S     0.0     0.0
2544          DI     0.0     0.0     2.0    71.6   314.7     0.0     0.0     0.0     0.0     0.0
2545          DQ     0.0     0.0     2.0    41.9   107.0     0.0     0.0     0.0     0.0     0.0
              *

2546          KK   L19D29ROUTE
2547          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2548          KM        Manning's N Value: Ag field
2549          RS      13    FLOW
2550          RC   0.038   0.038   0.038    2728  0.0044    0.00
2551          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2552          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2553          KK     D29BASIN
2554          KM        BASIN BOUNDARY FROM LOOP 303, AERIAL PHOTOGRAPHY
2555          KM        OF AG LAND AND FROM 1990 TOPO
2556          BA   0.508
2557          LG    0.47    0.25    4.60    0.50       4
2558          UI       0      32      32      50      82     148     187     188     238     267
2559          UI     268     267     257     222     238     205     169     177     124     112
2560          UI      92      98      65      55      49      40      38      30      29      25
2561          UI      18      17      18      18       4       4       4       4       4       4
2562          UI       4       4       4       4       4       4       4       4       4       4
              *

2563          KK   DL132RETRIEVE
2564          DR   DL132S
              *

2565          KK   L13D29ROUTE
2566          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2567          KM        Manning's N Value: Ag field
2568          RS      22    FLOW
2569          RC   0.038   0.038   0.038    5946  0.0064    0.00
2570          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2571          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

2572          KK   DD161RETRIEVE
2573          DR   DD161S
              *

2574          KK   D16D29ROUTE
2575          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2576          KM        Manning's N Value: Ag field
2577          RS       9    FLOW
2578          RC   0.038   0.038   0.038    5295  0.0038    0.00
2579          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2580          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2581          KK   CPD29COMBINE
2582          HC       4  11.154
              *

2583          KK   D29D30ROUTE
2584          KM        Cross-section: Cross-section determined from aerial
2585          KM        Manning's N Value: earth w/ grass
2586          RS       4    FLOW
2587          RC   0.025   0.025   0.025    4849  0.0054    0.00
2588          RX  100.00  103.00  106.00  108.00  112.00  114.00  135.50  153.50
```

```
2589          RY  1177.0 1176.50 1176.00 1175.00 1174.90 1176.00 1175.50 1176.86
              *

2590          KK     D30BASIN
2591          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT,
2592          KM        FCDMC, WESTERN BOUNDARY FROM LOOP 303
2593          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2594          BA   0.914
2595          LG    0.49     0.25     4.80     0.45        0
2596          UI       0       49       49       54      102      152      246      290      282      379
2597          UI     369      415      405      410      400      341      348      380      256      266
2598          UI     264      192      178      147      138      141       94       82       78       62
2599          UI      60       50       45       45       37       28       28       27       28       21
2600          UI       6        6        6        6        6        7        6        6        6        6
              *

2601          KK   DD162RETRIEVE
2602          DR  DD162S
              *

2603          KK  D16D30ROUTE
2604          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2605          KM        Manning's N Value: Ag field
2606          RS      19    FLOW
2607          RC   0.038    0.038    0.038     7187  0.0070     0.00
2608          RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
2609          RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50  1000.00
              *

2610          KK   DD191RETRIEVE
2611          DR  DD191S
              *

2612          KK  D19D30ROUTE
2613          KM        Cross-section: Cross-section determined from aerial
2614          KM        Manning's N Value: earth w/sparse trees and shrubs
2615          RS       2    FLOW
2616          RC   0.032    0.032    0.032     5320  0.0068     0.00
2617          RX  100.00   101.00   102.00   118.00  127.00   128.00   129.00   130.00
2618          RY  1179.2 1179.10 1179.00 1175.00 1179.00 1179.10 1179.20 1179.25
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2619          KK   CPD30COMBINE
2620          HC       4  20.504
              *

2621          KK  DD30SEDIVERT
2622          KM        Cactus at Reems split flow
2623          DT   DD30S      0.0      0.0
2624          DI     0.0    807.4   1298.7   2155.5  3667.5      0.0      0.0      0.0      0.0      0.0
2625          DQ     0.0    786.2   1122.0   1715.2  2774.9      0.0      0.0      0.0      0.0      0.0
              *

2626          KK  D30D32ROUTE
2627          KM        Cross-section: Cross-section determined from aerial
2628          KM        Manning's N Value: earth w/sparse trees and shrubs
2629          RS       7    FLOW
2630          RC   0.032    0.032    0.032     2704  0.0015     0.00
2631          RX  100.00   101.00   102.00   114.00  156.00   168.00   169.00   170.00
2632          RY  1000.2 1000.10 1000.00   997.00  997.10 1000.00 1000.11 1000.20
              *

2633          KK     D32BASIN
2634          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
2635          BA   0.248
2636          LG    0.25     0.25     4.70     0.36       35
2637          UI       0       59      207      316      510      371      238      108       59       24
2638          UI      13       14        0        0        0        0        0        0        0        0
2639          UI       0        0        0        0        0        0        0        0        0        0
2640          UI       0        0        0        0        0        0        0        0        0        0
2641          UI       0        0        0        0        0        0        0        0        0        0
              *

2642          KK  DD32REDIVERT
2643          KM        Preliminary Drainage Report for Marley Park Phase II Parcel 6
2644          KM        Drainage Report for Marley Park Parcel 8 (almost 20ac-ft over
2645          KM        required, according to report)
2646          DT    RD32     33.4      0.0
2647          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2648          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2649          KK   CPD32COMBINE
2650          HC       2  20.752
              *

2651          KK  DD32SEDIVERT
2652          KM        Cactus at 150th Ln split flow
2653          DT   DD32S      0.0      0.0
2654          DI     0.0      7.4     28.9     41.0    151.6    527.0   1011.0   2605.0      0.0      0.0
2655          DQ     0.0      0.0      1.8      2.3     23.9    213.0    442.0   1123.0      0.0      0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2656          KK  D32D33ROUTE
2657          KM        Cross-section: Cross-section determined from aerial
2658          KM        Manning's N Value: street, earth w/ grass
2659          RS       3    FLOW
2660          RC   0.032    0.013    0.013     2704  0.0055     0.00
2661          RX  100.00   102.00   138.00   138.10  160.00   168.50   171.90   172.00
2662          RY  999.70   999.60   999.00   998.50  998.90   999.10   999.20  1000.00
              *

2663          KK     D31BASIN
2664          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
2665          BA   0.496
2666          LG    0.30     0.29     4.70     0.37       17
2667          UI       0       72      274      416      595      862      604      429      279      125
2668          UI      84       39       22       22        0        0        0        0        0        0
2669          UI       0        0        0        0        0        0        0        0        0        0
2670          UI       0        0        0        0        0        0        0        0        0        0
2671          UI       0        0        0        0        0        0        0        0        0        0
              *
```

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2672        KK  DD31REDIVERT
2673        KM        Preliminary Drainage Report for Marley Park Plaza, Drainage
2674        KM        Report for Waddell Road at Marley Park, Final Drainage Report
2675        KM        Amended for Marley Park Heritage Club Site, Drainage Report for
2676        KM        Marley Park Parcel 11, Drainage Report for Marley Park Phase 2A Mass
2677        DT    RD31     50.0     0.0
2678        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2679        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2680        KK   DD192RETRIEVE
2681        DR  DD192S
            *

2682        KK  D19D31ROUTE
2683        KM        Cross-section: Cross-section determined from aerial
2684        KM        Manning's N Value: street, earth with sparse trees and shrubs
2685        RS       3    FLOW
2686        RC   0.032   0.013   0.032    7009  0.0054    0.00
2687        RX  100.00  105.00  110.00  110.10  134.00  134.10  140.00  146.00
2688        RY  1000.2  999.90  999.70  999.20  999.70 1000.20 1000.30 1000.40
            *

2689        KK   DD211RETRIEVE
2690        DR  DD211S
            *

2691        KK  D21D31ROUTE
2692        KM        Cross-section: Cross-section determined from aerial
2693        KM        Manning's N Value: earth w/ grass (main channel),
2694        KM        earth with sparse trees and shrubs (left overbank)
2695        RS       2    FLOW
2696        RC   0.032   0.025   0.025    2676  0.0052    0.00
2697        RX  100.00  102.00  104.00  124.00  128.00  132.00  135.00  137.00
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2698        RY  1170.0 1168.00 1167.00 1167.00 1168.00 1169.00 1169.50 1170.00
            *

2699        KK   CPD31COMBINE
2700        HC       3  18.987
            *

2701        KK  D31D33ROUTE
2702        KM        Cross-section: Cross-section determined from aerial
2703        KM        Manning's N Value: earth w/ grass
2704        RS       2    FLOW
2705        RC   0.025   0.025   0.025    2627  0.0042    0.00
2706        RX  100.00  100.50  105.00  113.00  116.00  125.00  129.00  130.00
2707        RY  1003.0  999.90  999.80  997.80  997.70  999.80 1000.00 1000.80
            *

2708        KK     D33BASIN
2709        KM        BASIN BOUNDARY FROM RANCHO GABRIELA PHASE 1
2710        BA   0.250
2711        LG    0.25    0.25    4.80    0.35      35
2712        UI       0      71     242     384     542     349     195      81      38      15
2713        UI      15       0       0       0       0       0       0       0       0       0
2714        UI       0       0       0       0       0       0       0       0       0       0
2715        UI       0       0       0       0       0       0       0       0       0       0
2716        UI       0       0       0       0       0       0       0       0       0       0
            *

2717        KK  DD33REDIVERT
2718        KM        Retention volume estimated based on aerial, Ranch Gabriella Phase I
2719        DT    RD33    18.7     0.0
2720        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2721        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2722        KK   CPD33COMBINE
2723        HC       3  23.501
            *

2724        KK   DD331DIVERT
2725        KM        Cactus at Bullard split flow
2726        DT  DD331S     0.0     0.0
2727        DI     0.0   136.2   690.5  2301.8  4749.1     0.0     0.0     0.0     0.0     0.0
2728        DQ     0.0    73.3   386.4  1268.6  2600.8     0.0     0.0     0.0     0.0     0.0
            *

2729        KK   DD332DIVERT
2730        KM        Cactus at Bullard split flow
2731        DT  DD332S     0.0     0.0
2732        DI     0.0    62.9   304.2  1033.1  2148.3     0.0     0.0     0.0     0.0     0.0
2733        DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2734        KK  D33D34ROUTE
2735        KM        Cross-section: Cross-section determined from aerial
2736        KM        Manning's N Value: earth w/ grass
2737        RS       5    FLOW
2738        RC   0.025   0.025   0.025    5348  0.0030    0.00
2739        RX  100.00  105.00  123.00  127.00  133.00  139.00  141.00  152.00
2740        RY  1142.0 1141.00 1141.00 1140.00 1139.00 1140.00 1141.00 1141.50
            *

2741        KK     D34BASIN
2742        KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
2743        BA   0.500
2744        LG    0.50    0.25    4.65    0.48       0
2745        UI       0      28      29      37      60     111     157     160     187     224
2746        UI     237     241     242     235     201     203     217     148     159     141
2747        UI     111      94      82      89      60      51      46      38      35      31
2748        UI      26      26      20      16      17      16      16       7       3       4
2749        UI       3       4       3       4       4       3       4       3       4       3
            *

2750        KK  DD34REDIVERT
2751        KM        Final Drainage Report for Marley Park Waddell Road, Phase 2
2752        KM        (Empty Lot except for retention for Waddell Rd-Future Marley Park)
2753        DT    RD34     2.4     0.0
2754        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

```
2755        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2756        KK   DD212RETRIEVE
2757        DR  DD212S
            *

2758        KK  D21D34ROUTE
2759        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2760        KM        Manning's N Value: Ag field
2761        RS      12    FLOW
2762        RC   0.038   0.038   0.038    3892  0.0057    0.00
2763        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2764        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

2765        KK   CPD34COMBINE
2766        HC       3  24.001
            *

2767        KK  D34D36ROUTE
2768        KM        Cross-section: Cross-section taken from Infrastructure Drainage Report
2769        KM        for Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees
2770        KM        and brush
2771        RS       5    FLOW
2772        RC   0.032   0.032   0.032    5236  0.0034    0.00
2773        RX  100.00  100.10  102.00  110.00  116.00  124.00  130.00  140.00
2774        RY  1000.0  998.00  997.90  996.50  996.40  998.00  999.00 1000.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2775        KK     D36BASIN
2776        KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
2777        BA   0.246
2778        LG    0.32     0.25     4.80     0.38       25
2779        UI       0       32      106      174      228      365      330      239      177      108
2780        UI      55       39       19       10       10       10        0        0        0        0
2781        UI       0        0        0        0        0        0        0        0        0        0
2782        UI       0        0        0        0        0        0        0        0        0        0
2783        UI       0        0        0        0        0        0        0        0        0        0
            *

2784        KK  DD36REDIVERT
2785        KM        Drainage Report for Veramonte Infrastructure
2786        KM        Prepared by DEA Jan 2004
2787        DT    RD36     11.1      0.0
2788        DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2789        DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

2790        KK  DD35SERETRIEVE
2791        DR   DD35S
            *

2792        KK  D35D36ROUTE
2793        KM        Cross-section: Cross-section taken from Infrastructure Drainage Report
2794        KM        for Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees
2795        KM        and brush
2796        RS       3    FLOW
2797        RC   0.032   0.032   0.032    2638  0.0038    0.00
2798        RX  100.00  103.00  108.00  126.00  130.00  142.00  143.00  144.00
2799        RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
            *

2800        KK   CPD36COMBINE
2801        HC       3   28.14
            *

2802        KK   DD361DIVERT
2803        KM        Cactus at Litchfield split flow
2804        DT  DD361S      0.0      0.0
2805        DI     0.0      0.0     70.2    838.2  2790.2      0.0      0.0      0.0      0.0      0.0
2806        DQ     0.0      0.0     64.8    768.5  2105.4      0.0      0.0      0.0      0.0      0.0
            *

2807        KK   DD362DIVERT
2808        KM        Cactus at Litchfield split flow
2809        DT  DD362S      0.0      0.0
2810        DI     0.0      0.0      5.4     69.7   684.8      0.0      0.0      0.0      0.0      0.0
2811        DQ     0.0      0.0      5.4     35.1    78.9      0.0      0.0      0.0      0.0      0.0
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2812        KK  D36D40ROUTE
2813        KM        Cross-section: Estimated 1' deep and 4:1 side slopes, width based on
2814        KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
2815        RS       7    FLOW
2816        RC   0.032   0.032   0.032    2597  0.0023    0.00
2817        RX  100.00  135.00  170.00  176.00  177.00  183.00  190.00  205.00
2818        RY  1138.2 1138.10 1138.00 1137.00 1136.90 1138.00 1138.10 1138.20
            *

2819        KK     D40BASIN
2820        KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2821        BA   0.242
2822        LG    0.50     0.25     5.40     0.34        0
2823        UI       0       21       26       54      111      123      160      178      177      160
2824        UI     154      133      118       87       71       62       46       35       28       24
2825        UI      19       16       12       12       11        2        3        2        3        2
2826        UI       3        3        2        3        2        3        3        2        3        0
2827        UI       0        0        0        0        0        0        0        0        0        0
            *

2828        KK   DD381RETRIEVE
2829        DR  DD381S
            *

2830        KK  D38D40ROUTE
2831        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2832        KM        Manning's N Value: Ag field
2833        RS       7    FLOW
2834        RC   0.038   0.038   0.038    2631  0.0030    0.00
2835        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2836        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
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                *
2837            KK   CPD40COMBINE
2838            HC       3  29.692
                *
2839            KK  DD40SEDIVERT
2840            KM        Cactus at RR tracks split flow
2841            DT   DD40S      0.0      0.0
2842            DI     0.0      4.7    423.7   1715.0   3501.5      0.0      0.0      0.0      0.0      0.0
2843            DQ     0.0      2.9    147.8    565.4   1138.2      0.0      0.0      0.0      0.0      0.0
                *
2844            KK  D40D41ROUTE
2845            KM        Cross-section: Cross-section estimated from aerial and topo-road
2846            KM        Manning's N Value: earth with sparse trees and shrubs
2847            RS       1    FLOW
2848            RC   0.032    0.032    0.032     1396   0.0043     0.00
2849            RX  100.00   101.00   102.00   110.00   145.00   155.00   156.00   157.00
2850            RY  1000.0   999.90   999.80   995.30   995.20   999.80   999.90  1000.00
                *
1                                          HEC-1 INPUT                                                    PAGE 73

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2851            KK     D41BASIN
2852            KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2853            BA   0.253
2854            LG    0.49     0.15     7.30     0.16        1
2855            UI       0       28       47      123      171      225      235      220      205      163
2856            UI     136       97       80       50       41       31       25       18       16       10
2857            UI       4        3        4        3        4        3        4        3        4        3
2858            UI       0        0        0        0        0        0        0        0        0        0
2859            UI       0        0        0        0        0        0        0        0        0        0
                *
2860            KK   DD382RETRIEVE
2861            DR  DD382S
                *
2862            KK  D38D41ROUTE
2863            KM        Cross-section: Cross-section estimated from aerial and topo-road
2864            KM        Manning's N Value: earth with grass and forbs, Ag field (left overbank)
2865            RS       7    FLOW
2866            RC   0.038    0.025    0.025     3903   0.0026     0.00
2867            RX  100.00   130.00   170.00   190.00   194.00   204.00   205.00   206.00
2868            RY  1138.2  1138.10  1138.00  1136.00  1136.00  1138.00  1138.10  1138.20
                *
2869            KK   CPD41COMBINE
2870            HC       3  29.945
                *
2871            KK  D41D50ROUTE
2872            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2873            KM        Manning's N Value: Ag field
2874            RS      14    FLOW
2875            RC   0.038    0.038    0.038     6744   0.0030     0.00
2876            RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
2877            RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
                *
2878            KK     L23BASIN
2879            KM        BASIN BOUNDARY FROM BEARDSLEY CSR AND 1990 TOPO
2880            BA   0.905
2881            LG    0.35     0.35     4.30     0.41        0
2882            UI       0      132      515      767     1109     1584     1090      776      486      228
2883            UI     149       63       41       40        0        0        0        0        0        0
2884            UI       0        0        0        0        0        0        0        0        0        0
2885            UI       0        0        0        0        0        0        0        0        0        0
2886            UI       0        0        0        0        0        0        0        0        0        0
                *
2887            KK  L23L24ROUTE
2888            KM        Cross-section: Cross-section determined from aerial
2889            KM        Manning's N Value: clean earth; straight
2890            RS       1    FLOW
2891            RC   0.022    0.022    0.022     2628   0.0080     0.00
2892            RX  100.00   101.00   161.00   175.00   189.00   203.00   228.00   229.00
1                                          HEC-1 INPUT                                                    PAGE 74

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2893            RY  1000.8  1000.30  1000.00   998.00   997.90  1000.00  1000.40  1000.80
                *
2894            KK     L24BASIN
2895            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
2896            BA   0.498
2897            LG    0.48     0.26     4.45     0.54        0
2898            UI       0       33       33       55       92      165      190      216      259      275
2899            UI     273      277      240      232      240      172      187      133      117       95
2900            UI     101       66       56       50       40       37       30       30       22       18
2901            UI      19       18       10        4        5        4        4        4        4        4
2902            UI       4        4        4        4        4        4        5        4        4        4
                *
2903            KK   CPL24COMBINE
2904            HC       2   1.403
                *
2905            KK  L24L26ROUTE
2906            KM        Cross-section: Cross-section determined from aerial
2907            KM        Manning's N Value: clean earth; straight
2908            RS       3    FLOW
2909            RC   0.022    0.022    0.022     5301   0.0074     0.00
2910            RX  100.00   200.00   279.00   286.00   289.00   295.00   311.00   315.00
2911            RY  1207.3  1206.50  1206.00  1204.00  1203.90  1206.50  1207.00  1207.25
                *
2912            KK     L25BASIN
2913            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
2914            KM        AG LAND, AND EASTERN AG CHANNEL
2915            BA   0.244
2916            LG    0.50     0.25     4.65     0.49        0
2917            UI       0       12       12       13       23       33       52       71       66       78
2918            UI      90      102      101      102      103       99       84       86       92       74
2919            UI      63       73       52       47       40       35       37       32       23       21
2920            UI      19       15       16       13       12       11       11        7        7        7
```

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2921        UI       7       7       5       1       2       1       2       1       2       1
            *

2922        KK  L25L26ROUTE
2923        KM        Cross-section: Cross-section determined from aerial
2924        KM        Manning's N Value: clean earth; straight
2925        RS       2    FLOW
2926        RC   0.022   0.022   0.013    5339  0.0073    0.00
2927        RX  100.00  105.00  109.00  116.00  119.00  125.00  141.00  145.00
2928        RY  1206.2 1206.10 1206.00 1204.00 1203.90 1206.50 1207.00 1207.20
            *

2929        KK   DL181RETRIEVE
2930        DR  DL181S
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2931        KK  L18L26ROUTE
2932        KM        Cross-section: Cross-section determined from 1992 topo
2933        KM        Manning's N Value: half street, clean earth
2934        RS       7    FLOW
2935        RC   0.013   0.022   0.022    5297  0.0130    0.00
2936        RX  100.00  105.00  112.00  121.00  139.00  153.00  154.00  154.00
2937        RY  1206.7 1206.60 1206.50 1206.00 1206.00 1208.00 1208.10 1208.20
            *

2938        KK  DL17SERETRIEVE
2939        DR   DL17S
            *

2940        KK  L17L26ROUTE
2941        KM        Cross-section: Ag field, assumed 0.5% side slopes
2942        KM        V-ditch / Manning's N Value: Ag field
2943        RS      30    FLOW
2944        RC   0.038   0.038   0.038    6336  0.0059    0.00
2945        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2946        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

2947        KK     L26BASIN
2948        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
2949        BA   0.757
2950        LG    0.50    0.25    4.55    0.52       0
2951        UI       0      45      45      64     105     193     265     240     356     337
2952        UI     379     379     379     337     321     339     268     245     237     177
2953        UI     156     129     138      97      80      72      59      55      44      42
2954        UI      42      26      26      25      26      19       5       6       6       5
2955        UI       6       6       5       6       6       5       6       5       6       6
            *

2956        KK   CPL26COMBINE
2957        HC       5  10.074
            *

2958        KK  DL26SEDIVERT
2959        KM        Peoria at Cotton Split flow
2960        DT   DL26S     0.0     0.0
2961        DI     0.0   190.7   867.7  2116.3  3794.4     0.0     0.0     0.0     0.0     0.0
2962        DQ     0.0     0.0     4.0    26.4    59.2     0.0     0.0     0.0     0.0     0.0
            *

2963        KK  L26L27ROUTE
2964        KM        Cross-section: Cross-section determined from aerial
2965        KM        Manning's N Value: clean earth, street
2966        RS       2    FLOW
2967        RC   0.022   0.022   0.013    2725  0.0070    0.00
2968        RX  100.00  100.50  363.00  373.00  378.00  388.00  400.00  401.00
2969        RY  1202.6 1202.10 1202.00 1200.00 1200.10 1202.00 1202.20 1205.55
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2970        KK     L27BASIN
2971        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
2972        KM        AG LAND, EASTERN BOUNDARY LOOP 303
2973        BA   0.508
2974        LG    0.47    0.25    4.65    0.48       5
2975        UI       0      32      33      51      83     152     188     194     244     269
2976        UI     268     271     253     225     239     201     172     171     124     108
2977        UI      92      98      61      54      47      40      37      29      30      22
2978        UI      18      18      18      14       4       4       4       4       4       4
2979        UI       4       4       4       4       4       4       5       4       4       4
            *

2980        KK   DL182RETRIEVE
2981        DR  DL182S
            *

2982        KK  L18L27ROUTE
2983        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2984        KM        Manning's N Value: Ag field
2985        RS      20    FLOW
2986        RC   0.038   0.038   0.038    5929  0.0061    0.00
2987        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2988        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

2989        KK   DL191RETRIEVE
2990        DR  DL191S
            *

2991        KK  L19L27ROUTE
2992        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2993        KM        Manning's N Value: Ag field
2994        RS       7    FLOW
2995        RC   0.038   0.038   0.038    5333  0.0049    0.00
2996        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2997        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

2998        KK   CPL27COMBINE
2999        HC       4  12.527
            *

3000        KK   DL271DIVERT
```

```
3001          KM        Peoria at L303 split flow
3002          DT  DL271S      0.0      0.0
3003          DI     0.0    133.3    620.9   2026.6   4234.5      0.0      0.0      0.0      0.0      0.0
3004          DQ     0.0     71.3    440.8   1073.7   1919.5      0.0      0.0      0.0      0.0      0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3005          KK   DL272DIVERT
3006          KM        Peoria at L303 split flow
3007          DT  DL272S      0.0      0.0
3008          DI     0.0     62.0    180.1    952.9   2315.0      0.0      0.0      0.0      0.0      0.0
3009          DQ     0.0     22.2     96.6    200.1    326.0      0.0      0.0      0.0      0.0      0.0
              *

3010          KK  L27D45ROUTE
3011          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3012          KM        Manning's N Value: Ag field
3013          RS       3     FLOW
3014          RC   0.038    0.038    0.038     2568   0.0070     0.00
3015          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
3016          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

3017          KK     D45BASIN
3018          KM        BASIN BOUNDARY FROM SYCAMORE FARMS PARCELS,  WESTERN BOUNDARY
3019          KM        FROM LOOP 303, FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
3020          BA   0.488
3021          LG    0.36     0.25     4.80     0.40       19
3022          UI       0       41       54      147      199      242      286      361      513      428
3023          UI     346      293      234      193      133       73       68       47       41       15
3024          UI      13       12       13       12       13        0        0        0        0        0
3025          UI       0        0        0        0        0        0        0        0        0        0
3026          UI       0        0        0        0        0        0        0        0        0        0
              *

3027          KK  DD45REDIVERT
3028          KM        Final Drainage Report for The Retreat at Sycamore Farms
3029          KM        Final Drainage Report for Sycamore Farms Parcel 13
3030          DT    RD45     17.9      0.0
3031          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3032          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3033          KK   DL192RETRIEVE
3034          DR  DL192S
              *

3035          KK  L19D45ROUTE
3036          KM        Cross-section: Cross-section determined from aerial
3037          KM        Manning's N Value: clean earth; straight
3038          RS      10     FLOW
3039          RC   0.022    0.022    0.022     7022   0.0061     0.00
3040          RX  100.00   100.10   100.20   128.00   158.00   180.00   181.00   182.00
3041          RY  1000.2  1000.10  1000.00   993.00   992.90  1000.00  1000.10  1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3042          KK   CPD45COMBINE
3043          HC       3  13.015
              *

3044          KK   DD451DIVERT
3045          KM        Peoria at Sarival split flow
3046          DT  DD451S      0.0      0.0
3047          DI     0.0    150.2    433.6    936.5   1656.8      0.0      0.0      0.0      0.0      0.0
3048          DQ     0.0     21.3     74.4    178.2    352.6      0.0      0.0      0.0      0.0      0.0
              *

3049          KK   DD452DIVERT
3050          KM        Peoria at Sarival split flow
3051          DT  DD452S      0.0      0.0
3052          DI     0.0    128.9    359.2    758.3   1304.2      0.0      0.0      0.0      0.0      0.0
3053          DQ     0.0     64.4    133.4    217.4    313.9      0.0      0.0      0.0      0.0      0.0
              *

3054          KK  D45D46ROUTE
3055          KM        Cross-section: Cross-section determined from aerial
3056          KM        Manning's N Value: earth w/ sparse trees and brush
3057          RS       3     FLOW
3058          RC   0.032    0.032    0.032     4898   0.0041     0.00
3059          RX  100.00   100.10   100.20   110.00   160.00   170.00   171.00   172.00
3060          RY  1000.2  1000.10  1000.00   997.00   997.10  1000.00  1000.10  1000.20
              *

3061          KK     D46BASIN
3062          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT, FCDMC
3063          KM        GREER RANCH NORTH PHASES AND 1990 TOPO
3064          BA   0.918
3065          LG    0.26     0.24     4.70     0.37       29
3066          UI       0       85      155      349      455      565      707     1019      940      725
3067          UI     588      472      356      199      147      110       86       33       26       26
3068          UI      27       26        0        0        0        0        0        0        0        0
3069          UI       0        0        0        0        0        0        0        0        0        0
3070          UI       0        0        0        0        0        0        0        0        0        0
              *

3071          KK  DD46REDIVERT
3072          KM        Preliminary Drainage Report for Greer Ranch North
3073          KM        Remaining retention volume estimated based on aerial
3074          DT    RD46     75.9      0.0
3075          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3076          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3077          KK  DD30SERETRIEVE
3078          DR   DD30S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3079          KK  D30D46ROUTE
3080          KM        Cross-section determined from FEMA
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3081          KM        CLOMR submittal for Greer Ranch
3082          RS       2    FLOW
3083          RC   0.022   0.022   0.022    5376  0.0045    0.00
3084          RX  100.00  112.00  124.00  136.00  201.00  209.00  217.00  225.00
3085          RY  1158.0 1156.00 1154.00 1152.00 1151.90 1154.00 1156.00 1158.00
              *

3086          KK   CPD46COMBINE
3087          HC       3  24.822
              *

3088          KK   DD461DIVERT
3089          KM        Peoria at Reems split flow
3090          DT  DD461S      0.0      0.0
3091          DI     0.0  2358.7  2658.0  3619.4  5112.4     0.0     0.0     0.0     0.0     0.0
3092          DQ     0.0  2342.0  2534.6  3070.8  3928.1     0.0     0.0     0.0     0.0     0.0
              *

3093          KK   DD462DIVERT
3094          KM        Peoria at Reems split flow
3095          DT  DD462S      0.0      0.0
3096          DI     0.0    16.7   123.4   548.6  1184.2     0.0     0.0     0.0     0.0     0.0
3097          DQ     0.0    16.7    56.4   109.3   172.9     0.0     0.0     0.0     0.0     0.0
              *

3098          KK  D46D47ROUTE
3099          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3100          KM        Manning's N Value: Ag field
3101          RS       1    FLOW
3102          RC   0.038   0.038   0.038    5291  0.0013    0.00
3103          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3104          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3105          KK     D47BASIN
3106          KM        BASIN BOUNDARY FROM RANCHO GABRIELA MULTI PHASE
3107          BA   0.997
3108          LG    0.36    0.25    4.65    0.43      19
3109          UI       0      52      53      59     176     220     256     287     324     361
3110          UI     407     497     628     658     553     474     424     383     330     291
3111          UI     259     218     159     107      91      86      76      52      52      39
3112          UI      16      16      17      16      16      16      16      16      17       0
3113          UI       0       0       0       0       0       0       0       0       0       0
              *

3114          KK  DD47REDIVERT
3115          KM        Drainage Report for Imagine Charter Schools, Retention
3116          KM        Calculations for Rancho Gabrialla Elementary School No 13,
3117          KM        Remaining retention volume estimated based on aerial
3118          DT    RD47    71.2     0.0
3119          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3120          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3121          KK  DD32SERETRIEVE
3122          DR   DD32S
              *

3123          KK  D3247AROUTE
3124          KM        Cross-section: Based on aerial, retention basin / Manning's N Value:
3125          KM        earth with grass and forbs, earth with sparse trees and shrubs
3126          RS      29    FLOW
3127          RC   0.025   0.025   0.032    6247  0.0026    0.00
3128          RX  100.00  102.00  105.00  120.00  180.00  184.00  210.00  215.00
3129          RY  1000.0  999.80  999.50  996.50  996.40  996.80  999.50 1000.00
              *

3130          KK  D3247BROUTE
3131          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3132          KM        Manning's N Value: Ag field
3133          RS      49    FLOW
3134          RC   0.038   0.038   0.038    3975  0.0025    0.00
3135          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3136          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3137          KK   DD331RETRIEVE
3138          DR  DD331S
              *

3139          KK  D3347AROUTE
3140          KM        Cross-section determined from aerial, assumed 1' deep
3141          KM        Manning's N Value: earth with grass, earth with sparse trees and shrubs
3142          RS       5    FLOW
3143          RC   0.032   0.025   0.032    2661  0.0023    0.00
3144          RX  100.00  120.00  139.00  143.00  158.00  162.00  199.00  200.00
3145          RY  1000.0  999.60  999.50  998.50  998.40  999.50  999.60 1000.00
              *

3146          KK  D3347BROUTE
3147          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3148          KM        Manning's N Value: Ag field
3149          RS       7    FLOW
3150          RC   0.038   0.038   0.038    2661  0.0023    0.00
3151          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3152          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3153          KK   CPD47COMBINE
3154          HC       4  28.816
              *

3155          KK  DD47SEDIVERT
3156          KM        Peoria at Bullard split flow
3157          DT   DD47S      0.0      0.0
3158          DI     0.0   692.3  2751.1  6693.8 12151.5     0.0     0.0     0.0     0.0     0.0
3159          DQ     0.0   609.8  2322.4  5410.8  9603.6     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3160          KK  D47D48ROUTE
3161          KM        Cross-section: Cross-section determined from aerial
3162          KM        Manning's N Value: earth w/ sparse trees and brush
```

```
3163          RS      13    FLOW
3164          RC   0.032   0.032   0.032    5328  0.0036    0.00
3165          RX  100.00  100.10  100.20  110.00  144.00  154.00  155.00  156.00
3166          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *

3167          KK     D48BASIN
3168          KM        BASIN BOUNDARY FROM MOUNTAIN GATE MULIT PHASE, AG LAND AND 1990 TOPO
3169          BA   0.998
3170          LG    0.33    0.25    4.80    0.35      14
3171          UI       0      65      66     155     260     323     368     425     496     616
3172          UI     812     750     610     524     462     387     331     276     190     114
3173          UI     110      95      65      66      25      20      20      20      20      20
3174          UI      20       0       0       0       0       0       0       0       0       0
3175          UI       0       0       0       0       0       0       0       0       0       0
              *

3176          KK  DD48REDIVERT
3177          KM        Master Drainage Report for Mountain Gate,
3178          KM        Final Drainage Report for Kenly Farms Unit 1
3179          DT    RD48    54.2     0.0
3180          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3181          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3182          KK   DD332RETRIEVE
3183          DR  DD332S
              *

3184          KK  D33D48ROUTE
3185          KM        Cross-section: Cross-section determined from aerial
3186          KM        Manning's N Value: earth w/ sparse trees and shrubs
3187          RS      15    FLOW
3188          RC   0.032   0.032   0.032    9601  0.0031    0.00
3189          RX  100.00  101.00  102.00  114.00  138.00  150.00  151.00  152.00
3190          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

3191          KK   DD361RETRIEVE
3192          DR  DD361S
              *

3193          KK  D3648AROUTE
3194          KM        Cross-section: Cross-section determined from aerial
3195          KM        Manning's N Value: clean earth (center), street (lt), and Ag field (rt)
3196          RS       5    FLOW
3197          RC   0.013   0.022   0.038    3335  0.0030    0.00
3198          RX  100.00  106.00  112.00  125.00  126.00  135.00  200.00  290.00
3199          RY  1000.0  999.85  999.70  999.00  998.90  999.10 1000.00 1001.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3200          KK  D3648BROUTE
3201          KM        Cross-section: Cross-section determined from aerial
3202          KM        Manning's N Value: clean earth; straight
3203          RS       1    FLOW
3204          RC   0.022   0.022   0.022    1965  0.0031    0.00
3205          RX  100.00  100.50  110.00  120.00  140.00  150.00  160.00  161.00
3206          RY  1003.0 1000.00  999.50  997.50  997.40  999.50  999.90 1000.00
              *

3207          KK   CPD48COMBINE
3208          HC       4  34.453
              *

3209          KK   DD481DIVERT
3210          KM        Peoria at Litchfield split flow
3211          DT  DD481S     0.0     0.0
3212          DI     0.0   624.6  2594.8  5787.1 10151.4     0.0     0.0     0.0     0.0     0.0
3213          DQ     0.0   532.1  1825.7  3708.3  6197.9     0.0     0.0     0.0     0.0     0.0
              *

3214          KK   DD482DIVERT
3215          KM        Peoria at Litchfield split flow
3216          DT  DD482S     0.0     0.0
3217          DI     0.0    92.5   769.1  2078.8  3953.5     0.0     0.0     0.0     0.0     0.0
3218          DQ     0.0    22.8    76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *

3219          KK  D48D49ROUTE
3220          KM        Cross-section: Cross-section determined from aerial
3221          KM        Manning's N Value: clean earth: straight and half street
3222          RS       4    FLOW
3223          RC   0.022   0.022   0.013    2623  0.0034    0.00
3224          RX  100.00  101.00  102.00  115.00  125.00  143.00  150.00  156.00
3225          RY  1000.2 1000.10 1000.00  998.00  998.10 1000.00 1000.40 1000.58
              *

3226          KK     D49BASIN
3227          KM        BASIN BOUNDARY FROM CITY OF SURPRISE WWTP
3228          BA   0.489
3229          LG    0.12    0.25    4.90    0.40      37
3230          UI       0     130     448     699    1052     700     415     175      94      29
3231          UI      28       0       0       0       0       0       0       0       0       0
3232          UI       0       0       0       0       0       0       0       0       0       0
3233          UI       0       0       0       0       0       0       0       0       0       0
3234          UI       0       0       0       0       0       0       0       0       0       0
              *

3235          KK  DD49REDIVERT
3236          KM        City of Surprise Special Planning Area 1 16.3 MGD
3237          KM        Water Reclamation Facility (PROVIDED VOLUME
3238          KM        NOT IN PLANS, USED REQUIRED VOLUME)
3239          DT    RD49     7.4     0.0
3240          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3241          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3242          KK   DD362RETRIEVE
3243          DR  DD362S
              *

3244          KK  D36D49ROUTE
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3245          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3246          KM        Manning's N Value: Ag field
3247          RS      32    FLOW
3248          RC   0.038   0.038   0.038    6555  0.0038    0.00
3249          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3250          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3251          KK  DD40SERETRIEVE
3252          DR   DD40S
              *

3253          KK  D40D49ROUTE
3254          KM        Cross-section: Cross-section estimated from aerial and topo-railroad
3255          KM        Manning's N Value: earth w/ sparse trees and shrubs; clean earth
3256          RS       9    FLOW
3257          RC   0.032   0.032   0.022    5333  0.0038    0.00
3258          RX  100.00  101.00  133.00  136.00  141.00  148.00  225.00  226.00
3259          RY  1124.3 1124.10 1124.00 1123.00 1123.10 1124.00 1124.10 1124.25
              *

3260          KK   CPD49COMBINE
3261          HC       4  36.494
              *

3262          KK   DD491DIVERT
3263          KM        Peoria at RR tracks split flow
3264          DT  DD491S     0.0     0.0
3265          DI     0.0    80.1  1017.8  3000.6  5982.2     0.0     0.0     0.0     0.0     0.0
3266          DQ     0.0    35.6   556.3  1576.1  3057.6     0.0     0.0     0.0     0.0     0.0
              *

3267          KK   DD492DIVERT
3268          KM        Peoria at RR tracks split flow
3269          DT  DD492S     0.0     0.0
3270          DI     0.0    44.6   461.5  1424.5  2924.7     0.0     0.0     0.0     0.0     0.0
3271          DQ     0.0     0.8    11.2    27.7    48.6     0.0     0.0     0.0     0.0     0.0
              *

3272          KK  D49D50ROUTE
3273          KM        Cross-section: Cross-section estimated from aerial and site visit
3274          KM        Manning's N Value: earth with sparse trees and shrubs
3275          RS       1    FLOW
3276          RC   0.022   0.013   0.022    2694  0.0022    0.00
3277          RX  100.00  102.00  104.00  114.00  134.00  145.00  147.00  148.00
3278          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *
1                                        HEC-1 INPUT                                          PAGE 84

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3279          KK     D50BASIN
3280          KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
3281          BA   0.505
3282          LG    0.48    0.15    7.00    0.18       3
3283          UI       0      23      24      23      41      54      89     122     145     130
3284          UI     180     174     197     199     198     198     190     167     164     177
3285          UI     157     122     134     120      92      90      70      66      73      55
3286          UI      45      38      38      30      29      27      22      21      22      16
3287          UI      13      14      13      13      14       5       3       3       3       3
              *

3288          KK   CPD50COMBINE
3289          HC       3  37.252
              *

3290          KK  D50D64ROUTE
3291          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3292          KM        Manning's N Value: Ag field
3293          RS       9    FLOW
3294          RC   0.038   0.038   0.038    5294  0.0032    0.00
3295          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3296          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3297          KK     D60BASIN
3298          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
3299          KM        1990 TOPO, AND RR ALIGNMENT
3300          BA   0.404
3301          LG    0.47    0.25    4.55    0.51       3
3302          UI       0      26      27      43      71     128     153     165     205     220
3303          UI     218     221     197     182     204     138     149     117     100      77
3304          UI      78      64      47      42      34      32      25      23      21      15
3305          UI      15      15      14       4       3       3       3       4       3       3
3306          UI       4       3       3       3       4       3       3       4       3       3
              *

3307          KK   DD481RETRIEVE
3308          DR  DD481S
              *

3309          KK  D48D60ROUTE
3310          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
3311          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush (main
3312          KM        channel), 1/2 street (left bank), Ag field (right bank)
3313          RS       2    FLOW
3314          RC   0.013   0.032   0.038    2425  0.0037    0.00
3315          RX  100.00  110.00  112.00  122.00  132.00  144.00  244.00  344.00
3316          RY  1120.4 1120.20 1120.00 1118.00 1118.10 1120.00 1120.10 1120.40
              *
1                                        HEC-1 INPUT                                          PAGE 85

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3317          KK   CPD60COMBINE
3318          HC       2  34.857
              *

3319          KK   DD601DIVERT
3320          KM        Litchfield at RR tracks split flow
3321          DT  DD601S     0.0     0.0
3322          DI     0.0    92.0   818.4  2186.6  4218.6     0.0     0.0     0.0     0.0     0.0
3323          DQ     0.0    60.4   542.2  1412.2  2663.0     0.0     0.0     0.0     0.0     0.0
              *

3324          KK   DD602DIVERT
3325          KM        Litchfield at RR tracks split flow
3326          DT  DD602S     0.0     0.0
```

```
3327          DI     0.0    31.6   276.1   774.4  1555.6     0.0     0.0     0.0     0.0     0.0
3328          DQ     0.0     4.6    15.4    29.8    47.1     0.0     0.0     0.0     0.0     0.0
              *

3329          KK  D60D63ROUTE
3330          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3331          KM        aerial & topo / Manning's N Value: clean earth, straight; Ag field
3332          RS       2    FLOW
3333          RC   0.038   0.022   0.022    1984  0.0020    0.00
3334          RX  100.00  120.00  140.00  152.00  156.00  168.00  182.00  188.00
3335          RY  1111.3 1111.10 1111.00 1108.00 1107.90 1111.00 1111.20 1111.30
              *

3336          KK     D63BASIN
3337          KM        BASIN BOUNDARY FROM 1990 TOPO, AG LAND, AND SMALL AREA OF 2008 TOPO.
3338          KM        AERIAL CONFIRMS AREA OF OVERTOPPING ON RR TRACKS, EVIDENCE OF TRACK
3339          KM        REPLACEMENT
3340          BA   0.222
3341          LG    0.50    0.25    4.35    0.59       0
3342          UI       0      20      29      62     117     137     161     173     173     144
3343          UI     146     113      94      71      61      44      34      26      22      18
3344          UI      14      12      12       4       3       2       3       2       3       2
3345          UI       3       3       2       3       2       3       0       0       0       0
3346          UI       0       0       0       0       0       0       0       0       0       0
              *

3347          KK   DD482RETRIEVE
3348          DR  DD482S
              *

3349          KK  D48D63ROUTE
3350          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3351          KM        Manning's N Value: Ag field
3352          RS      32    FLOW
3353          RC   0.038   0.038   0.038    3227  0.0065    0.00
3354          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3355          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3356          KK   DD491RETRIEVE
3357          DR  DD491S
              *

3358          KK  D49D63ROUTE
3359          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3360          KM        aerial Manning's N Value: earth w/ sparse trees and shrubs,
3361          KM        Ag field (right bank)
3362          RS       6    FLOW
3363          RC   0.032   0.032   0.038    2779  0.0022    0.00
3364          RX  100.00  100.50  125.00  133.00  138.00  146.00  500.00  501.00
3365          RY  1110.6 1110.50 1110.00 1108.00 1108.10 1110.00 1110.30 1110.60
              *

3366          KK   CPD63COMBINE
3367          HC       4   37.12
              *

3368          KK   SRD63STORAGE
3369          KM        Storage behind AT&SF Railroad tracks
3370          KO
3371          RS       1    STOR
3372          SV           89.25  182.89  281.00  483.41  742.12  908.61
3373          SQ           95.13  269.06  494.29  761.01 1034.31 1268.68
3374          SE  1096.0 1098.00 1100.00 1102.00 1104.00 1106.00 1108.00
3375          ST
              *

3376          KK  D63D64ROUTE
3377          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3378          KM        Manning's N Value: Ag field
3379          RS      13    FLOW
3380          RC   0.038   0.038   0.038    4370  0.0032    0.00
3381          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3382          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3383          KK     D62BASIN
3384          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3385          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3386          BA   0.250
3387          LG    0.48    0.25    4.40    0.56       1
3388          UI       0      22      26      55     113     125     164     179     183     167
3389          UI     155     142     119      94      74      63      50      37      30      25
3390          UI      20      18      12      12      12       3       3       2       3       3
3391          UI       2       3       3       2       3       3       3       2       3       0
3392          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3393          KK   DD601RETRIEVE
3394          DR  DD601S
              *

3395          KK  D60D62ROUTE
3396          KM        Cross-section: Cross-section determined from aerial-road / Manning's
3397          KM        N Value: street (left bank), clean earth (main channel),
3398          KM        and Ag field (right bank)
3399          RS       3    FLOW
3400          RC   0.013   0.022   0.038    2883  0.0028    0.00
3401          RX  100.00  108.00  115.00  120.00  126.00  135.00  218.00  280.00
3402          RY  1000.0  999.75  999.50  999.30  999.50  999.70 1001.00 1002.00
              *

3403          KK   CPD62COMBINE
3404          HC       2  35.107
              *

3405          KK   DD621DIVERT
3406          KM        Olive at Litchfield Rd split flow
3407          DT  DD621S     0.0     0.0
3408          DI     0.0    67.0   812.8  2353.7  4689.4     0.0     0.0     0.0     0.0     0.0
3409          DQ     0.0    50.7   512.2  1401.2  2724.4     0.0     0.0     0.0     0.0     0.0
              *
```

```
3410          KK   DD622DIVERT
3411          KM        Olive at Litchfield Rd split flow
3412          DT  DD622S      0.0      0.0
3413          DI     0.0     16.3    300.6    952.6   1965.1      0.0      0.0      0.0      0.0      0.0
3414          DQ     0.0      8.1     52.7    118.3    199.5      0.0      0.0      0.0      0.0      0.0
              *

3415          KK  D62D64ROUTE
3416          KM        Cross-section: Estimated 3' deep and 5:1 side slopes, width based on
3417          KM        aerial & topo / Manning's N Value: clean earth channel; street ROW
3418          RS       5     FLOW
3419          RC   0.022    0.022    0.013     5287  0.0019     0.00
3420          RX  100.00   120.00   140.00   156.00  160.00   176.00   183.00   210.00
3421          RY  1099.2 1099.10 1099.00 1096.00 1095.90 1099.00 1099.10 1099.20
              *

3422          KK   DD602RETRIEVE
3423          DR  DD602S
              *

3424          KK  D60D64ROUTE
3425          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3426          KM        Manning's N Value: avg value for cultivated areas from ""Est
3427          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3428          RS      30     FLOW
3429          RC   0.038    0.038    0.038     6010  0.0030     0.00
3430          RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
3431          RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3432          KK   DD492RETRIEVE
3433          DR  DD492S
              *

3434          KK  D49D64ROUTE
3435          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3436          KM        Manning's N Value: avg value for cultivated areas from ""Est
3437          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3438          RS      36     FLOW
3439          RC   0.038    0.038    0.038     5932  0.0035     0.00
3440          RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
3441          RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50 1000.00
              *

3442          KK     D64BASIN
3443          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3444          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3445          BA   0.771
3446          LG    0.49     0.25     4.60     0.50        1
3447          UI       0       42       42       49       88      137      218      249      254      318
3448          UI     339      354      352      351      330      291      313      291      220      240
3449          UI     194      160      139      123      128       93       78       67       59       53
3450          UI      48       39       38       37       24       24       24       23       23        5
3451          UI       5        5        6        5        5        5        6        5        5        5
              *

3452          KK  CPD64ACOMBINE
3453          HC       5  38.141
              *

3454          KK  CPD64BCOMBINE
3455          HC       2  38.899
              *

3456          KK  D64D74ROUTE
3457          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3458          KM        aerial & topo / Manning's N Value: clean earth; straight, left LOB
3459          RS       6     FLOW
3460          RC   0.013    0.022    0.022     5291  0.0025     0.00
3461          RX  100.00   112.00   118.00   128.00  133.00   143.00   343.00   344.00
3462          RY  1090.7 1090.10 1090.00 1087.00 1087.10 1090.00 1090.40 1090.70
              *

3463          KK     D74BASIN
3464          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3465          BA   0.989
3466          LG    0.45     0.25     4.60     0.50        7
3467          UI       0       49       49       49       94      129      212      277      274      308
3468          UI     372      401      410      410      410      406      340      345      367      312
3469          UI     257      284      226      187      170      143      142      140       93       85
3470          UI      79       66       61       58       44       45       45       32       28       28
3471          UI      28       28       24        6        6        6        6        7        6        6
              *
1                                          HEC-1 INPUT                                                PAGE 89

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3472          KK   DD622RETRIEVE
3473          DR  DD622S
              *

3474          KK  D62D74ROUTE
3475          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3476          KM        Manning's N Value: avg value for cultivated areas from ""Est
3477          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3478          RS      35     FLOW
3479          RC   0.038    0.038    0.038     7477  0.0035     0.00
3480          RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00   900.00
3481          RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50 1000.00
              *

3482          KK   CPD74COMBINE
3483          HC       3  39.888
              *

3484          KK   DD741DIVERT
3485          KM        Northern at Dysart split flow
3486          DT  DD741S      0.0      0.0
3487          DI     0.0   1742.9   5091.4 10712.8 18740.6      0.0      0.0      0.0      0.0      0.0
3488          DQ     0.0   1490.1   4289.3  8437.4 14200.9      0.0      0.0      0.0      0.0      0.0
              *

3489          KK   DD742DIVERT
3490          KM        Northern at Dysart split flow
```

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3491          DT  DD742S      0.0      0.0
3492          DI     0.0    252.8    802.1   2275.4   4539.6      0.0      0.0      0.0      0.0      0.0
3493          DQ     0.0     85.9    177.9    289.8    418.6      0.0      0.0      0.0      0.0      0.0
              *

3494          KK  D74D75ROUTE
3495          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3496          KM        aerial & topo / Manning's N Value: clean earth; straight, right ROB
3497          RS       4    FLOW
3498          RC   0.022   0.022   0.016    3213  0.0006    0.00
3499          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
3500          RY  1078.5 1078.25 1078.00 1075.00 1075.10 1078.00 1078.25 1078.50
              *

3501          KK    D79ABASIN
3502          KM        Basin boundary from topo
3503          BA   0.175
3504          LG    0.41     0.31     4.70     0.37        0
3505          UI       0       14       17       47       74       98      120      132      136      130
3506          UI     111       93       73       59       49       41       31       26       21       16
3507          UI      14       10        9        8        4        3        3        4        3        4
3508          UI       3        0        0        0        0        0        0        0        0        0
3509          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3510          KK   DD742RETRIEVE
3511          DR  DD742S
              *

3512          KK  D7479AROUTE
3513          KM        Cross-section: Ag field, assumed 0.5% side slopes
3514          KM        V-ditch / Manning's N Value: avg value for cultivated areas from ""Est
3515          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3516          RS       8    FLOW
3517          RC   0.038   0.038   0.038    2601  0.0021    0.00
3518          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3519          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
              *

3520          KK  CPD79ACOMBINE
3521          HC       2  40.063
              *

3522          KK     D51BASIN
3523          KM        BASIN BOUNDARY FROM DYSART RANCHETTES AND DYSART HIGH SCHOOL
3524          BA   0.287
3525          LG    0.30     0.15     7.60     0.11       18
3526          UI       0       76      261      406      613      410      251      104       58       17
3527          UI      16        0        0        0        0        0        0        0        0        0
3528          UI       0        0        0        0        0        0        0        0        0        0
3529          UI       0        0        0        0        0        0        0        0        0        0
3530          UI       0        0        0        0        0        0        0        0        0        0
              *

3531          KK  DD51REDIVERT
3532          KM        Retention volume estimated based on aerial
3533          DT    RD51      5.9      0.0
3534          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3535          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3536          KK  D51D65ROUTE
3537          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3538          KM        aerial & topo / Manning's N Value: clean earth; straight
3539          RS      10    FLOW
3540          RC   0.038   0.038   0.038    5303  0.0032    0.00
3541          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3542          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3543          KK     D65BASIN
3544          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3545          BA   0.695
3546          LG    0.50     0.25     5.00     0.41        0
3547          UI       0       39       39       49       81      142      208      224      249      295
3548          UI     325      329      324      327      285      271      296      231      208      213
3549          UI     157      142      114      114      104       74       64       59       48       48
3550          UI      36       35       36       22       22       22       22       20        5        5
3551          UI       5        5        5        5        5        4        5        5        5        5
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3552          KK   CPD65COMBINE
3553          HC       2   0.982
              *

3554          KK  D65D75ROUTE
3555          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3556          KM        Manning's N Value: avg value for cultivated areas from ""Est
3557          KM        Mng's Roughness Coefficient for Strm Chnls and Flood Plains in MC""
3558          RS      12    FLOW
3559          RC   0.038   0.038   0.038    5972  0.0020    0.00
3560          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3561          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
              *

3562          KK     D75BASIN
3563          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3564          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CONTECT CONSTRUCTION PRODUCTS
3565          BA   0.883
3566          LG    0.39     0.26     4.80     0.43       15
3567          UI       0       55       56       86      139      253      323      324      410      460
3568          UI     459      467      448      386      410      363      288      315      216      197
3569          UI     161      167      118       98       89       68       69       50       50       46
3570          UI      31       31       32       31       11        7        7        6        7        7
3571          UI       7        7        7        7        7        7        6        7        7        7
              *

3572          KK   CPD75COMBINE
3573          HC       4  41.928
              *

3574          KK  D7579BROUTE
```

```
3575          KM        Cross-section: Estimated 3' deep, width and side slopes based on
3576          KM        aerial & topo / Manning's N Value: natural desert wash w/ heavy vegetati
3577          RS       5    FLOW
3578          RC   0.045   0.045   0.045    4196  0.0038    0.00
3579          RX  100.00  115.00  130.00  154.00  434.00  449.00  469.00  489.00
3580          RY  1078.5 1078.25 1078.00 1075.00 1075.10 1078.00 1078.25 1078.50
              *

3581          KK     L33BASIN
3582          KM        BASIN BOUNDARY FROM LARGE LOT HOMES OF MARICOPA COUNTY
3583          BA   0.651
3584          LG    0.33     0.26     4.30     0.45        5
3585          UI       0       60      104      242      317      386      484      698      676      520
3586          UI     422      344      264      156      104       84       60       32       18       18
3587          UI      19       18        0        0        0        0        0        0        0        0
3588          UI       0        0        0        0        0        0        0        0        0        0
3589          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3590          KK  DL33SEDIVERT
3591          KM        Olive at Cotton split flow
3592          DT   DL33S     0.0      0.0
3593          DI     0.0   200.5    987.1  2321.7  4115.6      0.0      0.0      0.0      0.0      0.0
3594          DQ     0.0     0.0      2.7    97.9   266.6      0.0      0.0      0.0      0.0      0.0
              *

3595          KK  L33L34ROUTE
3596          KM        Cross-section: Cross-section determined from 1991 topo and
3597          KM        aerial/ Manning's N Value: earth w/ sparse trees and brush
3598          RS       1    FLOW
3599          RC   0.032   0.032   0.032    2761  0.0051    0.00
3600          RX  100.00  106.00  112.00  124.00  130.00  142.00  162.00  182.00
3601          RY  1178.2 1178.10 1178.00 1174.00 1174.10 1176.00 1176.20 1176.30
              *

3602          KK     L34BASIN
3603          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3604          KM        EASTERN BOUNDARY LOOP 303
3605          BA   0.515
3606          LG    0.49     0.25     4.40     0.57        3
3607          UI       0       31       32       48       77      139      186      176      239      252
3608          UI     262      268      262      224      226      234      164      183      137      119
3609          UI      97       90       86       59       51       45       40       34       29       29
3610          UI      21       18       18       17       16        4        4        3        4        4
3611          UI       4        4        4        4        4        4        4        4        4        4
              *

3612          KK  DL26SERETRIEVE
3613          DR   DL26S
              *

3614          KK  L26L34ROUTE
3615          KM        Cross-section: side slopes, width based on aerial and topo
3616          KM        Manning's N Value: clean earth; straight
3617          RS      29    FLOW
3618          RC   0.038   0.038   0.038    5936  0.0062    0.00
3619          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3620          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3621          KK   DL271RETRIEVE
3622          DR  DL271S
              *

3623          KK  L27L34ROUTE
3624          KM        Cross-section: Estimated 3' deep, side slopes and width based on
3625          KM        topo aerial / Manning's N Value: clean earth; straight
3626          RS       6    FLOW
3627          RC   0.013   0.022   0.022    5304  0.0034    0.00
3628          RX  100.00  125.00  146.00  154.00  164.00  172.00  470.00  472.00
3629          RY  1174.7 1174.10 1174.00 1171.00 1171.10 1174.00 1174.40 1174.70
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3630          KK   CPL34COMBINE
3631          HC       4  13.693
              *

3632          KK   DL341DIVERT
3633          KM        L303/Olive/RR tracks split flow
3634          DT  DL341S     0.0      0.0
3635          DI     0.0    13.8    681.8  2156.0  4356.0      0.0      0.0      0.0      0.0      0.0
3636          DQ     0.0     0.0    125.6   670.8  1612.6      0.0      0.0      0.0      0.0      0.0
              *

3637          KK   DL342DIVERT
3638          KM        L303/Olive/RR tracks split flow
3639          DT  DL342S     0.0      0.0
3640          DI     0.0   125.6    670.8  1612.6     0.0      0.0      0.0      0.0      0.0      0.0
3641          DQ     0.0    20.0    140.0   250.0     0.0      0.0      0.0      0.0      0.0      0.0
              *

3642          KK  L34D57ROUTE
3643          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3644          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
3645          RS       2    FLOW
3646          RC   0.032   0.032   0.032    2584  0.0066    0.00
3647          RX  100.00  112.00  124.00  136.00  142.00  154.00  169.00  184.00
3648          RY  1159.0 1158.50 1158.00 1155.00 1155.10 1158.00 1158.25 1158.50
              *

3649          KK     D57BASIN
3650          KM        BASIN BOUNDARYFROM LOOP 303
3651          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
3652          BA   0.480
3653          LG    0.48     0.25     4.35     0.59        5
3654          UI       0       30       31       48       80      143      177      183      231      254
3655          UI     253      256      240      212      226      191      162      161      118      101
3656          UI      88       92       57       51       46       37       35       27       27       22
3657          UI      17       17       18       13        4        4        3        4        4        4
3658          UI       4        3        4        4        4        3        4        4        4        3
              *
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```
KK   DL272RETRIEVE
DR  DL272S
*

KK  L27D57ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
KM        aerial / Manning's N Value: earth w/ sparse trees and shrubs, street LOB
RS      10    FLOW
RC   0.038   0.038   0.038    5789  0.0062    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   DD451RETRIEVE
DR  DD451S
*

KK  D45D57ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        aerial / Manning's N Value: earth w/ sparse trees and brush
RS       4    FLOW
RC   0.032   0.032   0.032    5208  0.0034    0.00
RX  100.00  112.00  124.00  130.00  138.00  144.00  156.00  168.00
RY  1156.0 1155.75 1155.50 1153.50 1153.60 1155.50 1155.75 1156.00
*

KK   CPD57COMBINE
HC       4  14.661
*

KK  D57D58ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
KM        aerial & topo / Manning's N Value: earth w/ sparse trees and shrubs;
KM        street ROB
RS       3    FLOW
RC   0.032   0.032   0.013    4894  0.0047    0.00
RX  100.00  101.00  324.00  340.00  348.00  360.00  375.00  390.00
RY  1140.7 1140.30 1140.00 1137.00 1137.10 1140.00 1140.10 1140.70
*

KK     D58BASIN
KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
KM        AND TWELVE OAK ESTATES
BA   0.918
LG    0.44    0.25    4.70    0.44       4
UI       0      55      56      83     135     247     325     310     426     439
UI     466     472     466     400     396     430     291     317     257     212
UI     179     156     162     108      91      82      70      64      51      51
UI      42      32      32      31      31       9       7       7       7       6
UI       7       7       7       7       7       7       7       7       7       7
*

KK   DD452RETRIEVE
DR  DD452S
*

KK  D45D58ROUTE
KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
KM        aerial / Manning's N Value: earth w/ sparse trees and brush
RS      14    FLOW
RC   0.038   0.038   0.038    7224  0.0055    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   DD461RETRIEVE
DR  DD461S
*

KK  D46D58ROUTE
KM        Cross-section determined from HEC-1 EC_RMS.OUT
KM        provided to HDR by John Holmes at FCMDC on May 5, 2009.
RS       2    FLOW
RC   0.022   0.022   0.022    2200  0.0011    0.00
RX    0.00    5.00   25.00   90.00  110.00  185.00  200.00  201.00
RY  1146.0 1145.00 1144.50 1137.00 1136.90 1145.00 1145.00 1146.00
*

KK  RMSBSNDIVERT
KM        Divet side weir flows into Reems Road Basin
DT  SSPILL     0.0     0.0
DI     0.0   371.0   512.0   724.0  1062.0  2173.0  2607.0  2728.0     0.0     0.0
DQ     0.0   152.0    27.0   416.0   669.0  1501.0     0.0     0.0     0.0     0.0
*

KK  RMSBSNRETRIEVE
DR  SSPILL
*

KK   SRRMSSTORAGE
KM        Reems Road Basin
KO
RS       1    STOR
SV           11.50   55.40  202.00  228.00  256.00
SQ           12.50   38.00   76.20  129.00 1583.00
SE  1125.0 1127.00 1129.50 1136.00 1137.00 1138.00
ST
*

KK   CPRMSCOMBINE
HC       2  24.822
*

KK    RRMSROUTE
KM        Reems Road Channel
RS       1    FLOW
RC   0.035   0.035   0.035    1358  0.0011    0.00
RX  100.00  105.00  130.00  190.00  210.00  270.00  285.00  290.00
RY  1135.0 1124.00 1134.00 1127.00 1127.10 1134.50 1134.60 1135.00
*

KK   CPD58COMBINE
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3739          HC        4  27.386
              *
1                                        HEC-1 INPUT                                                    PAGE 96

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3740          KK   DD581DIVERT
3741          KM        Olive at Reems split flow
3742          DT  DD581S      0.0      0.0
3743          DI     0.0     57.6    503.3   1318.1   2732.5      0.0      0.0      0.0      0.0      0.0
3744          DQ     0.0     32.6    304.7    767.6   1562.5      0.0      0.0      0.0      0.0      0.0
              *

3745          KK   DD582DIVERT
3746          KM        Olive at Reems split flow
3747          DT  DD582S      0.0      0.0
3748          DI     0.0     25.0    198.6    550.6   1170.1      0.0      0.0      0.0      0.0      0.0
3749          DQ     0.0      6.2     23.5     47.1     75.5      0.0      0.0      0.0      0.0      0.0
              *

3750          KK  D58D59ROUTE
3751          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3752          KM        aerial & topo / Manning's N Value: clean earth channel; street ROB
3753          RS       8    FLOW
3754          RC   0.038   0.022   0.013    5267  0.0023    0.00
3755          RX  100.00  105.00  422.00  430.00  436.00  444.00  452.00  466.00
3756          RY  1118.7 1118.30 1118.00 1115.00 1115.10 1118.00 1118.20 1118.70
              *

3757          KK     D59BASIN
3758          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
3759          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3760          BA   0.993
3761          LG    0.49    0.25    4.80    0.45       1
3762          UI       0      47      48      47      86     113     185     251     285     275
3763          UI     376     349     394     394     399     399     363     331     342     363
3764          UI     262     248     284     196     180     160     139     137     137      91
3765          UI      82      76      67      58      58      45      43      43      38      27
3766          UI      27      27      26      27      15       5       6       6       6       6
              *

3767          KK   DD462RETRIEVE
3768          DR  DD462S
              *

3769          KK  D46D59ROUTE
3770          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3771          KM        Manning's N Value: avg value for cultivated areas
3772          RS      44    FLOW
3773          RC   0.038   0.038   0.038    7500  0.0045    0.00
3774          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3775          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3776          KK  DD47SERETRIEVE
3777          DR   DD47S
              *
1                                        HEC-1 INPUT                                                    PAGE 97

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3778          KK  D47D59ROUTE
3779          KM        Cross-section: Cross-section determined from aerial & topo
3780          KM        Manning's N Value: clean earth; straight
3781          RS       4    FLOW
3782          RC   0.022   0.022   0.022    5274  0.0046    0.00
3783          RX  100.00  107.00  114.00  122.00  162.00  170.00  190.00  210.00
3784          RY  1118.5 1118.25 1118.00 1114.00 1114.40 1118.00 1118.25 1118.50
              *

3785          KK   CPD59COMBINE
3786          HC       4  32.373
              *

3787          KK  DD59SEDIVERT
3788          KM        Olive at Bullard split flow
3789          DT   DD59S      0.0      0.0
3790          DI     0.0   578.9  2379.7  5553.1  9800.2      0.0      0.0      0.0      0.0      0.0
3791          DQ     0.0   549.4  2103.3  4574.6  7763.0      0.0      0.0      0.0      0.0      0.0
              *

3792          KK  D59D61ROUTE
3793          KM        Cross-section: Cross-section estimated from aerial and
3794          KM        topo-road / Manning's N Value: clean earth; straight, street ROB
3795          RS       2    FLOW
3796          RC   0.022   0.022   0.013    2759  0.0007    0.00
3797          RX  100.00  108.00  116.00  122.00  128.00  132.00  144.00  156.00
3798          RY  1113.0 1112.50 1112.00 1110.00 1110.10 1112.00 1112.25 1112.50
              *

3799          KK     D61BASIN
3800          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3801          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3802          BA   0.348
3803          LG    0.50    0.25    4.55    0.52       0
3804          UI       0      17      18      17      34      46      75      98      96     110
3805          UI     131     144     144     145     146     141     120     122     131     107
3806          UI      90     102      76      67      58      50      52      47      32      29
3807          UI      28      23      21      20      16      16      16      10      10      10
3808          UI      10      10       7       2       2       2       2       3       2       2
              *

3809          KK   CPD61COMBINE
3810          HC       2  32.721
              *

3811          KK  D61D72ROUTE
3812          KM        Cross-section: Estimated 4' deep, width based on aerial & topo
3813          KM        Manning's N Value: natural wash w/ heavy vegetation
3814          RS       6    FLOW
3815          RC   0.045   0.045   0.045    5378  0.0041    0.00
3816          RX  100.00  108.00  116.00  140.00  156.00  180.00  188.00  196.00
3817          RY  1102.2 1102.10 1102.00 1098.00 1098.10 1102.00 1102.10 1102.20
              *
1                                        HEC-1 INPUT                                                    PAGE 98

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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KK     L30BASIN
KM        BASIN BOUNDARY FROM CORTESSA
BA   0.535
LG    0.27    0.26    4.55    0.39      33
UI       0     100     385     575     943     864     574     359     156      97
UI      32      27      28       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DL30REDIVERT
KM        Retention volume estimated based on aerial
DT    RL30    37.1     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK  L30L31ROUTE
KM        Cross-section: Cross section estimated from aerial; road
KM        Manning's N Value: earth w/ sparse trees and shrubs; street ROB
RS       3    FLOW
RC   0.032   0.032   0.016    2808  0.0078    0.00
RX  100.00  101.00  102.00  114.00  116.00  128.00  148.00  168.00
RY  1227.0 1226.00 1225.00 1223.00 1223.10 1225.00 1225.10 1225.20
*

KK     L31BASIN
KM        BASIN BOUNDARY FROM CORTESSA
BA   0.422
LG    0.26    0.25    4.45    0.42      37
UI       0     201     621    1099     766     366     136      41      32       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DL31REDIVERT
KM        Retention volume estimated based on aerial
DT    RL31    31.6     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPL31COMBINE
HC       2   0.957
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  L31L32ROUTE
KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width based on
KM        aerial / Manning's N Value: clean earth; straight; ROB street
RS       3    FLOW
RC   0.022   0.022   0.016    3746  0.0069    0.00
RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
RY  1194.5 1194.25 1194.00 1192.00 1192.10 1194.00 1194.25 1194.50
*

KK     L32BASIN
KM        BASIN BOUNDARY FROM CORTESSA
BA   0.351
LG    0.35    0.35    4.10    0.46       1
UI       0      99     384     622     623     407     239     141      87      50
UI      25      17      17       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK   CPL32COMBINE
HC       2   1.308
*

KK  L32L38ROUTE
KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
KM        on aerial / Manning's N Value: clean earth; straight, street LOB
RS       7    FLOW
RC   0.038   0.038   0.038    5549  0.0068    0.00
RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
*

KK     L28BASIN
KM        BASIN BOUNDARY FROM BEARDSLEY CSR, EASTERN BOUNDARY OF CORTESSA
BA   0.312
LG    0.34    0.34    4.25    0.42       3
UI       0      73     285     481     532     402     247     152      98      56
UI      40      15      14      14       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  L28L29ROUTE
KM        Cross-section: Cross-section determined from 1990 topo
KM        Manning's N Value: earth w/ sparse trees and brush
RS       2    FLOW
RC   0.032   0.032   0.032    3315  0.0060    0.00
RX  100.00  118.00  134.00  164.00  199.00  243.00  252.00  262.00
RY  1270.0 1269.00 1268.00 1266.00 1265.90 1268.00 1269.00 1270.00
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     L29BASIN
KM        BASIN BOUNDARY FROM 1990 TOPO, 2008 TOPO AT INTERSECTION
KM        AND FIELD VISIT, WESTERN BOUNDARY DEFINED BY BEARDSLEY CSR
KM        EASTERN BOUNDARY OF CORTESSA
BA   0.245
LG    0.34    0.34    4.40    0.38       0
UI       0      38     157     281     355     345     240     163     109      71
UI      48      31      23       9       9      10       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
```

```
3905          UI       0       0       0       0       0       0       0       0       0       0
3906          UI       0       0       0       0       0       0       0       0       0       0
              *

3907          KK   CPL29COMBINE
3908          HC       2   0.557
              *

3909          KK  DL29SEDIVERT
3910          KM        Diversion at canal overtopping, assume 50-50 split
3911          DT   DL29S      0.0     0.0
3912          DI     0.0   100.0  1000.0  5000.0 10000.0     0.0     0.0     0.0     0.0     0.0
3913          DQ     0.0    50.0   500.0  2500.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *

3914          KK  L29L36ROUTE
3915          KM        Cross-section: Estimated 5' deep and 6:1 side slopes, width based
3916          KM        on aerial / Manning's N Value: clean earth; straight
3917          RS       4    FLOW
3918          RC   0.022   0.022   0.022    6696  0.0066    0.00
3919          RX  100.00  112.00  121.00  151.00  186.00  216.00  228.00  244.00
3920          RY  1220.5 1220.25 1220.00 1215.00 1215.10 1220.00 1220.25 1220.50
              *

3921          KK     L35BASIN
3922          KM        BASIN BOUNDARY FROM 1990 TOPO AND FIELD VISIT
3923          BA   0.517
3924          LG    0.35    0.35    4.45    0.37       0
3925          UI       0     102     405     704     835     707     454     289     189     117
3926          UI      75      52      22      21      22       0       0       0       0       0
3927          UI       0       0       0       0       0       0       0       0       0       0
3928          UI       0       0       0       0       0       0       0       0       0       0
3929          UI       0       0       0       0       0       0       0       0       0       0
              *

3930          KK  DL29SERETRIEVE
3931          DR   DL29S
              *

3932          KK  L29L35ROUTE
3933          KM        Cross-section: Cross-section determined from aerial
3934          KM        Manning's N Value: earth w/ sparse trees and brush
3935          RS       6    FLOW
3936          RC   0.032   0.032   0.032    3510  0.0006    0.00
3937          RX  100.00  120.00  140.00  145.00  155.00  160.00  180.00  200.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3938          RY  1234.0 1233.50 1233.00 1231.50 1231.50 1232.00 1232.00 1232.00
              *

3939          KK   CPL35COMBINE
3940          HC       2   1.074
              *

3941          KK  L35L37ROUTE
3942          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3943          KM        Manning's N Value: avg value for cultivated areas
3944          RS       9    FLOW
3945          RC   0.038   0.038   0.038    6221  0.0058    0.00
3946          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3947          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3948          KK     L37BASIN
3949          KM        BASIN BOUNDARY FROM NORTH EASTERN BASIN BOUNDARY
3950          KM        AND ENGINEERED CHANNEL
3951          BA   0.399
3952          LG    0.35    0.35    4.15    0.44       0
3953          UI       0      81     318     559     649     541     343     221     141      88
3954          UI      56      37      17      16      17       0       0       0       0       0
3955          UI       0       0       0       0       0       0       0       0       0       0
3956          UI       0       0       0       0       0       0       0       0       0       0
3957          UI       0       0       0       0       0       0       0       0       0       0
              *

3958          KK     L36BASIN
3959          KM        BASIN BOUNDARY FROM WHITE TANK FOOTHILLS / CORTESSA
3960          KM        SW BOUNDARY BASED ON ENGINEERED CHANNEL
3961          BA   0.466
3962          LG    0.35    0.35    4.10    0.46       0
3963          UI       0      78     317     464     753     777     524     343     157      94
3964          UI      44      23      23       0       0       0       0       0       0       0
3965          UI       0       0       0       0       0       0       0       0       0       0
3966          UI       0       0       0       0       0       0       0       0       0       0
3967          UI       0       0       0       0       0       0       0       0       0       0
              *

3968          KK  DL36REDIVERT
3969          KM        Retention volume estimated based on aerial
3970          DT    RL36    34.9     0.0
3971          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3972          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3973          KK   CPL36COMBINE
3974          HC       4   1.939
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3975          KK  L36L38ROUTE
3976          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3977          KM        aerial Manning's N Value: clean earth; straight
3978          RS       4    FLOW
3979          RC   0.038   0.022   0.013    5308  0.0070    0.00
3980          RX  100.00  101.00  260.00  264.00  272.00  276.00  290.00  305.00
3981          RY  1146.6 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.60
              *

3982          KK     L38BASIN
3983          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHYAND AG LAND
3984          BA   1.005
3985          LG    0.45    0.25    4.60    0.47       2
3986          UI       0      63      63      97     159     289     367     368     468     523
3987          UI     523     530     511     439     467     413     328     358     246     224
3988          UI     183     191     134     111     101      78      78      58      57      52
```

```
3989          UI      36      35      36      35      13       7       8       8       8       8
3990          UI       8       8       7       8       8       8       8       8       7       8
              *

3991          KK  DL33SERETRIEVE
3992          DR   DL33S
              *

3993          KK  L33L38ROUTE
3994          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
3995          KM        on aerial / Manning's N Value: clean earth; straight, street LOB
3996          RS      12    FLOW
3997          RC   0.016   0.022   0.022    5310  0.0060    0.00
3998          RX  100.00  112.00  124.00  132.00  140.00  148.00  168.00  188.00
3999          RY  1170.5 1170.25 1170.00 1167.00 1167.10 1170.00 1170.25 1170.50
              *

4000          KK   CPL38COMBINE
4001          HC       4   4.903
              *

4002          KK   DL381DIVERT
4003          KM         Northern at Cotton split flow
4004          DT  DL381S      0.0      0.0
4005          DI     0.0     74.9    379.5  1198.9  2430.8     0.0     0.0     0.0     0.0     0.0
4006          DQ     0.0      1.9     30.1   320.7   837.7     0.0     0.0     0.0     0.0     0.0
              *

4007          KK   DL382DIVERT
4008          KM         Northern at Cotton split flow
4009          DT  DL382S      0.0      0.0
4010          DI     0.0     73.0    349.3   878.2  1593.1     0.0     0.0     0.0     0.0     0.0
4011          DQ     0.0     22.8     76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE103

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4012          KK  L38L39ROUTE
4013          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
4014          KM        on aerial / Manning's N Value: clean earth; straight
4015          RS       3    FLOW
4016          RC   0.038   0.022   0.013    2555  0.0039    0.00
4017          RX  100.00  101.00  450.00  454.00  462.00  466.00  480.00  495.00
4018          RY  1146.7 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.65
              *

4019          KK     L39BASIN
4020          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
4021          KM        AND EASTERN BOUNDARY LOOP 303
4022          BA   0.507
4023          LG    0.48    0.25    4.30    0.61       4
4024          UI       0      28      29      35      59     101     148     166     179     212
4025          UI     235     241     236     236     208     198     211     176     149     160
4026          UI     113     106      84      82      79      55      46      44      35      36
4027          UI      26      26      26      17      16      17      16      16       4       4
4028          UI       3       4       3       4       3       4       3       4       3       4
              *

4029          KK   DL341RETRIEVE
4030          DR  DL341S
              *

4031          KK  L34L39ROUTE
4032          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width
4033          KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
4034          RS       4    FLOW
4035          RC   0.032   0.032   0.032    5333  0.0053    0.00
4036          RX  100.00  120.00  140.00  156.00  166.00  182.00  202.00  222.00
4037          RY  1156.2 1156.10 1156.00 1152.00 1152.10 1156.00 1156.10 1156.20
              *

4038          KK   CPL39COMBINE
4039          HC       3  18.452
              *

4040          KK   DL391DIVERT
4041          KM         Northern at L303 split flow
4042          DT  DL391S      0.0      0.0
4043          DI     0.0    409.6   1188.4  2552.2  4924.4     0.0     0.0     0.0     0.0     0.0
4044          DQ     0.0    360.2   1056.6  2027.9  3368.6     0.0     0.0     0.0     0.0     0.0
              *

4045          KK   DL392DIVERT
4046          KM         Northern at L303 split flow
4047          DT  DL392S      0.0      0.0
4048          DI     0.0     49.4    131.9   524.3  1555.8     0.0     0.0     0.0     0.0     0.0
4049          DQ     0.0     27.9     60.7   108.8   168.3     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE104

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4050          KK  L39D68ROUTE
4051          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4052          KM        aerial & topo / Manning's N Value: clean earth; straight
4053          RS       2    FLOW
4054          RC   0.022   0.022   0.022    2769  0.0043    0.00
4055          RX  100.00  120.00  140.00  148.00  152.00  160.00  180.00  200.00
4056          RY  1129.2 1129.10 1129.00 1126.00 1126.10 1129.00 1129.10 1129.20
              *

4057          KK     D68BASIN
4058          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM
4059          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
4060          BA   0.494
4061          LG    0.47    0.24    4.10    0.67       4
4062          UI       0      32      33      53      89     158     187     202     254     270
4063          UI     268     271     241     221     252     167     183     140     121      94
4064          UI      96      75      57      52      40      40      29      29      25      19
4065          UI      18      18      16       4       4       4       4       4       4       4
4066          UI       4       4       4       4       4       4       4       4       4       4
              *

4067          KK   DL342RETRIEVE
4068          DR  DL342S
              *
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4069        KK  L34D68ROUTE
4070        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4071        KM        Manning's N Value: avg value for cultivated areas
4072        RS      13     FLOW
4073        RC   0.038    0.038    0.038     5866  0.0068     0.00
4074        RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00  900.00
4075        RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50 1000.00
            *

4076        KK   CPD68COMBINE
4077        HC       3  18.946
            *

4078        KK   DD681DIVERT
4079        KM        Northern at Sarival split flow
4080        DT  DD681S      0.0      0.0
4081        DI     0.0    250.0   1230.1   3091.5  6023.2      0.0      0.0      0.0      0.0      0.0
4082        DQ     0.0    197.3    899.3   2174.8  3885.3      0.0      0.0      0.0      0.0      0.0
            *

4083        KK   DD682DIVERT
4084        KM        Northern at Sarival split flow
4085        DT  DD682S      0.0      0.0
4086        DI     0.0     52.7    330.8    916.7  2138.0      0.0      0.0      0.0      0.0      0.0
4087        DQ     0.0     17.6     39.4     66.5    97.9      0.0      0.0      0.0      0.0      0.0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4088        KK  D68D69ROUTE
4089        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4090        KM        on aerial & topo / Manning's N Value: clean earth; straight, street ROB
4091        RS       3     FLOW
4092        RC   0.022    0.022    0.016     4930  0.0045     0.00
4093        RX  100.00   120.00   140.00   152.00  154.00   166.00   176.00  186.00
4094        RY  1121.2 1121.10 1121.00 1118.00 1118.10 1121.00 1121.10 1121.20
            *

4095        KK     D69BASIN
4096        KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4097        BA   0.925
4098        LG    0.49     0.25     4.55     0.52        0
4099        UI       0       47       48       47      100      138      226      284      253      350
4100        UI     359      402      399      399      401      355      331      362      322      251
4101        UI     272      231      183      168      138      139      133       90       80       77
4102        UI      60       58       52       43       44       41       26       27       28       26
4103        UI      27        8        6        6        6        6        6        6        6        6
            *

4104        KK   DD581RETRIEVE
4105        DR  DD581S
            *

4106        KK  D58D69ROUTE
4107        KM        Cross-section: Estimated 2' deep and 2:1 side slopes, width based on
4108        KM        aerial & topo / Manning's N Value: concrete channel
4109        RS       6     FLOW
4110        RC   0.013    0.032    0.038     5296  0.0038     0.00
4111        RX  100.00   118.00   136.00   142.00  145.00   151.00   700.00  705.00
4112        RY  1118.7 1118.20 1118.00 1116.00 1116.10 1118.00 1118.25 1118.70
            *

4113        KK   CPD69COMBINE
4114        HC       3  33.564
            *

4115        KK   DD691DIVERT
4116        KM        Northern at Reems split flow
4117        DT  DD691S      0.0      0.0
4118        DI     0.0   1524.4   3177.7   5722.8  8992.0      0.0      0.0      0.0      0.0      0.0
4119        DQ     0.0    127.3    360.0    873.5  1631.7      0.0      0.0      0.0      0.0      0.0
            *

4120        KK   DD692DIVERT
4121        KM        Northern at Reems split flow
4122        DT  DD692S      0.0      0.0
4123        DI     0.0   1397.1   2817.7   4849.3  7360.3      0.0      0.0      0.0      0.0      0.0
4124        DQ     0.0    102.5    198.8    314.3   446.2      0.0      0.0      0.0      0.0      0.0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4125        KK  D69D70ROUTE
4126        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4127        KM        aerial & topo / Manning's N Value: clean earth; straight, street ROB
4128        RS       4     FLOW
4129        RC   0.038    0.032    0.013     2823  0.0021     0.00
4130        RX  100.00   101.00   400.00   408.00  418.00   426.00   436.00  446.00
4131        RY  1102.5 1101.90 1101.80 1098.00 1098.10 1101.80 1102.00 1102.50
            *

4132        KK    D70ABASIN
4133        KM        Basin bounded to south by Falcon Dunes
4134        BA   0.266
4135        LG    0.49     0.25     4.80     0.45        2
4136        UI       0       31       55      151      196      249      260      230      221      173
4137        UI     120       93       72       49       38       28       22       18       14        4
4138        UI       4        4        3        4        4        4        4        4        3        0
4139        UI       0        0        0        0        0        0        0        0        0        0
4140        UI       0        0        0        0        0        0        0        0        0        0
            *

4141        KK   DD582RETRIEVE
4142        DR  DD582S
            *

4143        KK  D5870AROUTE
4144        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4145        KM        Manning's N Value: avg value for cultivated areas
4146        RS       9     FLOW
4147        RC   0.038    0.038    0.038     3835  0.0042     0.00
4148        RX  100.00   200.00   400.00   500.00  550.00   600.00   800.00  900.00
4149        RY  1000.0   999.50   998.50   998.00  998.25   998.50   999.50 1000.00
            *

4150        KK  CPD70ACOMBINE
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4151          HC       2  27.652
              *

4152          KK  D70A70ROUTE
4153          KM        Cross-section: Falcon Dunes, assumed 0.5% side slopes, V-ditch
4154          KM        Manning's N Value: avg value for cultivated areas
4155          RS       6    FLOW
4156          RC   0.038   0.038   0.038    2650  0.0030    0.00
4157          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4158          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

4159          KK     D70BASIN
4160          KM        FALCON DUNES
4161          BA   0.259
4162          LG    0.11    0.25    4.80    0.47       5
4163          UI       0      74     296     461     433     314     185      95      59      36
4164          UI      17       7       7       7       8       7       0       0       0       0
4165          UI       0       0       0       0       0       0       0       0       0       0
4166          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4167          UI       0       0       0       0       0       0       0       0       0       0
              *

4168          KK   CPD70COMBINE
4169          HC       3  34.089
              *

4170          KK   SRD70STORAGE
4171          KM        Falcon  Dunes. Storage recalc'd by FCDMC 3/2009
4172          KO
4173          RS       1    STOR
4174          SV            0.10    0.80    2.70    6.60   17.30   38.40   69.90  141.80  285.90
4175          SQ                                                   67.00  160.00  300.00  453.00
4176          SE  1079.0 1081.00 1083.00 1085.00 1087.00 1089.90 1092.50 1094.50 1097.00 1100.00
4177          ST
              *

4178          KK  D70D71ROUTE
4179          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4180          KM        to Agua Fria River Channel Improvements FCD No 94-38,
4181          KM        LAFB No 87-3002 dated May 1995,
4182          KM        from Falcon Dunes to Bullard Ave-No13
4183          RS       1    FLOW
4184          RC   0.013   0.013   0.013    2520  0.0011    0.00
4185          RX  100.00  107.00  110.00  113.00  123.00  126.00  129.00  136.00
4186          RY  1094.5 1089.83 1087.83 1085.83 1085.73 1087.83 1089.83 1094.50
              *

4187          KK     D71BASIN
4188          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4189          BA   0.478
4190          LG    0.48    0.25    4.80    0.44       1
4191          UI       0      29      29      42      69     125     169     158     222     223
4192          UI     241     245     240     212     203     222     157     160     142     109
4193          UI      95      81      89      55      48      45      37      35      26      26
4194          UI      24      16      17      16      16       8       3       4       3       4
4195          UI       4       3       4       3       4       4       3       4       3       4
              *

4196          KK  DD59SERETRIEVE
4197          DR   DD59S
              *

4198          KK  D59D71ROUTE
4199          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
4200          KM        Manning's N Value: avg value for cultivated areas
4201          RS       1    FLOW
4202          RC   0.038   0.038   0.038       5  0.0040    0.00
4203          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4204          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4205          KK   CPD71COMBINE
4206          HC       3  39.554
              *

4207          KK  D71D72ROUTE
4208          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4209          KM        to Agua Fria River Channel Improvements FCD No 94-38,
4210          KM        LAFB No 87-3002 dated May 1995,
4211          KM        from Bullard Ave to 143rd Ave-No11
4212          RS       1    FLOW
4213          RC   0.013   0.013   0.013    2698  0.0011    0.00
4214          RX  100.00  109.00  112.00  115.00  139.00  142.00  145.00  152.50
4215          RY  1090.0 1084.00 1082.00 1080.00 1079.90 1082.00 1084.00 1089.00
              *

4216          KK     D72BASIN
4217          KM        Dysart Drain
4218          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4219          KM        1990 TOPO AND BNSF RR ALIGNMENT
4220          BA   0.518
4221          LG    0.48    0.25    4.70    0.46       1
4222          UI       0      29      30      39      61     115     163     166     194     231
4223          UI     247     249     250     244     208     211     224     154     164     147
4224          UI     114      99      84      92      62      52      48      40      37      32
4225          UI      26      27      21      17      17      17      16       7       4       3
4226          UI       4       4       3       4       4       3       4       4       3       4
              *

4227          KK   CPD72COMBINE
4228          HC       3   40.42
              *

4229          KK  D72D73ROUTE
4230          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4231          KM        to Agua Fria River Channel Improvements FCD No 94-38,
4232          KM        LAFB No 87-3002 dated May 1995,
4233          KM        from 143rd Ave to Litchfield Rd-No09
4234          RS       1    FLOW
4235          RC   0.013   0.013   0.013    3001  0.0045    0.00
4236          RX  100.00  112.00  116.00  120.00  128.00  132.00  136.00  148.00
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4237          RY  1086.5 1080.50 1078.50 1076.50 1076.40 1078.50 1080.50 1086.50
              *

4238          KK     D73BASIN
4239          KM        BASIN BOUNDARY FROM LUKE AFB, AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
4240          BA   0.522
4241          LG    0.43    0.25    4.60    0.46       3
4242          UI       0      27      28      30      92     113     133     151     169     188
4243          UI     212     256     326     346     289     249     224     200     173     154
4244          UI     136     114      85      58      49      45      41      27      27      22
4245          UI       9       8       8       9       8       8       9       8       8       0
4246          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE109

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4247          KK   DD621RETRIEVE
4248          DR  DD621S
              *

4249          KK  D62D73ROUTE
4250          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4251          KM        aerial & topo / Manning's N Value: clean earth; straight
4252          RS       3    FLOW
4253          RC   0.022   0.022   0.022    6486  0.0045    0.00
4254          RX  100.00  111.00  122.00  134.00  138.00  150.00  160.00  170.00
4255          RY  1094.2 1094.10 1094.00 1091.00 1091.10 1094.00 1094.10 1094.20
              *

4256          KK   CPD73COMBINE
4257          HC       3  47.233
              *

4258          KK  D73D78ROUTE
4259          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4260          KM        to Agua Fria River Channel Improvements FCD No 94-38,
4261          KM        LAFB No 87-3002 dated May 1995,
4262          KM        from Litchfield Rd to Dysart Rd-No4
4263          RS       2    FLOW
4264          RC   0.013   0.013   0.013    8062  0.0019    0.00
4265          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
4266          RY  1073.0 1068.33 1064.33 1060.33 1060.23 1064.33 1068.33 1073.00
              *

4267          KK     D78BASIN
4268          KM        BASIN BOUNDARY FROM TREE FARMS, AG LAND
4269          KM        1990 TOPO AND THE DYSART DRAIN
4270          BA   0.531
4271          LG    0.49    0.25    4.70    0.47       1
4272          UI       0      17      17      18      17      22      36      36      61      79
4273          UI      90     112      91      99     121     140     132     148     143     145
4274          UI     147     143     146     138     120     121     121     135     130      92
4275          UI      90      95     105      78      67      67      63      52      50      48
4276          UI      55      47      32      33      28      28      28      21      22      21
              *

4277          KK   DD741RETRIEVE
4278          DR  DD741S
              *

4279          KK  D74D78ROUTE
4280          KM        Cross-section: Cross-section estimated from aerial and topo-road
4281          KM        Manning's N Value: street, clean earth, Ag field
4282          RS       3    FLOW
4283          RC   0.013   0.022   0.038    2724  0.0015    0.00
4284          RX  100.00  132.00  144.00  156.00  200.00  400.00  600.00  605.00
4285          RY  1000.7 1000.00  999.00 1000.00 1000.05 1000.10 1000.15 1000.70
              *
1                                          HEC-1 INPUT                                          PAGE110

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4286          KK   CPD78COMBINE
4287          HC       3  52.545
              *

4288          KK  D7879BROUTE
4289          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4290          KM        Agua Fria River Channel Improvements FCD No 94-38,
4291          KM        LAFB No 87-3002 dated May 1995,
4292          KM        from Dysart Rd to El Mirage Rd-No2
4293          RS       1    FLOW
4294          RC   0.013   0.013   0.013    3524  0.0009    0.00
4295          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
4296          RY  1068.0 1062.33 1058.33 1054.33 1054.23 1058.33 1062.33 1068.00
              *

4297          KK    D79BBASIN
4298          KM        BASIN BOUNDARY FROM THE GLENDALE SALT DEVELOPMENT
4299          KM        1990 TOPO AND DYSART DRAIN
4300          BA   0.317
4301          LG    0.35    0.35    4.65    0.32       0
4302          UI       0      76     302     500     546     404     243     149      95      55
4303          UI      38      14      14      15       0       0       0       0       0       0
4304          UI       0       0       0       0       0       0       0       0       0       0
4305          UI       0       0       0       0       0       0       0       0       0       0
4306          UI       0       0       0       0       0       0       0       0       0       0
              *

4307          KK  CPD79BCOMBINE
4308          HC       3  54.902
              *

4309          KK  D79B80ROUTE
4310          KM        As-builts for Dysart Drain Improvements Project Reems Rd
4311          KM        to Agua Fria River Channel Improvements FCD No 94-38,
4312          KM        LAFB No 87-3002 dated May 1995,
4313          KM        from El Mirage d to AFR-No1
4314          RS       1    FLOW
4315          RC   0.013   0.013   0.013    1044  0.0009    0.00
4316          RX  100.00  109.30  117.30  125.30  135.30  143.30  151.30  160.70
4317          RY  1064.5 1059.83 1055.83 1051.83 1051.73 1055.83 1059.83 1064.50
              *

4318          KK     D80BASIN
4319          KM        BASIN BOUNDARY FROM 1990 TOPO AND DYSART DRAIN
4320          BA   0.131
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4321          LG    0.29    0.32    4.45    0.41      13
4322          UI       0      86     307     317     162      79      34      15       9       0
4323          UI       0       0       0       0       0       0       0       0       0       0
4324          UI       0       0       0       0       0       0       0       0       0       0
4325          UI       0       0       0       0       0       0       0       0       0       0
4326          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                                    PAGE111

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4327          KK   CPD80COMBINE
4328          HC       2  55.033
              *

4329          KK     D52BASIN
4330          KM        BASIN BOUNDARY FROM RACHO MIRAGE UNITS 1 AND
4331          KM        DYSART HIGH SCHOOL, AND DYSART RACHETTES
4332          BA   0.587
4333          LG    0.28    0.25    5.40    0.26      23
4334          UI       0      69     188     338     438     603     837     625     488     363
4335          UI     237     120      91      61      22      21      21      21       0       0
4336          UI       0       0       0       0       0       0       0       0       0       0
4337          UI       0       0       0       0       0       0       0       0       0       0
4338          UI       0       0       0       0       0       0       0       0       0       0
              *

4339          KK  DD52REDIVERT
4340          KM        Retention volume estimated based calculation assuming 100-yr 2hr retenti
4341          DT    RD52     4.6     0.0
4342          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4343          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4344          KK  D52D66ROUTE
4345          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
4346          KM        based on aerial & topo / Manning's N Value: clean earth;
4347          KM        straight, street LOB
4348          RS       8    FLOW
4349          RC   0.013   0.022   0.038    5258  0.0015    0.00
4350          RX  100.00  120.00  141.00  153.00  163.00  175.00  595.00  600.00
4351          RY  1095.7 1098.20 1098.00 1095.00 1095.10 1098.00 1098.30 1098.65
              *

4352          KK     D66BASIN
4353          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4354          BA   0.300
4355          LG    0.50    0.25    4.80    0.45       0
4356          UI       0      15      15      14      30      40      64      87      82      95
4357          UI     113     124     124     125     127     122     103     105     114      90
4358          UI      79      89      64      57      50      43      45      39      29      25
4359          UI      24      19      19      17      14      13      14       9       8       9
4360          UI       8       9       6       2       1       2       2       2       2       2
              *

4361          KK   CPD66COMBINE
4362          HC       2   0.887
              *

4363          KK  D66D67ROUTE
4364          KM        Cross-section: Cross-section estimated from aerial and topo-road
4365          KM        Manning's N Value: clean earth; straight, street ROB
4366          RS       1    FLOW
4367          RC   0.022   0.022   0.016    1882  0.0032    0.00
4368          RX  100.00  120.00  140.00  150.00  160.00  170.00  178.00  188.00
1                                          HEC-1 INPUT                                                    PAGE112

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4369          RY  1092.5 1092.25 1092.00 1090.00 1090.10 1092.00 1092.25 1095.50
              *

4370          KK     D67BASIN
4371          KM        BASIN BOUNDARY FROM EL MIRAGE INDUSTRIAL PARK
4372          KM        COYOTE PASS RV STORAGE AND AGUA FRIA RIVER
4373          BA   0.317
4374          LG    0.30    0.27    4.60    0.45      28
4375          UI       0      28      48     114     150     181     224     317     341     254
4376          UI     213     170     133      89      52      45      29      21       9       9
4377          UI       9       8       9       0       0       0       0       0       0       0
4378          UI       0       0       0       0       0       0       0       0       0       0
4379          UI       0       0       0       0       0       0       0       0       0       0
              *

4380          KK   CPD67COMBINE
4381          HC       2   1.204
              *

4382          KK     D76BASIN
4383          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4384          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CLAYTON HOMES INC.
4385          BA   0.109
4386          LG    0.31    0.25    4.80    0.42      30
4387          UI       0       9      12      25      49      56      72      80      79      73
4388          UI      69      60      54      38      32      28      21      16      12      11
4389          UI       8       8       5       6       4       1       2       1       1       1
4390          UI       1       2       1       1       1       1       2       1       1       0
4391          UI       0       0       0       0       0       0       0       0       0       0
              *

4392          KK  D76D77ROUTE
4393          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width
4394          KM        based on aerial & topo / Manning's N Value: clean earth;
4395          KM        straight; street ROB
4396          RS       1    FLOW
4397          RC   0.022   0.022   0.016    2313  0.0130    0.00
4398          RX  100.00  120.00  140.00  146.00  148.00  154.00  164.00  174.00
4399          RY  1070.5 1070.25 1070.00 1068.00 1068.10 1070.00 1070.25 1070.50
              *

4400          KK     D77BASIN
4401          KM        BASIN BOUNDARY FROM UNION ROCK & MATERAIL CORR AND AGUA FRIA RIVER
4402          BA   0.361
4403          LG    0.15    0.25    4.60    0.45      54
4404          UI       0     152     597     769     600     328     158      88      49      12
4405          UI      12      12      11       0       0       0       0       0       0       0
4406          UI       0       0       0       0       0       0       0       0       0       0
4407          UI       0       0       0       0       0       0       0       0       0       0
4408          UI       0       0       0       0       0       0       0       0       0       0
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                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4409            KK   CPD77COMBINE
4410            HC       2    0.47
                *

4411            KK     B01BASIN
4412            KM        BASIN BOUNDARY FROM AMERICAN SAND AND ROCK INC
4413            KM        EL MIRAGE ROAD LLC, DYSART DRAIN AND AGUA FRIA RIVER
4414            BA   0.096
4415            LG    0.14    0.25    4.35    0.53      49
4416            UI       0     137     387     176      34       0       0       0       0       0
4417            UI       0       0       0       0       0       0       0       0       0       0
4418            UI       0       0       0       0       0       0       0       0       0       0
4419            UI       0       0       0       0       0       0       0       0       0       0
4420            UI       0       0       0       0       0       0       0       0       0       0
                *

4421            KK   DUMMYCOMBINE
4422            HC       5
                *

4423            KK     B03BASIN
4424            KM        BASIN BOUNDARY FROM GLENDALE SALT DEVELOPMENT
4425            KM        1990 TOPO AND DYSART DRAIN
4426            BA   0.338
4427            LG    0.40    0.30    4.70    0.39       4
4428            UI       0      32      58     130     171     211     266     383     344     264
4429            UI     215     171     127      70      54      38      31      10      10       9
4430            UI      10      10       0       0       0       0       0       0       0       0
4431            UI       0       0       0       0       0       0       0       0       0       0
4432            UI       0       0       0       0       0       0       0       0       0       0
                *

4433            KK  B03B05ROUTE
4434            KM        Cross section estimated from topo
4435            RS       2    FLOW
4436            RC   0.035   0.035   0.035    2746  0.0080    0.00
4437            RX  100.00  135.00  175.00  190.00  210.00  235.00  260.00  300.00
4438            RY  1074.0 1073.00 1072.00 1071.00 1070.00 1068.00 1069.00 1071.00
                *

4439            KK     B05BASIN
4440            KM        BASIN BOUNDARY FROM DYSART DRAIN, GLENDALE SALT DEVELOPMENT
4441            KM        AND 1990 TOPO
4442            BA   0.395
4443            LG    0.30    0.32    4.65    0.35      13
4444            UI       0      77     305     536     634     542     346     225     145      92
4445            UI      58      41      16      17      16       0       0       0       0       0
4446            UI       0       0       0       0       0       0       0       0       0       0
4447            UI       0       0       0       0       0       0       0       0       0       0
4448            UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4449            KK   CPB05COMBINE
4450            HC       2   0.733
                *

4451            KK  B05B06ROUTE
4452            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4453            KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4454            RS       3    FLOW
4455            RC   0.032   0.032   0.032    4011  0.0040    0.00
4456            RX  100.00  150.00  167.00  179.00  214.00  226.00  255.00  277.00
4457            RY  1039.0 1038.50 1038.00 1035.00 1035.10 1038.00 1038.25 1038.50
                *

4458            KK     B06BASIN
4459            KM        BASIN BOUNDARY ROCK QUARRY AND AGUA FRIA RIVER
4460            BA   0.400
4461            LG    0.22    0.28    3.92    0.41      34
4462            UI       0     132     523     797     695     415     234     134      75      41
4463            UI      21      21       0       0       0       0       0       0       0       0
4464            UI       0       0       0       0       0       0       0       0       0       0
4465            UI       0       0       0       0       0       0       0       0       0       0
4466            UI       0       0       0       0       0       0       0       0       0       0
                *

4467            KK   CPB06COMBINE
4468            HC       2   1.133
                *

4469            KK  B06B15ROUTE
4470            KM        Cross-section: Estimated 4:1 side slopes, width based on
4471            KM        aerial / Manning's N Value: clean earth; straight
4472            RS       6    FLOW
4473            RC   0.022   0.022   0.022    6376  0.0025    0.00
4474            RX  100.00  101.00  222.00  238.00  250.00  264.00  283.00  284.00
4475            RY  1033.0 1032.25 1032.00 1030.00 1030.10 1032.00 1032.25 1033.00
                *

4476            KK     B07BASIN
4477            KM        BASIN BOUNDARY FROM LUKE AFT ESTATES, DESERT GARDENS IV
4478            KM        AND LAFB BOUNDARY
4479            BA   0.246
4480            LG    0.33    0.34    4.90    0.30       8
4481            UI       0      46     175     260     428     402     264     168      74      45
4482            UI      16      12      13       0       0       0       0       0       0       0
4483            UI       0       0       0       0       0       0       0       0       0       0
4484            UI       0       0       0       0       0       0       0       0       0       0
4485            UI       0       0       0       0       0       0       0       0       0       0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4486            KK  DB07REDIVERT
4487            KM        Preliminary Drainage Report for Luke Ranch
4488            KM        Remaining retention volume estimated from aerial
4489            DT    RB07      7.7     0.0
4490            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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4491          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4492          KK  B07B09ROUTE
4493          KM        Cross-section: Estimated 4' deep and 6:1 side slopes, width based
4494          KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4495          RS       4    FLOW
4496          RC   0.032   0.032   0.032    3559  0.0020    0.00
4497          RX  100.00  106.00  112.00  136.00  160.00  184.00  194.00  204.00
4498          RY  1070.0 1069.50 1069.00 1065.00 1065.10 1069.00 1069.50 1070.00
              *

4499          KK     B08BASIN
4500          KM        BASIN BOUNDARY FROM LAFB BOUNDARY, 1990 TOPO
4501          KM        MOBILE HOME PARK AND DREAMING SUMMIT DEVELOPMENT
4502          BA   0.270
4503          LG    0.32    0.33    4.70    0.33       5
4504          UI       0     310     903     547     209      81      24       0       0       0
4505          UI       0       0       0       0       0       0       0       0       0       0
4506          UI       0       0       0       0       0       0       0       0       0       0
4507          UI       0       0       0       0       0       0       0       0       0       0
4508          UI       0       0       0       0       0       0       0       0       0       0
              *

4509          KK  B08B09ROUTE
4510          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4511          KM        aerial & topo / Manning's N Value: grass sides, concrete bottom
4512          RS       1    FLOW
4513          RC   0.025   0.016   0.025    3184  0.0016    0.00
4514          RX  100.00  107.00  114.00  118.00  133.00  137.00  157.00  167.00
4515          RY  1070.0 1069.50 1069.00 1067.00 1067.10 1069.00 1069.50 1070.00
              *

4516          KK     B09BASIN
4517          KM        BASIN BOUNDARY FROM DREAMING SUMMIT MULTI PHASE
4518          BA   0.430
4519          LG    0.24    0.25    5.00    0.33      33
4520          UI       0     266     787    1245     677     235      73      36       0       0
4521          UI       0       0       0       0       0       0       0       0       0       0
4522          UI       0       0       0       0       0       0       0       0       0       0
4523          UI       0       0       0       0       0       0       0       0       0       0
4524          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE116

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4525          KK  DB09REDIVERT
4526          KM        Final Drainage Report for Dreaming Summit Unit 2A and 1
4527          KM        Unit 1 75% retention used. Remainder retention in DB11
4528          DT    RB09    20.0     0.0
4529          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4530          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4531          KK   CPB09COMBINE
4532          HC       3   0.946
              *

4533          KK   SRB11STORAGE
4534          KM        Litchfield Park Detention Facility, Infrastructure from
4535          KM        Dreaming Summit Master Drainage Report
4536          KO
4537          RS       1    STOR
4538          SV            2.24   11.46   25.91   43.25   61.13   79.80   98.97  119.35  140.75
4539          SQ            5.00   18.00   37.00   58.00   79.00   92.00  104.00  115.00  125.00
4540          SE  1058.0 1059.00 1060.00 1061.00 1062.00 1063.00 1064.00 1065.00 1066.00 1067.00
4541          ST
              *

4542          KK  B09B11ROUTE
4543          KM        Cross-section: Estimated 3' deep; side slopes and width based on
4544          KM        aerial and topo / Manning's N Value: semi-natural wash w/ vegetation
4545          RS       8    FLOW
4546          RC   0.035   0.035   0.035    5810  0.0022    0.00
4547          RX  100.00  107.00  112.00  118.00  130.00  137.00  143.00  154.00
4548          RY  1058.0 1057.00 1056.00 1055.50 1055.00 1056.00 1058.00 1060.00
              *

4549          KK     B10BASIN
4550          KM        BASIN BOUNDARY FROM 1990 TOPO, DREAMING SUMMIT AND FALCON PLAZA
4551          BA   0.162
4552          LG    0.33    0.34    4.50    0.37       3
4553          UI       0     164     494     357     144      59      21      14       0       0
4554          UI       0       0       0       0       0       0       0       0       0       0
4555          UI       0       0       0       0       0       0       0       0       0       0
4556          UI       0       0       0       0       0       0       0       0       0       0
4557          UI       0       0       0       0       0       0       0       0       0       0
              *

4558          KK  B1011AROUTE
4559          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
4560          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
4561          RS       2    FLOW
4562          RC   0.022   0.022   0.022    3609  0.0060    0.00
4563          RX  100.00  107.50  119.50  125.50  129.00  135.00  147.00  154.50
4564          RY  1056.6 1055.30 1053.30 1052.30 1051.90 1053.30 1055.30 1056.60
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4565          KK  B1011BROUTE
4566          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
4567          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
4568          RS       2    FLOW
4569          RC   0.022   0.022   0.022    2760  0.0017    0.00
4570          RX  100.00  103.90  115.90  127.90  172.90  184.90  196.90  200.80
4571          RY  1051.9 1051.20 1049.20 1047.20 1046.80 1049.20 1051.20 1051.90
              *

4572          KK     B11BASIN
4573          KM        BASIN BOUNDARY FROM DREAMING SUMMIT, FALCON PLAZA AND COLTER CHANNEL
4574          BA   0.821
4575          LG    0.25    0.25    4.80    0.35      26
4576          UI       0     171     628     939    1568    1272     848     470     227     118
4577          UI      43      44       0       0       0       0       0       0       0       0
4578          UI       0       0       0       0       0       0       0       0       0       0
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4579          UI       0       0       0       0       0       0       0       0       0       0
4580          UI       0       0       0       0       0       0       0       0       0       0
              *

4581          KK  DB11REDIVERT
4582          KM        Final Drainage Report for Dreaming Summit
4583          KM        Unit 1 Retention Basin 1
4584          KM        Dreaming Summit Unit 2B Retention Basin for Commercial Site
4585          DT    RB11      5.1     0.0
4586          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4587          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4588          KK   CPB11COMBINE
4589          HC       3   1.929
              *

4590          KK  B11B12ROUTE
4591          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
4592          KM        August 1993, From Dysart Rd to Wigwam Creek Rd-74+00
4593          RS       2    FLOW
4594          RC   0.022   0.022   0.022    3516  0.0017    0.00
4595          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
4596          RY  1046.0 1044.30 1042.30 1040.30 1039.90 1042.30 1044.30 1045.95
              *

4597          KK     B12BASIN
4598          KM        BASIN BOUNDARY FROM LOC CERROS, LITCHFILED VISTA VIEWS MULTI PHASE
4599          KM        WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
4600          BA   0.381
4601          LG    0.28    0.24    4.45    0.44      17
4602          UI       0      52     176     279     378     605     491     364     263     139
4603          UI      86      51      21      15      16       0       0       0       0       0
4604          UI       0       0       0       0       0       0       0       0       0       0
4605          UI       0       0       0       0       0       0       0       0       0       0
4606          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4607          KK  DB12REDIVERT
4608          KM        Retention volume estimated based on aerial
4609          DT    RB12      1.8     0.0
4610          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4611          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4612          KK   CPB12COMBINE
4613          HC       2    2.31
              *

4614          KK  B12B14ROUTE
4615          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
4616          KM        August 1993, From Wigwam Creek Rd to El Mirage-99+00
4617          RS       1    FLOW
4618          RC   0.022   0.022   0.022    1682  0.0021    0.00
4619          RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
4620          RY  1036.6 1034.90 1032.90 1030.90 1030.50 1032.90 1034.90 1036.60
              *

4621          KK     B13BASIN
4622          KM        BASIN BOUNDARY FROM WIGWAM CREEK PH 2, DYSART VILLAGE
4623          KM        BETHANY ESTATES NORTH AND 1990 TOPO
4624          BA   0.489
4625          LG    0.33    0.32    4.60    0.34       4
4626          UI       0     117     407     623    1006     732     468     216     114      47
4627          UI      27      27       0       0       0       0       0       0       0       0
4628          UI       0       0       0       0       0       0       0       0       0       0
4629          UI       0       0       0       0       0       0       0       0       0       0
4630          UI       0       0       0       0       0       0       0       0       0       0
              *

4631          KK  B13B14ROUTE
4632          KM        Cross-section: Estimated 4' deep and 4:1 side slopes
4633          KM        width based on aerial / Manning's N Value: grass
4634          RS       2    FLOW
4635          RC   0.025   0.025   0.025    4696  0.0030    0.00
4636          RX  100.00  108.00  116.00  136.00  166.00  186.00  196.00  206.00
4637          RY  1040.0 1039.50 1039.00 1035.00 1035.10 1039.00 1039.50 1040.00
              *

4638          KK     B14BASIN
4639          KM        BASIN BOUNDARY FROM WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
4640          BA   0.328
4641          LG    0.25    0.25    4.60    0.39      33
4642          UI       0      69     251     374     627     508     338     189      90      47
4643          UI      17      18       0       0       0       0       0       0       0       0
4644          UI       0       0       0       0       0       0       0       0       0       0
4645          UI       0       0       0       0       0       0       0       0       0       0
4646          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4647          KK  DB14REDIVERT
4648          KM        Final Drainage Report for Wigwam Creek Ph. 1
4649          KM        (60% retention used), Remaining retention volume
4650          KM        estimated from aerial
4651          DT    RB14     23.9     0.0
4652          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4653          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4654          KK   CPB14COMBINE
4655          HC       3   3.127
              *

4656          KK  B14B15ROUTE
4657          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
4658          KM        August 1993, From El Mirage to AFR-99+00
4659          RS       1    FLOW
4660          RC   0.022   0.022   0.022    2696  0.0016    0.00
4661          RX  100.00  112.00  118.00  124.00  238.00  244.00  250.00  262.00
4662          RY  1027.0 1025.00 1024.00 1023.00 1022.90 1024.00 1025.00 1027.00
              *
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4663          KK     B15BASIN
4664          KM        BASIN BOUNDARY FROM ROCK QUARRY, COLTER CHANNEL AND AGUA FRIA RIVER
4665          BA   0.376
4666          LG    0.14     0.24     4.45     0.49       52
4667          UI       0       83      320      554      630      496      311      195      125       77
4668          UI      47       26       17       16        0        0        0        0        0        0
4669          UI       0        0        0        0        0        0        0        0        0        0
4670          UI       0        0        0        0        0        0        0        0        0        0
4671          UI       0        0        0        0        0        0        0        0        0        0
              *

4672          KK   CPB15COMBINE
4673          HC       3   4.636
              *

4674          KK     B16BASIN
4675          KM        BASIN BOUNDARY FROM SUN HEALTH PROPERTIES AND 1990 TOPO
4676          BA   0.113
4677          LG    0.17     0.28     4.25     0.55       29
4678          UI       0      115      369      280       84       19        0        0        0        0
4679          UI       0        0        0        0        0        0        0        0        0        0
4680          UI       0        0        0        0        0        0        0        0        0        0
4681          UI       0        0        0        0        0        0        0        0        0        0
4682          UI       0        0        0        0        0        0        0        0        0        0
              *

4683          KK  DB16REDIVERT
4684          KM        Retention volume estimated based on aerial
4685          DT    RB16      3.6      0.0
4686          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4687          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4688          KK  B16B17ROUTE
4689          KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
4690          KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 65+00
4691          RS       1     FLOW
4692          RC   0.013    0.013    0.013     5250   0.0015     0.00
4693          RX  100.00   102.00   106.00   110.00   115.00   119.00   123.00   125.00
4694          RY  1038.3 1037.30 1035.30 1033.30 1033.20 1035.30 1037.30 1038.30
              *

4695          KK     B17BASIN
4696          KM        BASIN BOUNDARY FROM VERANDA MULTI PHASE, DYSART COMMONS
4697          KM        CAMBELBACK PLACE AT DYSART AND COLTER CHANNEL
4698          BA   0.334
4699          LG    0.22     0.28     4.80     0.36       30
4700          UI       0       81      285      436      698      494      312      138       77       28
4701          UI      19        0        0        0        0        0        0        0        0        0
4702          UI       0        0        0        0        0        0        0        0        0        0
4703          UI       0        0        0        0        0        0        0        0        0        0
4704          UI       0        0        0        0        0        0        0        0        0        0
              *

4705          KK  DB17REDIVERT
4706          KM        Retention volume estimated based on aerial
4707          DT    RB17      9.6      0.0
4708          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4709          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4710          KK   CPB17COMBINE
4711          HC       2   0.447
              *

4712          KK  B17B18ROUTE
4713          KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
4714          KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 115+00
4715          RS       1     FLOW
4716          RC   0.013    0.013    0.013     5176   0.0032     0.00
4717          RX  100.00   102.00   106.00   110.00   115.00   119.00   123.00   125.00
4718          RY  1028.4 1027.40 1025.40 1023.40 1023.30 1025.40 1027.40 1028.40
              *

4719          KK     B18BASIN
4720          KM        BASIN BOUNDARY FROM CAMELBACK CROSSING, TIERRA BUENA
4721          KM        WIGWAM CREEK AND COLTER CHANNEL
4722          BA   0.282
4723          LG    0.35     0.27     4.55     0.44       14
4724          UI       0       26       42      101      133      162      199      282      303      227
4725          UI     189      151      119       79       45       40       26       19        8        8
4726          UI       8        7        8        0        0        0        0        0        0        0
4727          UI       0        0        0        0        0        0        0        0        0        0
4728          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4729          KK  DB18REDIVERT
4730          KM        Final Drainage Report for Wigwam Creek Ph. 1 (40% retention used)
4731          DT    RB18      3.8      0.0
4732          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4733          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4734          KK   CPB18COMBINE
4735          HC       2   0.729
              *

4736          KK  B18B19ROUTE
4737          KM        Cross-section: Cross-section determined from aerial and
4738          KM        1990 topo / Manning's N Value: earth w/ sparse trees and brush
4739          RS       2     FLOW
4740          RC   0.032    0.032    0.032     3218   0.0053     0.00
4741          RX  100.00   104.00   108.00   124.00   142.00   157.00   179.00   193.00
4742          RY  1026.0 1026.00 1022.00 1020.00 1020.00 1022.00 1022.00 1022.10
              *

4743          KK     B19BASIN
4744          KM        BASIN BOUNDARY FROM ROCK QUARY, COLTER CHANNEL AND AGUA FRIA RIVER
4745          BA   0.117
4746          LG    0.15     0.25     4.40     0.51       55
4747          UI       0      163      426      208       74       22       12        0        0        0
4748          UI       0        0        0        0        0        0        0        0        0        0
```

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4749        UI       0       0       0       0       0       0       0       0       0       0
4750        UI       0       0       0       0       0       0       0       0       0       0
4751        UI       0       0       0       0       0       0       0       0       0       0
            *

4752        KK   CPB19COMBINE
4753        HC       2   0.846
            *

4754        KK     B20BASIN
4755        KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
4756        BA   0.228
4757        LG    0.15    0.25    4.15    0.59      55
4758        UI       0     159     547     550     276     131      57      23      17       0
4759        UI       0       0       0       0       0       0       0       0       0       0
4760        UI       0       0       0       0       0       0       0       0       0       0
4761        UI       0       0       0       0       0       0       0       0       0       0
4762        UI       0       0       0       0       0       0       0       0       0       0
            *

4763        KK   DUMMYCOMBINE
4764        HC       4
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4765        KK     B21BASIN
4766        KM        BASIN BOUNDARY FROM RIO CROSSING AND WIGWAM CREEK
4767        BA   0.243
4768        LG    0.29    0.29    4.20    0.48      21
4769        UI       0      44     172     255     420     396     264     166      75      45
4770        UI      17      13      12       0       0       0       0       0       0       0
4771        UI       0       0       0       0       0       0       0       0       0       0
4772        UI       0       0       0       0       0       0       0       0       0       0
4773        UI       0       0       0       0       0       0       0       0       0       0
            *

4774        KK  DB21REDIVERT
4775        KM        Final Drainage Report for Rio Crossing
4776        DT    RB21    12.3     0.0
4777        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4778        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4779        KK  B21B22ROUTE
4780        KM        Cross-section: Estimated channel, 2' depth, width based on
4781        KM        aerial / Manning's N Value: earth w/ sparse trees and brush
4782        RS       1    FLOW
4783        RC   0.032   0.032   0.032    1942  0.0082    0.00
4784        RX  100.00  108.00  116.00  128.00  136.00  148.00  156.00  164.00
4785        RY  1010.0 1009.50 1009.00 1007.00 1007.10 1009.00 1009.50 1010.00
            *

4786        KK     B22BASIN
4787        KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
4788        BA   0.217
4789        LG    0.16    0.25    4.00    0.61      51
4790        UI       0     168     521     622     261      78      20       0       0       0
4791        UI       0       0       0       0       0       0       0       0       0       0
4792        UI       0       0       0       0       0       0       0       0       0       0
4793        UI       0       0       0       0       0       0       0       0       0       0
4794        UI       0       0       0       0       0       0       0       0       0       0
            *

4795        KK   CPB22COMBINE
4796        HC       2    0.46
            *

4797        KK     B23BASIN
4798        KM        BASIN BOUNDARY FROM WIGWAM CREEK
4799        BA   0.269
4800        LG    0.25    0.25    6.00    0.21      35
4801        UI       0      38     138     214     300     454     335     243     166      78
4802        UI      51      28      12      12      12       0       0       0       0       0
4803        UI       0       0       0       0       0       0       0       0       0       0
4804        UI       0       0       0       0       0       0       0       0       0       0
4805        UI       0       0       0       0       0       0       0       0       0       0
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4806        KK  DB23REDIVERT
4807        KM        Drainage Report for Wigwam Creek
4808        KM        South Offsites (50% area)
4809        DT    RB23     2.1     0.0
4810        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4811        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4812        KK  B23B24ROUTE
4813        KM        Cross-section: Assumed 2% cross slope from crown of road,
4814        KM        0.5' curb height / Manning's N Value: street and curb
4815        RS       1    FLOW
4816        RC   0.032   0.013   0.032    2557  0.0051    0.00
4817        RX  100.00  100.50  124.00  124.50  175.00  175.50  197.50  198.00
4818        RY  1025.0 1024.50 1024.00 1023.50 1023.40 1024.00 1024.50 1025.00
            *

4819        KK     B24BASIN
4820        KM        BASIN BOUNDARY FROM CORTE SIERRA
4821        BA   0.188
4822        LG    0.24    0.25    4.20    0.53      37
4823        UI       0      73     233     422     371     215      82      35      13       0
4824        UI       0       0       0       0       0       0       0       0       0       0
4825        UI       0       0       0       0       0       0       0       0       0       0
4826        UI       0       0       0       0       0       0       0       0       0       0
4827        UI       0       0       0       0       0       0       0       0       0       0
            *

4828        KK  DB24REDIVERT
4829        KM        Master Drainage and Grading Plans for Corte
4830        KM        Sierra Unit 1 and Unit 2 (50% area)
4831        DT    RB24    12.2     0.0
4832        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4833        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *
```

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4834          KK   CPB24COMBINE
4835          HC       2   0.457
              *

4836          KK  B24B25ROUTE
4837          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
4838          KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
4839          RS       3    FLOW
4840          RC   0.032   0.032   0.032    3303  0.0012    0.00
4841          RX  100.00  108.00  116.00  128.00  134.00  146.00  154.00  162.00
4842          RY  1011.5 1011.25 1011.00 1008.00 1008.10 1011.00 1013.50 1014.00
              *
1                                          HEC-1 INPUT                                          PAGE124

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4843          KK     B25BASIN
4844          KM        BASIN BOUNDARY FROM 1990 TOPO
4845          BA   0.203
4846          LG    0.27    0.31    4.15    0.50      18
4847          UI       0      90     278     502     381     201      72      26      15       0
4848          UI       0       0       0       0       0       0       0       0       0       0
4849          UI       0       0       0       0       0       0       0       0       0       0
4850          UI       0       0       0       0       0       0       0       0       0       0
4851          UI       0       0       0       0       0       0       0       0       0       0
              *

4852          KK   CPB25COMBINE
4853          HC       2    0.66
              *

4854          KK     B26BASIN
4855          KM        BASIN BOUNDARY FROM CORTE SIERRA
4856          BA   0.308
4857          LG    0.23    0.24    4.50    0.43      38
4858          UI       0     114     363     649     627     368     149      69      21      21
4859          UI       0       0       0       0       0       0       0       0       0       0
4860          UI       0       0       0       0       0       0       0       0       0       0
4861          UI       0       0       0       0       0       0       0       0       0       0
4862          UI       0       0       0       0       0       0       0       0       0       0
              *

4863          KK  DB26REDIVERT
4864          KM        Master Drainage and Grading Plans for Corte
4865          KM        Sierra Unit 1 and Unit 2 (50% area), Final Drainage
4866          KM        Report for Las Palmeras West
4867          DT    RB26    17.6     0.0
4868          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4869          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4870          KK  B26B27ROUTE
4871          KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width
4872          KM        based on aerial / Manning's N Value: clean earth; straight; ROB street
4873          RS       7    FLOW
4874          RC   0.032   0.022   0.013    2653  0.0008    0.00
4875          RX  100.00  101.00  340.00  352.00  356.00  368.00  378.00  388.00
4876          RY  996.75  996.25  996.00  994.00  994.10  996.00  996.25  996.75
              *

4877          KK     B27BASIN
4878          KM        BASIN BOUNDARY FROM CORTE SIERRA AND 1990 TOPO
4879          BA   0.363
4880          LG    0.15    0.25    4.50    0.48      54
4881          UI       0      78     281     422     705     563     369     197      98      48
4882          UI      19      20       0       0       0       0       0       0       0       0
4883          UI       0       0       0       0       0       0       0       0       0       0
4884          UI       0       0       0       0       0       0       0       0       0       0
4885          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE125

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4886          KK   CPB27COMBINE
4887          HC       2   0.671
              *

4888          KK   DUMMYCOMBINE
4889          HC       4
              *

4890          KK     B76BASIN
4891          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4892          BA   0.386
4893          LG    0.18    0.25    4.15    0.60      24
4894          UI       0      55     204     316     441     665     476     340     228     106
4895          UI      70      36      17      17      17       0       0       0       0       0
4896          UI       0       0       0       0       0       0       0       0       0       0
4897          UI       0       0       0       0       0       0       0       0       0       0
4898          UI       0       0       0       0       0       0       0       0       0       0
              *

4899          KK  DB76REDIVERT
4900          KM        Retention volume estimated based on aerial
4901          DT    RB76    52.4     0.0
4902          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4903          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4904          KK  B7676AROUTE
4905          KM        Cross-section: Estimated based on aerial, street section
4906          KM        Manning's N Value: street, earth with sparse trees and shrubs
4907          RS       1    FLOW
4908          RC   0.032   0.016   0.032    3516  0.0057    0.00
4909          RX  100.00  110.00  120.00  122.00  158.00  160.00  170.00  180.00
4910          RY  1020.5 1020.25 1020.00 1019.50 1019.40 1019.90 1020.25 1020.50
              *

4911          KK     B75BASIN
4912          KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4913          BA   0.417
4914          LG    0.19    0.25    4.35    0.53      20
4915          UI       0     119     410     647     907     576     321     131      63      25
4916          UI      25       0       0       0       0       0       0       0       0       0
4917          UI       0       0       0       0       0       0       0       0       0       0
4918          UI       0       0       0       0       0       0       0       0       0       0
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4919        UI      0       0       0       0       0       0       0       0       0       0
            *

4920        KK  DB75REDIVERT
4921        KM        Master Drainage Study for Palm Valley (CONCEPT
4922        KM        DESIGN VOLUME OF 550 AC-FT RECOMMENDED)
4923        KM        Remaining retention volume estimated from aerial
4924        DT    RB75    52.3     0.0
4925        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4926        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *
1                                   HEC-1 INPUT                                          PAGE126

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4927        KK  B75A75ROUTE
4928        KM        Cross-section: Estimated based on aerial, street section
4929        KM        Manning's N Value: street, earth with sparse trees and shrubs
4930        RS       1    FLOW
4931        RC   0.025   0.025   0.025    5478  0.0026    0.00
4932        RX  100.00  107.00  114.00  114.10  155.00  155.10  165.00  171.00
4933        RY  1000.0  999.90  999.80  999.30  999.20  999.80  999.90 1000.00
            *

4934        KK    B75ABASIN
4935        KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4936        BA   0.281
4937        LG    0.23    0.23    6.20    0.20      26
4938        UI       0      57     207     315     516     446     295     173      81      44
4939        UI      15      14       0       0       0       0       0       0       0       0
4940        UI       0       0       0       0       0       0       0       0       0       0
4941        UI       0       0       0       0       0       0       0       0       0       0
4942        UI       0       0       0       0       0       0       0       0       0       0
            *

4943        KK  CPB75ACOMBINE
4944        HC       2   0.698
            *

4945        KK  B7576AROUTE
4946        KM        Cross-section: Estimated based on aerial, street section
4947        KM        Manning's N Value: street and ROW
4948        RS       1    FLOW
4949        RC   0.032   0.013   0.032    2062  0.0015    0.00
4950        RX  100.00  100.50  110.00  110.10  147.00  147.10  164.50  165.00
4951        RY  1000.9 1000.00  999.80  999.30  999.31  999.80 1000.00 1000.90
            *

4952        KK    B76ABASIN
4953        KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
4954        BA   0.314
4955        LG    0.19    0.24    4.10    0.59      38
4956        UI       0     186     553     904     509     184      59      26       0       0
4957        UI       0       0       0       0       0       0       0       0       0       0
4958        UI       0       0       0       0       0       0       0       0       0       0
4959        UI       0       0       0       0       0       0       0       0       0       0
4960        UI       0       0       0       0       0       0       0       0       0       0
            *

4961        KK  CPB76ACOMBINE
4962        HC       3   1.398
            *

4963        KK  B76B78ROUTE
4964        KM        Cross-section: assumed 9' headwall to keep flow from
4965        KM        overflowing into canal, width from aerial / Manning's
4966        KM        N Value: concrete
4967        RS       1    FLOW
4968        RC   0.016   0.016   0.016     171  0.0117    0.00
1                                   HEC-1 INPUT                                          PAGE127

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4969        RX  100.00  101.00  102.00  103.00  163.00  164.00  165.00  166.00
4970        RY  1009.0 1008.90 1008.80 1000.00 1000.10 1008.80 1008.90 1009.00
            *

4971        KK     B77BASIN
4972        KM        WIGWAM CREEK
4973        BA   0.825
4974        LG    0.22    0.16    7.00    0.15      28
4975        UI       0     128     527     774    1200    1422     950     656     326     187
4976        UI     102      40      39       0       0       0       0       0       0       0
4977        UI       0       0       0       0       0       0       0       0       0       0
4978        UI       0       0       0       0       0       0       0       0       0       0
4979        UI       0       0       0       0       0       0       0       0       0       0
            *

4980        KK  DB77REDIVERT
4981        KM        Drainage Report for Wigwam Creek Offsites-Wigwam South
4982        KM        Report states 100yr 2hr retetnion for development. Retention estimated.
4983        DT    RB77    32.1     0.0
4984        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4985        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

4986        KK  B77B78ROUTE
4987        KM        Cross-section: Estimated 3' deep, 1' fb, included wall, width based on
4988        KM        aerial / Manning's N Value: earth with sparse trees and shrubs
4989        RS       8    FLOW
4990        RC   0.032   0.032   0.032    8404  0.0012    0.00
4991        RX  100.00  110.00  134.00  154.00  170.00  190.00  200.00  200.50
4992        RY  1001.0 1000.50 1000.00  996.00  996.10 1000.00 1001.00 1001.10
            *

4993        KK     B78BASIN
4994        KM        DYSART RANCH
4995        BA   0.570
4996        LG    0.26    0.27    5.80    0.23      28
4997        UI       0      41      41     127     180     221     253     300     374     506
4998        UI     465     380     325     271     231     188     137      81      69      59
4999        UI      42      37      13      12      13      12      13      13       0       0
5000        UI       0       0       0       0       0       0       0       0       0       0
5001        UI       0       0       0       0       0       0       0       0       0       0
            *

5002        KK  DB78REDIVERT
5003        KM        Final Drainage Report for Sage Creek
5004        DT    RB78    11.6     0.0
```

```
5005          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5006          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                                PAGE128

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5007          KK  CPB78ACOMBINE
5008          HC       2   1.395
              *

5009          KK  DB78BNDIVERT
5010          KM        Est from RID Overchute Design Report for Basin #4
5011          KM        based on overchute plans. 23ac-ft in Basin #4 shown on plans.
5012          DT  RB78BN     18.4     0.0
5013          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5014          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5015          KK  CPB78BCOMBINE
5016          HC       2   2.793
              *

5017          KK  B78B79ROUTE
5018          KM        Cross-section: Golf course, assumed 0.5% side slopes,
5019          KM        V-ditch / Manning's N Value: grass - golf course
5020          RS       8    FLOW
5021          RC   0.025   0.025   0.025    6489  0.0022    0.00
5022          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5023          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5024          KK     B79BASIN
5025          KM        BASIN BOUNDARY FROM RID CANAL, FULTON ESTATES
5026          KM        LITCHFIELD, AND PALM VALLEY PH 1
5027          BA   0.848
5028          LG    0.25    0.27    5.60    0.27      25
5029          UI       0     109     347     579     760    1188    1160     848     619     413
5030          UI     195     144      85      33      34      33       0       0       0       0
5031          UI       0       0       0       0       0       0       0       0       0       0
5032          UI       0       0       0       0       0       0       0       0       0       0
5033          UI       0       0       0       0       0       0       0       0       0       0
              *

5034          KK  DB79REDIVERT
5035          KM        Drainage Report for Fulton Estates
5036          DT    RB79    14.9     0.0
5037          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5038          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5039          KK   CPB79COMBINE
5040          HC       2   3.641
              *

5041          KK  B79B80ROUTE
5042          KM        Cross-section: Golf course, assumed 0.5% side slopes,
5043          KM        V-ditch / Manning's N Value: grass - golf course
5044          RS       1    FLOW
5045          RC   0.025   0.025   0.025    1200  0.0033    0.00
5046          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1                                          HEC-1 INPUT                                                PAGE129

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5047          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5048          KK     B80BASIN
5049          KM        PALM VALLEY PHASE 1
5050          BA   0.266
5051          LG    0.22    0.25    4.80    0.37      29
5052          UI       0      46     185     271     439     440     295     191      86      53
5053          UI      22      13      13       0       0       0       0       0       0       0
5054          UI       0       0       0       0       0       0       0       0       0       0
5055          UI       0       0       0       0       0       0       0       0       0       0
5056          UI       0       0       0       0       0       0       0       0       0       0
              *

5057          KK  DB80REDIVERT
5058          KM        Retention volume estimated based on aerial
5059          DT    RB80    19.9     0.0
5060          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5061          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5062          KK   CPB80COMBINE
5063          HC       2   3.907
              *

5064          KK   SRB80STORAGE
5065          KM        Storage at Palm Valley golf course cart path
5066          KO
5067          RS       1    STOR
5068          SV            6.61   16.70   34.00
5069          SQ          607.40 3236.62 7036.41
5070          SE  996.00  998.00 1000.00
5071          ST
              *

5072          KK  B80B81ROUTE
5073          KM        Cross-section: Golf course, assumed 0.5% side slopes,
5074          KM        V-ditch / Manning's N Value: grass - golf course
5075          RS       4    FLOW
5076          RC   0.025   0.025   0.025    1746  0.0011    0.00
5077          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5078          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5079          KK     B81BASIN
5080          KM        PALM VALLEY PHASE 1
5081          BA   0.252
5082          LG    0.17    0.17    6.80    0.18      25
5083          UI       0      57     204     307     503     384     249     122      64      29
5084          UI      13      14       0       0       0       0       0       0       0       0
5085          UI       0       0       0       0       0       0       0       0       0       0
5086          UI       0       0       0       0       0       0       0       0       0       0
5087          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5088          KK  DB81REDIVERT
5089          KM        Retention volume estimated based on aerial
5090          DT    RB81      1.8      0.0
5091          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5092          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5093          KK   CPB81COMBINE
5094          HC       2   4.159
              *

5095          KK   SRB81STORAGE
5096          KM        Storage at McDowell Road culvert
5097          KO
5098          RS       1     STOR
5099          SV            2.20     9.46    29.91
5100          SQ          114.77   324.61  2290.53
5101          SE  992.00  994.00   996.00   998.00
5102          ST
              *

5103          KK  B81B84ROUTE
5104          KM        Cross-section: Estimated from aerial, assumed 2' depth / Manning's
5105          KM        N Value: earth with sparse trees and shrubs (main channel),
5106          KM        clean earth (left and right bank)
5107          RS       1     FLOW
5108          RC   0.022    0.032    0.022     2092  0.0077     0.00
5109          RX  100.00   101.00   145.00   150.00  160.00   165.00   219.00   220.00
5110          RY  1000.2  1000.10   996.40   996.00  995.90   996.25  1000.10  1000.20
              *

5111          KK     B82BASIN
5112          KM        PALM VALLEY PHASE 1
5113          BA   0.149
5114          LG    0.19     0.25     5.30     0.31       29
5115          UI       0       38      132      202      313      219      134       58       32       11
5116          UI       8        0        0        0        0        0        0        0        0        0
5117          UI       0        0        0        0        0        0        0        0        0        0
5118          UI       0        0        0        0        0        0        0        0        0        0
5119          UI       0        0        0        0        0        0        0        0        0        0
              *

5120          KK  DB82REDIVERT
5121          KM        Retention volume estimated based on aerial
5122          DT    RB82     11.1      0.0
5123          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5124          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5125          KK  B82B83ROUTE
5126          KM        Cross-section: cross-section estimated from aerial, est
5127          KM        1' deep / Manning's N Value: clean straight earth
5128          RS      21     FLOW
5129          RC   0.022    0.022    0.022     1687  0.0095     0.00
5130          RX  100.00   105.00   115.00   135.00  136.00   155.00   160.00   170.00
5131          RY  1000.2  1000.10  1000.00   999.00  999.10  1000.00  1000.10  1000.20
              *

5132          KK     B83BASIN
5133          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5134          BA   0.223
5135          LG    0.20     0.31     6.00     0.22       51
5136          UI       0      219      702      564      181       42        0        0        0        0
5137          UI       0        0        0        0        0        0        0        0        0        0
5138          UI       0        0        0        0        0        0        0        0        0        0
5139          UI       0        0        0        0        0        0        0        0        0        0
5140          UI       0        0        0        0        0        0        0        0        0        0
              *

5141          KK  DB83REDIVERT
5142          KM        Retention volume estimated based on aerial
5143          DT    RB83      1.9      0.0
5144          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5145          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5146          KK   CPB83COMBINE
5147          HC       2   0.372
              *

5148          KK   SRB83STORAGE
5149          KM        ADOT Regional Basin (per URS 2001 study)
5150          KO
5151          RS       1     STOR
5152          SV           19.83    60.59   109.71   161.17   215.52   334.65   399.54   399.64   399.74
5153          SQ           36.00    44.00    52.00    60.00    65.00    76.00    81.00    86.00    87.00
5154          SE  970.50  974.00   976.00   978.00   980.00   982.00   986.00   988.00   990.00   990.50
5155          ST
              *

5156          KK  B83B84ROUTE
5157          KM        Cross-section: Cross-section determined from aerial and
5158          KM        1990 topo / Manning's N Value: clean straight earth
5159          RS       3     FLOW
5160          RC   0.022    0.022    0.022      680  0.0010     0.00
5161          RX  100.00   142.00   160.00   191.00  231.00   258.00   269.00   281.00
5162          RY  988.00   986.00   984.00   976.00  976.10   984.00   986.00   988.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5163          KK     B71BASIN
5164          KM        BASIN BOUNDARY FROM PALM VALLEY CONCEPT DRAINAGE PLAN
5165          KM        PV PHASE 3A AND 38, SUNRISE
5166          BA   0.959
5167          LG    0.24     0.26     4.50     0.43       34
5168          UI       0      108      268      508      654      865     1280     1081      828      633
5169          UI     466      246      179      112       68       32       33       33        0        0
5170          UI       0        0        0        0        0        0        0        0        0        0
```

```
5171          UI       0       0       0       0       0       0       0       0       0       0
5172          UI       0       0       0       0       0       0       0       0       0       0
              *

5173          KK  DB71REDIVERT
5174          KM        Palm Valley Concept Drainage Plan for the Roosevelt
5175          KM        Canal Watershed (conceptual retention required
5176          KM        volume used, no design plans available)
5177          DT    RB71     73.5     0.0
5178          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5179          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5180          KK  B71B72ROUTE
5181          KM        Cross-section: Golf course, assumed 0.5% side slopes
5182          KM        V-ditch / Manning's N Value: grass/golf course
5183          RS      34    FLOW
5184          RC   0.025   0.025   0.025    8168  0.0022    0.00
5185          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5186          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5187          KK     B72BASIN
5188          KM        PALM VALLEY
5189          BA   1.120
5190          LG    0.22    0.26    4.90    0.38      22
5191          UI       0     108     209     460     595     741     951    1345    1096     858
5192          UI     689     544     368     198     173     109      72      33      34      33
5193          UI      33       0       0       0       0       0       0       0       0       0
5194          UI       0       0       0       0       0       0       0       0       0       0
5195          UI       0       0       0       0       0       0       0       0       0       0
              *

5196          KK  DB72REDIVERT
5197          KM        Retention volume estimated based on aerial
5198          DT    RB72     26.2     0.0
5199          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5200          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5201          KK   CPB72COMBINE
5202          HC       2   2.079
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5203          KK  B72B74ROUTE
5204          KM        Cross-section: estimated from aerial, assumed 4' depth, 4:1
5205          KM        sideslopes / Manning's N Value: concrete channel
5206          RS       1    FLOW
5207          RC   0.016   0.016   0.016    2872  0.0045    0.00
5208          RX  100.00  107.00  114.00  138.00  150.00  174.00  184.00  194.00
5209          RY  1000.2 1000.10 1000.00  996.00  996.10 1000.00 1000.10 1000.10
              *

5210          KK     B73BASIN
5211          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5212          BA   0.304
5213          LG    0.32    0.29    4.70    0.40      20
5214          UI       0      33      81     154     198     258     387     349     270     206
5215          UI     157      91      56      41      28      10      11      10      10       0
5216          UI       0       0       0       0       0       0       0       0       0       0
5217          UI       0       0       0       0       0       0       0       0       0       0
5218          UI       0       0       0       0       0       0       0       0       0       0
              *

5219          KK  DB73REDIVERT
5220          KM        Retention volume estimated based on aerial
5221          DT    RB73      6.1     0.0
5222          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5223          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5224          KK   SRB73STORAGE
5225          KM        ADOT Regional Basin (per URS 2001 study)
5226          KO
5227          RS       1    STOR
5228          SV            9.46   52.88  120.61  265.17  348.06  348.16  348.26
5229          SQ            7.00   55.00   55.00   55.00   55.00   55.00  329.00
5230          SE  975.70  978.00  980.00  982.00  986.00  988.00  988.80  990.00
5231          ST
              *

5232          KK  B73B74ROUTE
5233          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5234          KM        Manning's N Value: avg value for cultivated areas
5235          RS      13    FLOW
5236          RC   0.038   0.038   0.038    1446  0.0007    0.00
5237          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5238          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5239          KK     B74BASIN
5240          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5241          BA   0.106
5242          LG    0.16    0.27    4.80    0.40      66
5243          UI       0     104     334     268      86      20       0       0       0       0
5244          UI       0       0       0       0       0       0       0       0       0       0
5245          UI       0       0       0       0       0       0       0       0       0       0
5246          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5247          UI       0       0       0       0       0       0       0       0       0       0
              *

5248          KK  DB74REDIVERT
5249          KM        Retention volume estimated based on aerial
5250          DT    RB74      4.9     0.0
5251          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5252          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5253          KK   CPB74COMBINE
5254          HC       3   2.489
              *
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5255          KK   SRB74STORAGE
5256          KM        ADOT Regional Basin (per URS 2001 study)
5257          KO
5258          RS        1     STOR
5259          SV            11.35   32.69   57.00  108.98  126.82  136.43
5260          SQ             2.00   60.00  263.00  668.00  800.00  953.00
5261          SE   974.60  978.00  980.00  982.00  986.00  987.30  988.00
5262          ST
              *

5263          KK  B74B84ROUTE
5264          KM        Cross-section: Cross-section determined from aerial and 1990
5265          KM        topo / Manning's N Value: channel w/ concrete sides
5266          RS        1     FLOW
5267          RC   0.016   0.022   0.016    2292  0.0050    0.00
5268          RX  100.00  120.00  140.00  160.00  182.00  202.00  212.00  222.00
5269          RY  986.20  986.10  986.00  976.00  976.10  986.00  986.10  983.20
              *

5270          KK     B84BASIN
5271          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5272          BA   0.216
5273          LG    0.18    0.20    8.00    0.11      48
5274          UI       0      69     229     391     461     281     134      61      23      14
5275          UI       0       0       0       0       0       0       0       0       0       0
5276          UI       0       0       0       0       0       0       0       0       0       0
5277          UI       0       0       0       0       0       0       0       0       0       0
5278          UI       0       0       0       0       0       0       0       0       0       0
              *

5279          KK  DB84REDIVERT
5280          KM        Retention volume estimated based on aerial
5281          DT    RB84     1.6     0.0
5282          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5283          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5284          KK   CPB84COMBINE
5285          HC        4   7.236
              *

5286          KK   SRB84STORAGE
5287          KM        ADOT Regional Basin (per URS 2001 study)
5288          KM        Drains to River via underground storm drain system
5289          KO
5290          RS        1     STOR
5291          SV            25.10   71.68  127.08  189.52  324.54  402.14  402.24  402.34
5292          SQ             6.00  233.00  460.00  460.00  460.00  460.00  460.00  657.00
5293          SE   972.50  976.00  978.00  980.00  982.00  986.00  988.00  988.60  990.00
5294          ST
              *

5295          KK     B28BASIN
5296          KM        BASIN BOUNDARY FROM RANCHO SANTA FE
5297          BA   0.960
5298          LG    0.23    0.25    4.55    0.42      36
5299          UI       0     116     330     579     759    1086    1374    1003     771     567
5300          UI     318     197     130      74      36      35      36       0       0       0
5301          UI       0       0       0       0       0       0       0       0       0       0
5302          UI       0       0       0       0       0       0       0       0       0       0
5303          UI       0       0       0       0       0       0       0       0       0       0
              *

5304          KK  DB28REDIVERT
5305          KM        Rancho Santa Fe Ph.1 Infrastructure Drainage Design Report
5306          DT    RB28     0.4     0.0
5307          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5308          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5309          KK     B29BASIN
5310          KM        BASIN BOUNDARY FROM PALMILLA APTS, RANCHO SANTA FE CENTER
5311          KM        PALMILLA CENTER
5312          BA   0.177
5313          LG    0.17    0.25    4.80    0.38      55
5314          UI       0      46     157     244     375     256     159      66      38      12
5315          UI      10       0       0       0       0       0       0       0       0       0
5316          UI       0       0       0       0       0       0       0       0       0       0
5317          UI       0       0       0       0       0       0       0       0       0       0
5318          UI       0       0       0       0       0       0       0       0       0       0
              *

5319          KK  DB29REDIVERT
5320          KM        Drainage Report for Palmilla Center, Final Drainage
5321          KM        Report for Rancho Santa Fe Center, Final Drainage
5322          KM        Report for Palmilla Apts, Drainage Report - Walmart
5323          DT    RB29    11.9     0.0
5324          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5325          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5326          KK     B30BASIN
5327          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
5328          BA   0.170
5329          LG    0.13    0.26    4.70    0.41      73
5330          UI       0      67     210     381     336     195      73      31      12       0
5331          UI       0       0       0       0       0       0       0       0       0       0
5332          UI       0       0       0       0       0       0       0       0       0       0
5333          UI       0       0       0       0       0       0       0       0       0       0
5334          UI       0       0       0       0       0       0       0       0       0       0
              *

5335          KK  DB30REDIVERT
5336          KM        Drainage Report for Avondale Home Depot, Master
5337          KM        Drainage Report for Coldwater Plaza, Remaining
5338          KM        retention volume estimated from aerial
5339          DT    RB30    10.8     0.0
5340          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5341          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5342          KK   SRB30STORAGE
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```
5343          KM        Storage behind Agua Fria River levee (WLB)
5344          KO
5345          RS       1    STOR
5346          SV            1.16    7.44   17.82   22.15   60.86
5347          SQ           16.00   38.00   49.00  117.00 3687.00
5348          SE  972.00  974.00  976.00  977.60  978.00  980.00
5349          ST
              *

5350          KK     B31BASIN
5351          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
5352          BA   0.681
5353          LG    0.18    0.25    4.60    0.45      41
5354          UI       0     190     644    1012    1477     957     558     227     112      41
5355          UI      40       0       0       0       0       0       0       0       0       0
5356          UI       0       0       0       0       0       0       0       0       0       0
5357          UI       0       0       0       0       0       0       0       0       0       0
5358          UI       0       0       0       0       0       0       0       0       0       0
              *

5359          KK  DB31REDIVERT
5360          KM        Preliminary Drainage Report for Rio Estrella Plaza
5361          KM        Drainage Report for Rio Estrella Commerce Park Drainage
5362          KM        System, Final Drainage Report for Parcel XIV at Arizona Traditions,
5363          KM        Remaining retention volume estimated from aerial
5364          DT    RB31    24.5     0.0
5365          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5366          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5367          KK   SRB31STORAGE
5368          KM        Storage behind Agua Fria River levee (WLB)
5369          KO
5370          RS       1    STOR
5371          SV            4.15   34.22   71.09  141.43  276.96  481.06  516.31  604.41  744.46
5372          SQ           16.00   50.00   71.00   87.00  100.00  112.00  114.00 1335.0010496.00
5373          SE  956.00  958.00  960.00  962.00  964.00  966.00  968.00  968.30  969.00  970.00
5374          ST
              *

5375          KK   DUMMYCOMBINE
5376          HC       2
              *

5377          KK   DUMMYCOMBINE
5378          HC       5
              *

5379          KK     B32BASIN
5380          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR TRES
5381          KM        RIOS LANDING PARCELS 4 AND 5 DATED 2/13/03 BY CMX AND FINAL DRAINAGE
5382          KM        REPORT FOR THE VILLAGE AT TRES RIOS LANDING DATED 6/14/05 BY CMX
5383          BA   0.819
5384          LG    0.27    0.28    3.88    0.42      25
5385          UI       0      92     230     433     558     740    1093     922     707     541
5386          UI     398     211     153      95      57      28      28      29       0       0
5387          UI       0       0       0       0       0       0       0       0       0       0
5388          UI       0       0       0       0       0       0       0       0       0       0
5389          UI       0       0       0       0       0       0       0       0       0       0
              *

5390          KK  DB32REDIVERT
5391          KM        Final Drainage Report for Tres Rios Landing Parcels 4 & 5, Final
5392          KM        Drainage Report for The Village at Tres Rios Landing, Drainage
5393          KM        Report for Whyman Haciendas, Drainage Report for Litchfield
5394          KM        Mountain View Homes, Remaining retention volume estimated from aerial
5395          DT    RB32    25.3     0.0
5396          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5397          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5398          KK   SRB32STORAGE
5399          KM        Storage behind Lwr Buckeye Rd, est from topo
5400          KO
5401          RS       1    STOR
5402          SV            7.79   53.57  155.29  276.97
5403          SQ                         2206.00 6240.00
5404          SE  942.00  944.00  946.00  948.00  950.00
5405          ST
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5406          KK  B32B33ROUTE
5407          KM        Cross-section: Cross-section determined from 1990 topo
5408          KM        Manning's N Value: clean straight earth
5409          RS       1    FLOW
5410          RC   0.022   0.022   0.022    3134  0.0045    0.00
5411          RX  100.00  112.00  125.00  132.00  185.00  190.00  215.00  240.00
5412          RY  948.00  944.00  940.00  938.00  938.10  940.00  942.00  944.00
              *

5413          KK     B33BASIN
5414          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5415          BA   0.285
5416          LG    0.39    0.30    4.30    0.51       7
5417          UI       0      43     142     267     356     358     313     231     154     112
5418          UI      68      49      34      25      14       6       5       5       6       5
5419          UI       6       5       0       0       0       0       0       0       0       0
5420          UI       0       0       0       0       0       0       0       0       0       0
5421          UI       0       0       0       0       0       0       0       0       0       0
              *

5422          KK  DB33REDIVERT
5423          KM        Master Drainage Report for Lower Buckeye Park
5424          KM        Remaining retention volume estimated from aerial
5425          DT    RB33     4.8     0.0
5426          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5427          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5428          KK   CPB33COMBINE
5429          HC       2   1.104
              *
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5430          KK     B34BASIN
5431          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5432          BA   0.125
5433          LG    0.20     0.27     4.25     0.52       33
5434          UI       0      199      533      196       32        0        0        0        0        0
5435          UI       0        0        0        0        0        0        0        0        0        0
5436          UI       0        0        0        0        0        0        0        0        0        0
5437          UI       0        0        0        0        0        0        0        0        0        0
5438          UI       0        0        0        0        0        0        0        0        0        0
              *

5439          KK     B38BASIN
5440          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5441          BA   0.343
5442          LG    0.41     0.28     4.20     0.57        5
5443          UI       0       34       53      125      194      249      290      288      260      260
5444          UI     182      169      118      103       71       54       42       33       29       20
5445          UI      19       12        4        5        4        4        5        4        4        5
5446          UI       4        4        5        0        0        0        0        0        0        0
5447          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5448          KK  DB38REDIVERT
5449          KM        Retention volume estimated based on aerial
5450          DT    RB38      0.8      0.0
5451          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
5452          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

5453          KK  B38B39ROUTE
5454          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5455          KM        Manning's N Value: avg value for cultivated areas
5456          RS      12     FLOW
5457          RC   0.038    0.038    0.038     4543   0.0018     0.00
5458          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
5459          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

5460          KK     B37BASIN
5461          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5462          BA   0.466
5463          LG    0.50     0.25     3.92     0.41        0
5464          UI       0       25       26       29       52       82      130      150      150      193
5465          UI     199      214      211      211      201      176      186      181      131      142
5466          UI     125       95       86       73       76       61       48       41       37       31
5467          UI      31       23       23       23       15       15       14       14       15        5
5468          UI       3        3        3        3        3        4        3        3        3        3
              *

5469          KK  B37B39ROUTE
5470          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5471          KM        Manning's N Value: Ag field
5472          RS      12     FLOW
5473          RC   0.038    0.038    0.038     5801   0.0031     0.00
5474          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
5475          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

5476          KK     B39BASIN
5477          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5478          KM        FLOW ENTERS BUCKEYE CANAL
5479          BA   0.775
5480          LG    0.50     0.25     4.70     0.47        0
5481          UI       0       36       37       36       65       84      141      192      222      205
5482          UI     293      260      308      305      308      307      288      259      252      281
5483          UI     225      189      213      173      139      131      109      102      117       72
5484          UI      66       59       57       45       44       40       33       34       33       22
5485          UI      20       21       21       20       19        4        5        4        5        4
              *

5486          KK   CPB39COMBINE
5487          HC       3   1.584
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5488          KK   SRB39STORAGE
5489          KM        Storage behind canal (WLB)
5490          KO
5491          RS       1     STOR
5492          SV              1.84     7.82    26.86   173.63
5493          SQ                              247.00  6031.00
5494          SE  914.00   916.00   916.90   918.00   920.00
5495          ST
              *

5496          KK     B35BASIN
5497          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
5498          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
5499          BA   0.144
5500          LG    0.04     0.09     3.25     0.65       18
5501          UI       0       79      291      325      217      104       48       26        8        5
5502          UI       5        5        0        0        0        0        0        0        0        0
5503          UI       0        0        0        0        0        0        0        0        0        0
5504          UI       0        0        0        0        0        0        0        0        0        0
5505          UI       0        0        0        0        0        0        0        0        0        0
              *

5506          KK     B36BASIN
5507          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
5508          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
5509          BA   0.056
5510          LG    0.03     0.02     4.55     0.30        0
5511          UI       0      113      215       76       21        4        4        0        0        0
5512          UI       0        0        0        0        0        0        0        0        0        0
5513          UI       0        0        0        0        0        0        0        0        0        0
5514          UI       0        0        0        0        0        0        0        0        0        0
5515          UI       0        0        0        0        0        0        0        0        0        0
              *

5516          KK   DUMMYCOMBINE
5517          HC       4
              *
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5518          KK   DUMMYCOMBINE
5519          HC       3
              *

5520          KK     L41BASIN
5521          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5522          BA   0.249
5523          LG    0.30    0.25    4.60    0.34       5
5524          UI       0      34     111     182     242     390     324     238     174      96
5525          UI      56      36      15      10      10       0       0       0       0       0
5526          UI       0       0       0       0       0       0       0       0       0       0
5527          UI       0       0       0       0       0       0       0       0       0       0
5528          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5529          KK  DL41SEDIVERT
5530          KM        Glendale at 185th split flow
5531          DT   DL41S      0.0     0.0
5532          DI     0.0     15.2   324.5  1021.5  2211.8     0.0     0.0     0.0     0.0     0.0
5533          DQ     0.0     15.2   203.0   611.7  1283.9     0.0     0.0     0.0     0.0     0.0
              *

5534          KK  L41L42ROUTE
5535          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width based
5536          KM        on aerial / Manning's N Value: clean earth; straight, street ROB
5537          RS       2    FLOW
5538          RC   0.022   0.022   0.016    3951  0.0040    0.00
5539          RX  100.00  115.00  130.00  136.00  139.00  145.00  157.00  167.00
5540          RY  1166.5 1166.25 1166.00 1164.00 1164.10 1166.00 1166.25 1166.50
              *

5541          KK     L42BASIN
5542          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5543          BA   0.740
5544          LG    0.30    0.25    4.10    0.46       5
5545          UI       0      71     131     293     382     473     598     865     732     581
5546          UI     463     367     265     144     118      77      60      22      22      22
5547          UI      22      21       0       0       0       0       0       0       0       0
5548          UI       0       0       0       0       0       0       0       0       0       0
5549          UI       0       0       0       0       0       0       0       0       0       0
              *

5550          KK   CPL42COMBINE
5551          HC       2   0.989
              *

5552          KK   DL421DIVERT
5553          KM        Glendale at Citrus split flow
5554          DT  DL421S      0.0     0.0
5555          DI     0.0   189.3   751.3  2087.6  4053.5     0.0     0.0     0.0     0.0     0.0
5556          DQ     0.0    91.1   387.9  1123.4  2232.7     0.0     0.0     0.0     0.0     0.0
              *

5557          KK   DL422DIVERT
5558          KM        Glendale at Citrus split flow
5559          DT  DL422S      0.0     0.0
5560          DI     0.0    98.2   363.4   964.2  1820.8     0.0     0.0     0.0     0.0     0.0
5561          DQ     0.0    30.7    76.1   133.6   200.9     0.0     0.0     0.0     0.0     0.0
              *

5562          KK  L42L43ROUTE
5563          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
5564          KM        based on aerial / Manning's N Value: clean earth;
5565          KM        straight, street ROB
5566          RS       5    FLOW
5567          RC   0.022   0.022   0.013    5319  0.0056    0.00
5568          RX  100.00  100.50  224.00  230.00  233.00  239.00  262.50  263.00
5569          RY  1136.7 1136.50 1136.00 1134.00 1134.10 1136.35 1136.50 1136.65
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5570          KK     L43BASIN
5571          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5572          BA   0.997
5573          LG    0.30    0.25    4.20    0.43       5
5574          UI       0     128     405     675     889    1378    1368     994     741     490
5575          UI     235     172     102      40      39      39       0       0       0       0
5576          UI       0       0       0       0       0       0       0       0       0       0
5577          UI       0       0       0       0       0       0       0       0       0       0
5578          UI       0       0       0       0       0       0       0       0       0       0
              *

5579          KK  DL381RETRIEVE
5580          DR  DL381S
              *

5581          KK  L38L43ROUTE
5582          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width from aerial
5583          KM        Manning's N Value: earth w/ sparse trees and brush: street LOB
5584          RS       4    FLOW
5585          RC   0.016   0.032   0.032    5276  0.0038    0.00
5586          RX  100.00  115.00  130.00  140.00  146.00  156.00  171.00  186.00
5587          RY  1135.5 1135.25 1135.00 1132.00 1132.10 1135.00 1135.25 1135.50
              *

5588          KK   CPL43COMBINE
5589          HC       3   6.889
              *

5590          KK   DL431DIVERT
5591          KM        Glendale at Cotton split flow
5592          DT  DL431S      0.0     0.0
5593          DI     0.0   174.4  1002.0  2334.9  4460.0     0.0     0.0     0.0     0.0     0.0
5594          DQ     0.0     0.0     3.8    19.5    58.9     0.0     0.0     0.0     0.0     0.0
              *

5595          KK   DL432DIVERT
5596          KM        Glendale at Cotton split flow
5597          DT  DL432S      0.0     0.0
5598          DI     0.0   174.4   998.2  2315.4  4401.1     0.0     0.0     0.0     0.0     0.0
5599          DQ     0.0     0.6    20.8    54.9    98.4     0.0     0.0     0.0     0.0     0.0
              *
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5600          KK  L43L44ROUTE
5601          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5602          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
5603          RS       2    FLOW
5604          RC   0.038   0.032   0.013    2574  0.0039    0.00
5605          RX  100.00  105.00  430.00  444.00  449.00  463.00  478.00  479.00
5606          RY  1126.8 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.80
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5607          KK     L44BASIN
5608          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
5609          KM        AND EASTERN BOUNDARY LOOP 303
5610          BA   0.478
5611          LG    0.46    0.25    4.15    0.66       7
5612          UI       0      30      31      50      81     146     178     188     236     254
5613          UI     256     259     236     212     231     180     167     153     116      97
5614          UI      88      86      58      49      43      38      33      28      27      19
5615          UI      17      17      18       8       4       4       4       4       3       4
5616          UI       4       4       4       3       4       4       4       4       4       3
              *

5617          KK   DL382RETRIEVE
5618          DR  DL382S
              *

5619          KK  L38L44ROUTE
5620          KM        Cross-section: Cross-section based on aerial
5621          KM        Manning's N Value: clean earth channel, street
5622          RS      14    FLOW
5623          RC   0.038   0.038   0.038    5850  0.0034    0.00
5624          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5625          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5626          KK   DL391RETRIEVE
5627          DR  DL391S
              *

5628          KK  L39L44ROUTE
5629          KM        Cross-section: Estimated 1' deep, width based on aerial
5630          KM        Manning's N Value: clean earth channel, street and Ag field
5631          RS       8    FLOW
5632          RC   0.013   0.022   0.038    5284  0.0034    0.00
5633          RX  100.00  100.50  120.00  157.00  167.00  182.00  599.00  600.00
5634          RY  1000.3  999.90  999.60  998.60  998.50  999.60  999.90 1000.30
              *

5635          KK   CPL44COMBINE
5636          HC       4  20.916
              *

5637          KK   DL441DIVERT
5638          KM        Glendale at L303 split flow
5639          DT  DL441S     0.0     0.0
5640          DI     0.0    34.7   330.9  1066.0  2375.9     0.0     0.0     0.0     0.0     0.0
5641          DQ     0.0     5.7   153.4   473.9  1110.2     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


5642          KK   DL442DIVERT
5643          KM        Glendale at L303 split flow
5644          DT  DL442S     0.0     0.0
5645          DI     0.0    29.0   177.5   592.1  1265.6     0.0     0.0     0.0     0.0     0.0
5646          DQ     0.0     0.0    26.5    75.0   137.8     0.0     0.0     0.0     0.0     0.0
              *

5647          KK  L44B40ROUTE
5648          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5649          KM        aerial & topo / Manning's N Value: clean straight earth; street ROB
5650          RS       2    FLOW
5651          RC   0.022   0.022   0.013    1653  0.0103    0.00
5652          RX  100.00  101.00  330.00  336.00  339.00  345.00  351.00  357.00
5653          RY  1106.6 1106.25 1106.00 1104.00 1104.10 1106.00 1106.25 1106.60
              *

5654          KK     B40BASIN
5655          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
5656          KM        PHOTOGRAPHY OF AG LAND, 1990 TOPO, SWAN HILL NURSERIES AND
5657          KM        ORANGEWOOD NURSERIES
5658          BA   0.514
5659          LG    0.38    0.25    4.50    0.52      15
5660          UI       0      40      41      86     172     231     271     310     338     334
5661          UI     306     287     278     212     205     151     118     123      75      65
5662          UI      55      47      37      36      24      22      23      16       5       5
5663          UI       5       5       5       5       5       5       5       4       5       5
5664          UI       5       5       5       0       0       0       0       0       0       0
              *

5665          KK   DL392RETRIEVE
5666          DR  DL392S
              *

5667          KK  L39B40ROUTE
5668          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5669          KM        aerial & topo / Manning's N Value: clean straight earth; street LOB
5670          RS      17    FLOW
5671          RC   0.038   0.038   0.038    5943  0.0064    0.00
5672          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5673          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5674          KK   DD681RETRIEVE
5675          DR  DD681S
              *

5676          KK  D68B40ROUTE
5677          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5678          KM        aerial & topo / Manning's N Value: clean straight earth; street LOB
5679          RS       3    FLOW
5680          RC   0.016   0.022   0.022    5311  0.0047    0.00
5681          RX  100.00  112.00  124.00  132.00  135.00  143.00  155.00  167.00
5682          RY  1110.5 1110.25 1110.00 1108.00 1108.10 1110.00 1110.25 1110.50
```

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                *
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5683            KK   CPB40COMBINE
5684            HC       4  21.924
                *

5685            KK   DB401DIVERT
5686            KM        Glendale at Sarival split flow
5687            DT  DB401S      0.0      0.0
5688            DI     0.0     68.5    415.8   1670.6   4103.5      0.0      0.0      0.0      0.0      0.0
5689            DQ     0.0     37.6    246.0   1114.3   2520.9      0.0      0.0      0.0      0.0      0.0
                *

5690            KK   DB402DIVERT
5691            KM        Glendale at Sarival split flow
5692            DT  DB402S      0.0      0.0
5693            DI     0.0     30.9    169.8    556.4   1582.5      0.0      0.0      0.0      0.0      0.0
5694            DQ     0.0     14.8     64.4    133.4    217.4      0.0      0.0      0.0      0.0      0.0
                *

5695            KK  B40B41ROUTE
5696            KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5697            KM        on aerial & topo / Manning's N Value: clean straight earth
5698            RS       7    FLOW
5699            RC   0.022   0.022   0.013    5216  0.0033    0.00
5700            RX  100.00  100.50  228.00  234.00  238.00  244.00  252.00  260.00
5701            RY  1088.6 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1088.60
                *

5702            KK     B41BASIN
5703            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5704            KM        OF MARICOPA COUNTY HOMES AND 1990 TOPO
5705            BA   0.952
5706            LG    0.38    0.25    4.65    0.39       5
5707            UI       0      51      53      69     177     223     259     293     325     372
5708            UI     424     547     653     593     509     440     400     347     306     263
5709            UI     232     173     119      93      85      79      53      51      41      16
5710            UI      16      15      16      16      16      16      16       0       0       0
5711            UI       0       0       0       0       0       0       0       0       0       0
                *

5712            KK   DD682RETRIEVE
5713            DR  DD682S
                *

5714            KK  D68B41ROUTE
5715            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
5716            KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
5717            RS      12    FLOW
5718            RC   0.032   0.032   0.032   10073  0.0042    0.00
5719            RX  100.00  124.00  130.00  136.00  141.00  147.00  153.00  162.00
5720            RY  1120.1 1120.00 1118.50 1117.00 1117.10 1118.50 1120.00 1120.10
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5721            KK   DD691RETRIEVE
5722            DR  DD691S
                *

5723            KK  D69B41ROUTE
5724            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
5725            KM        on aerial & topo / Manning's N Value: clean straight earth
5726            RS       4    FLOW
5727            RC   0.022   0.022   0.022    5281  0.0038    0.00
5728            RX  100.00  120.00  146.00  158.00  170.00  182.00  210.00  244.00
5729            RY  1086.2 1086.10 1086.00 1083.00 1082.90 1086.00 1086.10 1086.20
                *

5730            KK   CPB41COMBINE
5731            HC       4  37.494
                *

5732            KK  DB41SEDIVERT
5733            KM        Reems at Glendale split flow
5734            DT   DB41S      0.0      0.0
5735            DI     0.0    210.0   1330.5   3445.6   6340.8      0.0      0.0      0.0      0.0      0.0
5736            DQ     0.0    201.5   1259.5   3072.1   5469.4      0.0      0.0      0.0      0.0      0.0
                *

5737            KK  B41B43ROUTE
5738            KM        Cross-section: Cross section estimated from aerial and topo
5739            KM        Manning's N Value: clean straight earth
5740            RS       2    FLOW
5741            RC   0.022   0.022   0.022    1849  0.0022    0.00
5742            RX  100.00  104.00  108.00  114.00  116.00  122.00  125.00  128.00
5743            RY  1082.0 1081.80 1081.50 1080.00 1080.10 1081.50 1081.80 1082.00
                *

5744            KK     B43BASIN
5745            KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
5746            BA   0.541
5747            LG    0.49    0.25    4.70    0.46       1
5748            UI       0      18      19      18      19      27      39      45      64      95
5749            UI     103     112      95     123     157     123     154     156     154     153
5750            UI     156     153     148     128     129     128     143     134      96      96
5751            UI     103     108      77      71      69      60      54      52      56      56
5752            UI      35      36      31      29      30      23      22      23      22      16
                *

5753            KK   DD692RETRIEVE
5754            DR  DD692S
                *

5755            KK  D69B43ROUTE
5756            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5757            KM        Manning's N Value: avg value for cultivated areas
5758            RS      30    FLOW
5759            RC   0.038   0.038   0.038    9199  0.0027    0.00
5760            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
```



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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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5761          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5762          KK   CPB43COMBINE
5763          HC       3  38.035
              *

5764          KK  B43B45ROUTE
5765          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
5766          KM        aerial & topo / Manning's N Value: clean straight earth
5767          RS       6    FLOW
5768          RC   0.022   0.022   0.022    4681  0.0004    0.00
5769          RX  100.00  112.00  124.00  132.00  138.00  146.00  166.00  186.00
5770          RY  1080.5 1080.25 1080.00 1076.00 1076.10 1080.00 1080.25 1080.50
              *

5771          KK     L40BASIN
5772          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
5773          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
5774          BA   0.610
5775          LG    0.35    0.35    4.25    0.42       0
5776          UI       0      88     325     607     796     839     652     449     312     209
5777          UI     147     101      64      47      22      21      22      22       0       0
5778          UI       0       0       0       0       0       0       0       0       0       0
5779          UI       0       0       0       0       0       0       0       0       0       0
5780          UI       0       0       0       0       0       0       0       0       0       0
              *

5781          KK  L40L45ROUTE
5782          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
5783          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
5784          RS       2    FLOW
5785          RC   0.032   0.032   0.032    5706  0.0053    0.00
5786          RX  100.00  120.00  128.00  136.00  144.00  152.00  164.00  220.00
5787          RY  1166.5 1166.00 1164.00 1162.00 1161.90 1164.00 1166.00 1166.50
              *

5788          KK     L45BASIN
5789          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
5790          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
5791          BA   0.503
5792          LG    0.35    0.35    4.45    0.37       0
5793          UI       0      95     379     660     795     692     452     297     189     123
5794          UI      78      57      21      20      21       0       0       0       0       0
5795          UI       0       0       0       0       0       0       0       0       0       0
5796          UI       0       0       0       0       0       0       0       0       0       0
5797          UI       0       0       0       0       0       0       0       0       0       0
              *

5798          KK   CPL45COMBINE
5799          HC       2   1.113
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5800          KK  L45L46ROUTE
5801          KM        Cross-section: Estimated 2' deep; width and side slopes estimated from
5802          KM        aerial road / Manning's N Value: clean earth; straight
5803          RS       3    FLOW
5804          RC   0.022   0.022   0.013    2613  0.0023    0.00
5805          RX  100.00  101.00  375.00  380.00  382.00  384.00  389.00  405.00
5806          RY  1143.0 1142.40 1142.00 1140.00 1139.90 1141.00 1142.20 1142.95
              *

5807          KK     L46BASIN
5808          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5809          BA   0.490
5810          LG    0.30    0.25    4.15    0.44       5
5811          UI       0      68     240     375     516     808     624     453     319     155
5812          UI     102      62      21      20      21       0       0       0       0       0
5813          UI       0       0       0       0       0       0       0       0       0       0
5814          UI       0       0       0       0       0       0       0       0       0       0
5815          UI       0       0       0       0       0       0       0       0       0       0
              *

5816          KK  DL41SERETRIEVE
5817          DR   DL41S
              *

5818          KK  L41L46ROUTE
5819          KM        Cross-section: Cross section estimated from aerial; road
5820          KM        Manning's N Value: street and ROW
5821          RS       4    FLOW
5822          RC   0.032   0.016   0.032    6496  0.0049    0.00
5823          RX  100.00  140.00  142.00  152.00  162.00  164.00  174.00  190.00
5824          RY  1167.0 1166.00 1165.50 1165.70 1165.50 1166.00 1166.50 1167.00
              *

5825          KK   CPL46COMBINE
5826          HC       3   1.852
              *

5827          KK   DL461DIVERT
5828          KM        Bethany Home at 183rd split flow
5829          DT  DL461S     0.0     0.0
5830          DI     0.0   202.4   580.6  1312.2  2324.9     0.0     0.0     0.0     0.0     0.0
5831          DQ     0.0   102.5   110.7   124.7   147.0     0.0     0.0     0.0     0.0     0.0
              *

5832          KK   DL462DIVERT
5833          KM        Bethany Home at 183rd split flow
5834          DT  DL462S     0.0     0.0
5835          DI     0.0   100.0   469.8  1187.5  2178.0     0.0     0.0     0.0     0.0     0.0
5836          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5837          KK  L46L47ROUTE
5838          KM        Cross-section: Cross section estimated from aerial; road
5839          KM        Manning's N Value: clean earth; straight; street ROB
5840          RS       1    FLOW
5841          RC   0.022   0.022   0.013    2652  0.0053    0.00
5842          RX  100.00  101.00  250.00  262.00  277.00  289.00  305.00  335.00
5843          RY  1138.9 1138.30 1138.00 1136.00 1136.10 1138.00 1138.40 1138.90
              *
```

```
5844          KK     L47BASIN
5845          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5846          BA   0.497
5847          LG    0.35    0.25    4.10    0.51       4
5848          UI       0      40      50     141     195     234     279     341     484     454
5849          UI     358     307     248     203     156      90      69      59      40      29
5850          UI      12      13      12      12      13       0       0       0       0       0
5851          UI       0       0       0       0       0       0       0       0       0       0
5852          UI       0       0       0       0       0       0       0       0       0       0
              *

5853          KK   DL421RETRIEVE
5854          DR  DL421S
              *

5855          KK  L42L47ROUTE
5856          KM        Cross-section: Cross section estimated from 1992 survey
5857          KM        Manning's N Value: clean earth; straight; street LOB
5858          RS       2    FLOW
5859          RC   0.016   0.022   0.016    5287  0.0057    0.00
5860          RX  100.00  112.00  116.00  120.00  125.00  129.00  133.00  150.00
5861          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1146.00
              *

5862          KK   CPL47COMBINE
5863          HC       3   3.089
              *

5864          KK   DL471DIVERT
5865          KM        Bethany Home at Citrus split flow
5866          DT  DL471S      0.0     0.0
5867          DI     0.0   379.8  1603.8  3817.4  6818.0     0.0     0.0     0.0     0.0     0.0
5868          DQ     0.0   185.0   185.0   185.0   185.0     0.0     0.0     0.0     0.0     0.0
              *

5869          KK   DL472DIVERT
5870          KM        Bethany Home at Citrus split flow
5871          DT  DL472S      0.0     0.0
5872          DI     0.0   194.8  1418.8  3632.4  6633.0     0.0     0.0     0.0     0.0     0.0
5873          DQ     0.0   179.6  1195.7  2776.3  4806.5     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5874          KK  L47L48ROUTE
5875          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5876          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
5877          RS       4    FLOW
5878          RC   0.032   0.032   0.013    5306  0.0045    0.00
5879          RX  100.00  140.00  160.00  168.00  174.00  182.00  194.00  206.00
5880          RY  1124.5 1124.25 1124.00 1122.00 1122.10 1124.00 1124.25 1124.50
              *

5881          KK     L48BASIN
5882          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
5883          BA   1.003
5884          LG    0.35    0.27    4.10    0.51       5
5885          UI       0      99     200     426     548     691     926    1214     960     757
5886          UI     600     473     286     172     141      99      44      31      30      30
5887          UI      31       0       0       0       0       0       0       0       0       0
5888          UI       0       0       0       0       0       0       0       0       0       0
5889          UI       0       0       0       0       0       0       0       0       0       0
              *

5890          KK   DL422RETRIEVE
5891          DR  DL422S
              *

5892          KK  L42L48ROUTE
5893          KM        Cross-section: Cross section estimated from 1992 survey
5894          KM        Manning's N Value: clean earth; straight;
5895          RS       7    FLOW
5896          RC   0.022   0.022   0.022   10523  0.0030    0.00
5897          RX  100.00  125.00  130.00  135.00  138.00  143.00  148.00  168.00
5898          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1145.00
              *

5899          KK   DL431RETRIEVE
5900          DR  DL431S
              *

5901          KK  L43L48ROUTE
5902          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5903          KM        aerial / Manning's N Value: clean earth; straight, street LOB
5904          RS       9    FLOW
5905          RC   0.022   0.022   0.016    5357  0.0045    0.00
5906          RX  100.00  120.00  128.00  136.00  142.00  150.00  170.00  190.00
5907          RY  1120.5 1120.25 1120.00 1118.00 1118.10 1120.00 1120.25 1120.50
              *

5908          KK   CPL48COMBINE
5909          HC       4   9.992
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5910          KK   DL481DIVERT
5911          KM        Bethany Home at Cotton split flow
5912          DT  DL481S      0.0     0.0
5913          DI     0.0   398.6  1307.1  2640.8  4556.3     0.0     0.0     0.0     0.0     0.0
5914          DQ     0.0     0.0    16.8    73.0   287.0     0.0     0.0     0.0     0.0     0.0
              *

5915          KK   DL482DIVERT
5916          KM        Bethany Home at Cotton split flow
5917          DT  DL482S      0.0     0.0
5918          DI     0.0   398.6  1290.3  2567.8  4269.2     0.0     0.0     0.0     0.0     0.0
5919          DQ     0.0     3.2    21.1    47.3    79.8     0.0     0.0     0.0     0.0     0.0
              *

5920          KK  L48L49ROUTE
5921          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5922          KM        aerial / Manning's N Value: clean earth; straight; street ROB
5923          RS       2    FLOW
5924          RC   0.022   0.022   0.013    2488  0.0040    0.00
```

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5925          RX  100.00  101.00  540.00  548.00  550.00  558.00  566.00  576.00
5926          RY  1102.7 1102.30 1102.00 1100.00 1100.10 1102.00 1102.25 1102.65
              *

5927          KK     L49BASIN
5928          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
5929          KM        AG LAND, EASTERN BOUNDARY LOOP 303
5930          BA   0.473
5931          LG    0.48    0.25    4.10    0.68       4
5932          UI       0      29      30      46      75     135     172     172     220     246
5933          UI     247     249     240     205     220     196     153     169     117     105
5934          UI      87      88      65      53      48      36      37      27      27      25
5935          UI      17      17      17      17       6       4       3       4       4       3
5936          UI       4       4       3       4       4       3       4       4       3       4
              *

5937          KK   DL432RETRIEVE
5938          DR  DL432S
              *

5939          KK  L43L49ROUTE
5940          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5941          KM        Manning's N Value: avg value for cultivated areas
5942          RS      21    FLOW
5943          RC   0.038   0.038   0.038    5833  0.0060    0.00
5944          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5945          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5946          KK   DL441RETRIEVE
5947          DR  DL441S
              *
1                                        HEC-1 INPUT                                          PAGE152

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5948          KK  L44L49ROUTE
5949          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
5950          KM        aerial / Manning's N Value: clean earth; straight; street LOB
5951          RS       3    FLOW
5952          RC   0.016   0.022   0.022    5329  0.0041    0.00
5953          RX  100.00  123.00  129.00  135.00  147.00  153.00  159.00  190.00
5954          RY  1111.2 1111.00 1109.50 1108.00 1108.10 1109.50 1111.00 1111.20
              *

5955          KK   CPL49COMBINE
5956          HC       4  24.492
              *

5957          KK   DL491DIVERT
5958          KM        Bethany Home at L303 split flow
5959          DT  DL491S     0.0     0.0
5960          DI     0.0   199.8   761.4  1789.9  3518.1     0.0     0.0     0.0     0.0     0.0
5961          DQ     0.0   182.5   611.3  1275.8  2339.6     0.0     0.0     0.0     0.0     0.0
              *

5962          KK   DL492DIVERT
5963          KM        Bethany Home at L303 split flow
5964          DT  DL492S     0.0     0.0
5965          DI     0.0    17.4   150.1   514.1  1178.6     0.0     0.0     0.0     0.0     0.0
5966          DQ     0.0    17.4    88.0   188.9   312.7     0.0     0.0     0.0     0.0     0.0
              *

5967          KK  L49B44ROUTE
5968          KM        Cross-section: Cross section estimated from aerial
5969          KM        Manning's N Value: clean straight earth
5970          RS       2    FLOW
5971          RC   0.022   0.022   0.022    2903  0.0041    0.00
5972          RX  100.00  115.00  130.00  145.00  175.00  190.00  205.00  220.00
5973          RY  1088.5 1088.25 1088.00 1082.00 1082.10 1088.00 1088.25 1088.50
              *

5974          KK     B44BASIN
5975          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
5976          KM        PHOTOGRAPHY OF AG LAND AND1990 TOPO
5977          BA   0.525
5978          LG    0.47    0.25    4.25    0.61       4
5979          UI       0      33      34      55      89     160     196     207     259     278
5980          UI     281     285     259     233     253     199     183     169     127     107
5981          UI      96      95      63      54      47      42      36      30      30      20
5982          UI      19      19      19      10       4       4       4       5       4       4
5983          UI       4       4       5       4       4       4       5       4       4       4
              *

5984          KK   DL442RETRIEVE
5985          DR  DL442S
              *
1                                        HEC-1 INPUT                                          PAGE153

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5986          KK  L44B44ROUTE
5987          KM        Cross-section: Estimated 6' deep and 4:1 side slopes, width based on
5988          KM        aerial & topo / Manning's N Value: gravel bottom/ earth sides
5989          RS      13    FLOW
5990          RC   0.038   0.038   0.038    5971  0.0047    0.00
5991          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5992          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5993          KK   DB401RETRIEVE
5994          DR  DB401S
              *

5995          KK  B40B44ROUTE
5996          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5997          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
5998          KM        street LOB
5999          RS       8    FLOW
6000          RC   0.013   0.032   0.038    5333  0.0037    0.00
6001          RX  100.00  112.00  128.00  136.00  138.00  146.00  449.00  450.00
6002          RY  1084.8 1084.50 1084.00 1082.00 1082.10 1084.00 1084.40 1084.80
              *

6003          KK   CPB44COMBINE
6004          HC       4  26.025
              *
```

```
6005        KK   DB441DIVERT
6006        KM        Bethany Home at Sarival split flow
6007        DT  DB441S      0.0      0.0
6008        DI     0.0  1083.7  2846.1  5566.3  9305.7      0.0      0.0      0.0      0.0      0.0
6009        DQ     0.0   133.1   579.6  1378.1  2728.9      0.0      0.0      0.0      0.0      0.0
            *

6010        KK   DB442DIVERT
6011        KM        Bethany Home at Sarival split flow
6012        DT  DB442S      0.0      0.0
6013        DI     0.0   950.6  2266.5  4188.3  6576.8      0.0      0.0      0.0      0.0      0.0
6014        DQ     0.0    83.1   145.7   219.1   301.9      0.0      0.0      0.0      0.0      0.0
            *

6015        KK  B44B45ROUTE
6016        KM        Cross-section: Estimated 4' deep, width and side slopes based on
6017        KM        aerial & topo / Manning's N Value: clean straight earth, street ROB
6018        RS       1    FLOW
6019        RC   0.022   0.022   0.016    2127  0.0019    0.00
6020        RX  100.00  120.00  140.00  152.00  192.00  204.00  224.00  236.00
6021        RY  1078.5 1078.25 1078.00 1074.00 1074.10 1078.00 1078.25 1078.50
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6022        KK     B45BASIN
6023        KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
6024        BA   0.805
6025        LG    0.43    0.25    4.70    0.43       5
6026        UI       0      44      44      50      91     141     228     261     259     334
6027        UI     349     370     366     366     343     306     324     307     230     248
6028        UI     207     167     148     127     132     101      81      71      63      55
6029        UI      52      40      40      40      25      24      25      25      24       6
6030        UI       6       5       6       5       6       5       6       5       6       5
            *

6031        KK   DB402RETRIEVE
6032        DR  DB402S
            *

6033        KK  B40B45ROUTE
6034        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
6035        KM        aerial & topo / Manning's N Value: clean straight earth
6036        RS       5    FLOW
6037        RC   0.022   0.022   0.022    6771  0.0037    0.00
6038        RX  100.00  120.00  140.00  152.00  153.00  165.00  175.00  185.00
6039        RY  1090.2 1090.10 1090.00 1087.00 1087.10 1090.00 1090.10 1090.20
            *

6040        KK  DB41SERETRIEVE
6041        DR   DB41S
            *

6042        KK  B41B45ROUTE
6043        KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6044        KM        Manning's N Value: avg value for cultivated areas
6045        RS      17    FLOW
6046        RC   0.038   0.038   0.038    6479  0.0009    0.00
6047        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6048        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *

6049        KK   CPB45COMBINE
6050        HC       5  42.941
            *

6051        KK  B45B47ROUTE
6052        KM        Cross-section:
6053        KM        Manning's N Value: avg value for cultivated areas
6054        RS       7    FLOW
6055        RC   0.038   0.038   0.038    5550  0.0043    0.00
6056        RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6057        RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6058        KK     W21BASIN
6059        KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN,
6060        KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
6061        BA   0.420
6062        LG    0.35    0.35    4.35    0.40       0
6063        UI       0     134     535     827     730     445     251     145      82      46
6064        UI      22      22       0       0       0       0       0       0       0       0
6065        UI       0       0       0       0       0       0       0       0       0       0
6066        UI       0       0       0       0       0       0       0       0       0       0
6067        UI       0       0       0       0       0       0       0       0       0       0
            *

6068        KK  W21L50ROUTE
6069        KM        Cross-section: Estimated 3' deep, side slopes and width based on
6070        KM        aerial / Manning's N Value: natural desert wash w/ vegetation
6071        RS       5    FLOW
6072        RC   0.035   0.035   0.035    6272  0.0056    0.00
6073        RX  100.00  110.00  120.00  146.00  166.00  236.00  256.00  276.00
6074        RY  1138.5 1138.25 1138.00 1132.00 1132.10 1136.00 1136.25 1136.50
            *

6075        KK     L50BASIN
6076        KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6077        KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6078        BA   0.498
6079        LG    0.35    0.35    4.15    0.44       0
6080        UI       0     104     408     703     819     672     424     271     169     109
6081        UI      67      43      21      21      21       0       0       0       0       0
6082        UI       0       0       0       0       0       0       0       0       0       0
6083        UI       0       0       0       0       0       0       0       0       0       0
6084        UI       0       0       0       0       0       0       0       0       0       0
            *

6085        KK   CPL50COMBINE
6086        HC       2   0.918
            *

6087        KK  L50L51ROUTE
6088        KM        Cross-section: Cross-section determined from aerial
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6089          KM        Manning's N Value: clean earth; straight, street ROB
6090          RS       3    FLOW
6091          RC   0.022   0.022   0.013    2654  0.0049    0.00
6092          RX  100.00  101.00  330.00  340.00  346.00  356.00  371.00  386.00
6093          RY  1126.5 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.50
              *

6094          KK     L51BASIN
6095          KM        BASIN BOUNDARY FROM COTTONWOOD ESTATES AND SAVANNAH
6096          BA   0.495
6097          LG    0.29    0.28    4.10    0.49      13
6098          UI       0      73     289     430     643     856     593     417     246     124
6099          UI      78      28      22      23       0       0       0       0       0       0
6100          UI       0       0       0       0       0       0       0       0       0       0
6101          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE156

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6102          UI       0       0       0       0       0       0       0       0       0       0
              *

6103          KK  DL51REDIVERT
6104          KM        Retention volume estimated based on aerial
6105          DT    RL51    18.8     0.0
6106          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6107          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6108          KK   DL461RETRIEVE
6109          DR  DL461S
              *

6110          KK  L46L51ROUTE
6111          KM        Cross-section: Cross-section determined from aerial
6112          KM        Manning's N Value: earth w/ sparse trees and brush
6113          RS       5    FLOW
6114          RC   0.032   0.032   0.032    5512  0.0045    0.00
6115          RX  100.00  105.00  110.00  130.00  150.00  170.00  190.00  210.00
6116          RY  1124.5 1124.25 1124.00 1120.00 1120.10 1124.00 1124.25 1124.50
              *

6117          KK   CPL51COMBINE
6118          HC       3   3.265
              *

6119          KK  L51L52ROUTE
6120          KM        Cross-section: Estimated 4:1 sideslopes, width based on
6121          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6122          RS       2    FLOW
6123          RC   0.032   0.032   0.032    2644  0.0034    0.00
6124          RX  100.00  122.00  144.00  156.00  176.00  188.00  200.00  212.00
6125          RY  1117.5 1116.25 1116.00 1113.00 1113.10 1116.00 1116.25 1117.50
              *

6126          KK     L52BASIN
6127          KM        BASIN BOUNDARY FROM RUSSEL RANCH PHASE 1 AND PHASE 2
6128          BA   0.498
6129          LG    0.28    0.28    4.00    0.53      18
6130          UI       0      64     202     337     445     688     683     497     370     244
6131          UI     118      86      51      19      20      19       0       0       0       0
6132          UI       0       0       0       0       0       0       0       0       0       0
6133          UI       0       0       0       0       0       0       0       0       0       0
6134          UI       0       0       0       0       0       0       0       0       0       0
              *

6135          KK  DL52REDIVERT
6136          KM        Retention volume estimated based on aerial
6137          DT    RL52    23.3     0.0
6138          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6139          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE157

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6140          KK   DL462RETRIEVE
6141          DR  DL462S
              *

6142          KK  L46L52ROUTE
6143          KM        Cross-section: Estimated 4:1 sideslopes, width based on
6144          KM        aerial, included wall / Manning's N Value: gravel
6145          RS       6    FLOW
6146          RC   0.023   0.023   0.023    7754  0.0044    0.00
6147          RX  100.00  102.00  107.00  122.00  134.00  149.00  154.00  154.10
6148          RY  1000.5 1000.00  998.00  996.00  996.10  998.00 1000.00 1000.50
              *

6149          KK   DL471RETRIEVE
6150          DR  DL471S
              *

6151          KK  L47L52ROUTE
6152          KM        Cross-section: Cross section estimated from aerial
6153          KM        Manning's N Value: clean earth; straight; street LOB
6154          RS      11    FLOW
6155          RC   0.016   0.022   0.022    5307  0.0038    0.00
6156          RX  100.00  132.00  138.00  144.00  148.00  152.00  156.00  160.00
6157          RY  1118.5 1118.00 1117.00 1116.00 1115.90 1117.00 1118.00 1118.50
              *

6158          KK   CPL52COMBINE
6159          HC       4       5
              *

6160          KK   DL521DIVERT
6161          KM        Camelback at Citrus split flow
6162          DT  DL521S     0.0     0.0
6163          DI     0.0   349.6  1281.0  3821.5  7631.2     0.0     0.0     0.0     0.0     0.0
6164          DQ     0.0    29.6   306.8  1432.6  3229.3     0.0     0.0     0.0     0.0     0.0
              *

6165          KK   DL522DIVERT
6166          KM        Camelback at Citrus split flow
6167          DT  DL522S     0.0     0.0
6168          DI     0.0   320.1   974.2  2389.0  4401.9     0.0     0.0     0.0     0.0     0.0
6169          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *
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6170          KK  L52L53ROUTE
6171          KM        Cross-section: Cross-section determined from aerial
6172          KM        Manning's N Value: clean earth; straight; street ROB
6173          RS       3    FLOW
6174          RC   0.022   0.022   0.016    5286  0.0045    0.00
6175          RX  100.00  220.00  240.00  246.00  256.00  262.00  274.00  286.00
6176          RY  1094.5 1093.00 1092.50 1092.00 1092.10 1094.00 1094.25 1094.50
              *
1                                          HEC-1 INPUT                                                    PAGE158

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6177          KK     L53BASIN
6178          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND AG LAND
6179          BA   1.002
6180          LG    0.50    0.25    4.45    0.56       0
6181          UI       0      50      50      50      98     136     218     291     274     322
6182          UI     373     426     415     421     420     407     348     353     384     293
6183          UI     265     299     205     192     165     143     151     128      95      83
6184          UI      80      63      62      54      45      46      45      28      29      28
6185          UI      28      29      16       6       6       6       6       7       6       6
              *

6186          KK   DL472RETRIEVE
6187          DR  DL472S
              *

6188          KK  L47L53ROUTE
6189          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6190          KM        Manning's N Value: avg value for cultivated areas
6191          RS       8    FLOW
6192          RC   0.038   0.038   0.038    7479  0.0064    0.00
6193          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6194          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6195          KK   DL481RETRIEVE
6196          DR  DL481S
              *

6197          KK  L48L53ROUTE
6198          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6199          KM        Manning's N Value: Ag field
6200          RS      32    FLOW
6201          RC   0.038   0.038   0.038    5346  0.0041    0.00
6202          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6203          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6204          KK   CPL53COMBINE
6205          HC       4  12.905
              *

6206          KK   DL531DIVERT
6207          KM        Camelback at Cotton split flow
6208          DT  DL531S      0.0     0.0
6209          DI     0.0   351.4  1270.7  2947.6  5463.3     0.0     0.0     0.0     0.0     0.0
6210          DQ     0.0    10.3   376.9  1055.3  2049.3     0.0     0.0     0.0     0.0     0.0
              *

6211          KK   DL532DIVERT
6212          KM        Camelback at Cotton split flow
6213          DT  DL532S      0.0     0.0
6214          DI     0.0   341.1   893.8  1892.3  3414.0     0.0     0.0     0.0     0.0     0.0
6215          DQ     0.0     2.9    41.8   103.8   182.2     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                                    PAGE159

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6216          KK  L53L54ROUTE
6217          KM        Cross-section: Cross-section determined from aerial
6218          KM        Manning's N Value: natural wash with heavy vegetation
6219          RS       1    FLOW
6220          RC   0.045   0.045   0.045    2532  0.0039    0.00
6221          RX  100.00  105.00  110.00  115.10  135.00  141.00  148.00  175.00
6222          RY  1080.0 1078.00 1076.50 1075.00 1074.90 1076.50 1078.00 1080.00
              *

6223          KK     L54BASIN
6224          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6225          KM        AND EASTERN BOUNDARY LOOP 303
6226          BA   0.479
6227          LG    0.46    0.24    4.65    0.47       4
6228          UI       0      30      31      48      79     143     177     183     230     254
6229          UI     253     254     240     211     226     190     162     161     117     102
6230          UI      87      92      57      51      46      37      35      27      27      22
6231          UI      17      17      17      13       4       4       3       4       4       4
6232          UI       4       3       4       4       4       3       4       4       4       3
              *

6233          KK   DL482RETRIEVE
6234          DR  DL482S
              *

6235          KK  L48L54ROUTE
6236          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6237          KM        Manning's N Value: avg value for cultivated areas
6238          RS      28    FLOW
6239          RC   0.038   0.038   0.038    5864  0.0056    0.00
6240          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6241          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6242          KK   DL491RETRIEVE
6243          DR  DL491S
              *

6244          KK  L49L54ROUTE
6245          KM        Cross-section: Estimated 3' depth, 4:1 sideslopes, width
6246          KM        based on aerial and topo Manning's N Value: clean earth; straight
6247          RS       3    FLOW
6248          RC   0.022   0.022   0.022    5344  0.0040    0.00
6249          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
6250          RY  1085.0 1084.25 1084.00 1081.00 1081.10 1084.00 1084.25 1085.00
              *
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6251          KK   CPL54COMBINE
6252          HC       4  27.884
              *
1                                        HEC-1 INPUT                                                    PAGE160

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6253          KK  DL54SEDIVERT
6254          KM        Camelback at L303 split flow
6255          DT   DL54S     0.0     0.0
6256          DI     0.0   354.3   836.1  1615.9  2817.2     0.0     0.0     0.0     0.0     0.0
6257          DQ     0.0   186.6   644.6  1337.5  2330.5     0.0     0.0     0.0     0.0     0.0
              *

6258          KK  L54B46ROUTE
6259          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6260          KM        Manning's N Value: earth w/ sparse trees and brush
6261          RS       1    FLOW
6262          RC   0.032   0.032   0.032    2773  0.0043    0.00
6263          RX  100.00  120.00  140.00  152.00  164.00  176.00  188.00  200.00
6264          RY  1066.5 1066.25 1066.00 1062.00 1062.10 1066.00 1066.25 1066.50
              *

6265          KK     B46BASIN
6266          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
6267          KM        PHOTOGRAPHY OF AG LAND AND 1990 TOPO
6268          BA   0.542
6269          LG    0.47    0.25    4.80    0.44       4
6270          UI       0      34      34      53      87     156     198     200     252     284
6271          UI     283     286     274     235     254     222     177     192     134     120
6272          UI      99     103      71      59      54      42      42      31      30      28
6273          UI      19      20      19      19       6       4       4       4       5       4
6274          UI       4       4       5       4       4       4       5       4       4       4
              *

6275          KK   DL492RETRIEVE
6276          DR  DL492S
              *

6277          KK  L49B46ROUTE
6278          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6279          KM        Manning's N Value: clean earth; straight
6280          RS      12    FLOW
6281          RC   0.038   0.038   0.038    5997  0.0053    0.00
6282          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6283          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6284          KK   DB441RETRIEVE
6285          DR  DB441S
              *

6286          KK  B44B46ROUTE
6287          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6288          KM        Manning's N Value: clean straight earth
6289          RS       3    FLOW
6290          RC   0.022   0.022   0.022    5267  0.0038    0.00
6291          RX  100.00  123.00  136.00  139.00  143.00  147.00  157.00  167.00
6292          RY  1072.5 1072.30 1072.00 1070.00 1070.10 1072.00 1072.30 1072.50
              *
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6293          KK   CPB46COMBINE
6294          HC       4  29.959
              *

6295          KK  B46B47ROUTE
6296          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6297          KM        Manning's N Value: earth w/ sparse trees and brush, road right bank
6298          RS       1    FLOW
6299          RC   0.032   0.032   0.016    2597  0.0023    0.00
6300          RX  100.00  109.00  121.00  131.00  177.00  183.00  199.00  206.00
6301          RY  1056.1 1054.30 1054.00 1050.00 1049.90 1053.00 1056.00 1056.10
              *

6302          KK     B47BASIN
6303          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
6304          BA   0.496
6305          LG    0.46    0.25    4.90    0.43       5
6306          UI       0      31      31      47      77     140     179     178     230     254
6307          UI     258     259     255     212     230     208     162     177     124     113
6308          UI      90      91      73      56      49      41      38      30      27      28
6309          UI      17      17      18      17       9       4       4       4       4       4
6310          UI       3       4       4       4       4       4       4       3       4       4
              *

6311          KK   DB442RETRIEVE
6312          DR  DB442S
              *

6313          KK  B44B47ROUTE
6314          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6315          KM        Manning's N Value: avg value for cultivated areas
6316          RS      17    FLOW
6317          RC   0.038   0.038   0.038    5832  0.0045    0.00
6318          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6319          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6320          KK   CPB47COMBINE
6321          HC       4  47.371
              *

6322          KK  B47B48ROUTE
6323          KM        Cross-section: Estimated 4:1 side slopes, width based on aerial
6324          KM        Manning's N Value: earth w/ sparse trees and brush in bottom
6325          KM        clean straight earth banks
6326          RS       1    FLOW
6327          RC   0.022   0.032   0.022    2606  0.0019    0.00
6328          RX  100.00  109.00  121.00  131.00  177.00  183.00  199.00  206.00
6329          RY  1056.1 1054.30 1054.00 1050.00 1049.90 1053.00 1056.00 1056.10
              *
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6330          KK     B48BASIN
6331          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
6332          BA   0.397
6333          LG    0.49     0.25     4.70     0.46        1
6334          UI       0       27       28       51       89      157      152      208      221      232
6335          UI     232      218      193      210      151      160      112      101       79       85
6336          UI      54       45       40       34       28       25       23       16       15       16
6337          UI      12        4        3        3        4        3        4        3        4        3
6338          UI       3        4        3        4        3        3        4        3        0        0
              *

6339          KK   CPB48COMBINE
6340          HC       2  47.768
              *

6341          KK  B48B54ROUTE
6342          KM        Cross-section: Estimated 4:1 side slopes, width based on aerial
6343          KM        Manning's N Value: earth w/ sparse trees and brush
6344          RS       2     FLOW
6345          RC   0.032    0.032    0.032     4128   0.0022     0.00
6346          RX  100.00   104.00   108.00   114.00   222.00   230.00   233.00   237.00
6347          RY  1052.2 1052.10 1052.00 1048.00 1047.90 1052.00 1052.10 1052.20
              *

6348          KK     B42BASIN
6349          KM        BASIN BOUNDARY FROM LUKE AFB
6350          BA   0.348
6351          LG    0.16     0.25     4.80     0.40       28
6352          UI       0      303      973      934      352       93       35        0        0        0
6353          UI       0        0        0        0        0        0        0        0        0        0
6354          UI       0        0        0        0        0        0        0        0        0        0
6355          UI       0        0        0        0        0        0        0        0        0        0
6356          UI       0        0        0        0        0        0        0        0        0        0
              *

6357          KK  B42B53ROUTE
6358          KM        Cross-section: Cross section estimated from aerial & topo
6359          KM        Manning's N Value: earth w/ sparse trees and brush
6360          RS      30     FLOW
6361          RC   0.032    0.032    0.032    17837   0.0009     0.00
6362          RX  100.00   140.00   180.00   220.00   240.00   280.00   300.00   320.00
6363          RY  1070.5 1070.25 1070.00 1068.00 1068.10 1070.00 1072.00 1074.00
              *

6364          KK     B53BASIN
6365          KM        BASIN BOUNDARY FROM LUKE AFB
6366          BA   1.101
6367          LG    0.19     0.27     4.80     0.38       23
6368          UI       0       84       85      285      379      470      539      648      875     1057
6369          UI     836      710      590      492      411      299      180      144      123       84
6370          UI      71       26       25       26       26       25       26        0        0        0
6371          UI       0        0        0        0        0        0        0        0        0        0
6372          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6373          KK   CPB53COMBINE
6374          HC       2   1.449
              *

6375          KK  B53B54ROUTE
6376          KM        Cross-section: Cross-section determined from aerial and 1991 topo
6377          KM        Manning's N Value: earth w/ sparse trees and brush
6378          RS       2     FLOW
6379          RC   0.032    0.032    0.032     3082   0.0042     0.00
6380          RX  100.00   200.00   365.00   540.00   785.00   940.00 1050.00 1130.00
6381          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

6382          KK     B49BASIN
6383          KM        BASIN BOUNDARY FROM LUKE AFB
6384          BA   0.323
6385          LG    0.15     0.25     4.70     0.42       29
6386          UI       0      513     1378      507       81        0        0        0        0        0
6387          UI       0        0        0        0        0        0        0        0        0        0
6388          UI       0        0        0        0        0        0        0        0        0        0
6389          UI       0        0        0        0        0        0        0        0        0        0
6390          UI       0        0        0        0        0        0        0        0        0        0
              *

6391          KK  B49B50ROUTE
6392          KM        Cross-section: Cross-section estimated from aerial and topo-road
6393          KM        Manning's N Value: street, parking lot
6394          RS       4     FLOW
6395          RC   0.016    0.016    0.016     6292   0.0016     0.00
6396          RX  100.00   120.00   140.00   142.00   272.00   274.00   294.00   314.00
6397          RY  1075.0 1074.50 1074.00 1073.50 1073.50 1074.00 1074.50 1075.00
              *

6398          KK     B02BASIN
6399          KM        BASIN BOUNDARY FROM LUKE AFB HOUSING AND DYSART DRAIN
6400          BA   0.543
6401          LG    0.21     0.25     4.80     0.38       39
6402          UI       0       73      255      407      552      868      697      512      370      190
6403          UI     119       75       25       22       23        0        0        0        0        0
6404          UI       0        0        0        0        0        0        0        0        0        0
6405          UI       0        0        0        0        0        0        0        0        0        0
6406          UI       0        0        0        0        0        0        0        0        0        0
              *

6407          KK  DB02REDIVERT
6408          KM        Retention volume estimated based on aerial
6409          DT    RB02     19.4      0.0
6410          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6411          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6412          KK     B04BASIN
6413          KM        BASIN BOUNDARY FROM CAPISTRANO NORTH AND SOUTH
6414          KM        CASITAS BONITAS, LAFB HOUSING AND 1990 TOPO
6415          BA   0.315
6416          LG    0.27     0.27     4.60     0.38       23
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6417          UI       0     468    1300     544     100       0       0       0       0       0
6418          UI       0       0       0       0       0       0       0       0       0       0
6419          UI       0       0       0       0       0       0       0       0       0       0
6420          UI       0       0       0       0       0       0       0       0       0       0
6421          UI       0       0       0       0       0       0       0       0       0       0
              *

6422          KK  DB04REDIVERT
6423          KM        Preliminary Drainage Report for Capistrano North
6424          KM        Drainage Report for Dysart Estates, Remaining
6425          KM        Retention Volume estimated from aerial
6426          DT    RB04     7.0     0.0
6427          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6428          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6429          KK  B04B02ROUTE
6430          KM        Cross-section: Route taken along Thunderbird Rd, with walls on
6431          KM        either side
6432          RS       5    FLOW
6433          RC   0.016   0.016   0.016    6392  0.0011    0.00
6434          RX  100.00  101.00  124.00  124.10  184.00  184.10  207.00  208.00
6435          RY  1090.0 1082.00 1081.90 1081.40 1081.30 1081.90 1082.00 1090.00
              *

6436          KK   CPB02COMBINE
6437          HC       2   0.858
              *

6438          KK  B02B50ROUTE
6439          KM        Cross-section: From Litchfield Rd to Bullard Wash Trib outlet thru LAFB
6440          KM        route taken at roadway and parking lots north and south of
6441          KM        roadway per aerial and topo
6442          RS       3    FLOW
6443          RC   0.016   0.016   0.016    4817  0.0016    0.00
6444          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
6445          RY  1075.0 1074.50 1074.00 1073.50 1073.40 1074.00 1074.50 1075.00
              *

6446          KK     B50BASIN
6447          KM        BASIN BOUNDARY FROM LUKE AFB
6448          BA   0.668
6449          LG    0.15    0.25    5.60    0.29      29
6450          UI       0     448    1337    1957     978     306      89       0       0       0
6451          UI       0       0       0       0       0       0       0       0       0       0
6452          UI       0       0       0       0       0       0       0       0       0       0
6453          UI       0       0       0       0       0       0       0       0       0       0
6454          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6455          KK   CPB50COMBINE
6456          HC       3   1.849
              *

6457          KK  B50B52ROUTE
6458          KM        Cross-section: Cross section estimated from aerial & topo
6459          KM        Manning's N Value: natural desert wash w/ vegetation
6460          RS       3    FLOW
6461          RC   0.032   0.032   0.032    6368  0.0027    0.00
6462          RX  100.00  115.00  130.00  165.00  175.00  195.00  210.00  225.00
6463          RY  1073.0 1072.25 1072.00 1066.00 1066.10 1072.00 1072.25 1073.00
              *

6464          KK     B51BASIN
6465          KM        BASIN BOUNDARY FROM LUKE AFB
6466          BA   0.609
6467          LG    0.15    0.25    5.40    0.30      29
6468          UI       0     292    1107    1431     912     477     247     127      56      38
6469          UI       0       0       0       0       0       0       0       0       0       0
6470          UI       0       0       0       0       0       0       0       0       0       0
6471          UI       0       0       0       0       0       0       0       0       0       0
6472          UI       0       0       0       0       0       0       0       0       0       0
              *

6473          KK  B51B52ROUTE
6474          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6475          KM        width based on aerial & topo / Manning's N Value
6476          KM        earth w/ sparse trees and brush
6477          RS       6    FLOW
6478          RC   0.032   0.032   0.032    5441  0.0015    0.00
6479          RX  100.00  130.00  160.00  172.00  177.00  193.00  300.00  350.00
6480          RY  1066.0 1064.25 1064.00 1061.00 1061.10 1064.00 1064.25 1066.00
              *

6481          KK     B52BASIN
6482          KM        BASIN BOUNDARY FROM LUKE AFB
6483          BA   0.842
6484          LG    0.31    0.35    5.30    0.26       6
6485          UI       0     193     687    1033    1701    1277     823     399     210      92
6486          UI      46      46       0       0       0       0       0       0       0       0
6487          UI       0       0       0       0       0       0       0       0       0       0
6488          UI       0       0       0       0       0       0       0       0       0       0
6489          UI       0       0       0       0       0       0       0       0       0       0
              *

6490          KK   CPB52COMBINE
6491          HC       3     3.3
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6492          KK  B52B54ROUTE
6493          KM        Cross-section: Cross-section determined from aerial and 1991 topo
6494          KM        Manning's N Value: earth w/ sparse trees and brush
6495          RS       3    FLOW
6496          RC   0.032   0.032   0.032    3082  0.0042    0.00
6497          RX  100.00  200.00  365.00  540.00  785.00  940.00 1050.00 1130.00
6498          RY  1056.5 1056.30 1056.00 1054.00 1054.10 1056.00 1056.30 1056.50
              *

6499          KK     B54BASIN
6500          KM        BASIN BOUNDARY FROM FR CAL FACLON GOLF, ARIZONA MOTORSPORTS PARK,
6501          KM        LAFB BOUNDARY AND CAMELBACK CHANNEL
6502          BA   1.228
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6503          LG    0.25    0.31    4.65    0.39      11
6504          UI       0     322    1242    2077    2136    1491     893     541     330     196
6505          UI     116      58      58       0       0       0       0       0       0       0
6506          UI       0       0       0       0       0       0       0       0       0       0
6507          UI       0       0       0       0       0       0       0       0       0       0
6508          UI       0       0       0       0       0       0       0       0       0       0
              *

6509          KK  DB54REDIVERT
6510          KM        Retention volume estimated based on aerial
6511          DT    RB54     9.0     0.0
6512          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6513          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6514          KK   CPB54COMBINE
6515          KM        Bullard Wash at Camelback Road
6516          HC       4  53.745
              *

6517          KK  B54B57ROUTE
6518          KM        Bullard Wash Basin HEC-1 L33PE4H9.OUT
6519          KM        dated April 18, 2007 by Wood Patel, from
6520          KM        Camelback Rd to Indian School Rd-RBD2N
6521          RS       5    FLOW
6522          RC   0.030   0.030   0.030    5603  0.0020    0.00
6523          RX    0.00   48.90   61.90   74.90   87.90  100.90  113.90  162.70
6524          RY  1047.6 1039.50 1039.49 1039.48 1039.49 1039.50 1039.80 1047.60
              *

6525          KK     L55BASIN
6526          KM        BASIN BOUNDARY FROM 1990 TOPO
6527          BA   0.497
6528          LG    0.44    0.25    4.00    0.63       1
6529          UI       0      30      30      61     109     144     163     182     216     243
6530          UI     317     386     329     275     245     211     184     157     134      98
6531          UI      64      52      50      36      30      27      10       9       9       9
6532          UI       9      10       9       9       0       0       0       0       0       0
6533          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6534          KK   DL551DIVERT
6535          KM        Indian School at Perryville split flow
6536          DT  DL551S     0.0     0.0
6537          DI     0.0   155.2  1033.7  2463.5  4920.4     0.0     0.0     0.0     0.0     0.0
6538          DQ     0.0     0.0    97.8   314.7   781.8     0.0     0.0     0.0     0.0     0.0
              *

6539          KK   DL552DIVERT
6540          KM        Indian School at Perryville split flow
6541          DT  DL552S     0.0     0.0
6542          DI     0.0   155.2   935.9  2148.8  4138.5     0.0     0.0     0.0     0.0     0.0
6543          DQ     0.0     7.9    34.4    71.2   115.9     0.0     0.0     0.0     0.0     0.0
              *

6544          KK  L55L56ROUTE
6545          KM        Cross-section: Estimated 3' depth,  4:1 sideslopes
6546          KM        width based on aerial / Manning's N Value
6547          KM        clean earth; straight; street  ROB
6548          RS       3    FLOW
6549          RC   0.022   0.022   0.016    5334  0.0051    0.00
6550          RX  100.00  120.00  140.00  152.00  172.00  184.00  204.00  224.00
6551          RY  1096.5 1096.25 1096.00 1093.00 1093.10 1096.00 1096.25 1096.50
              *

6552          KK     L56BASIN
6553          KM        SEDELLA
6554          BA   0.999
6555          LG    0.35    0.35    4.00    0.47       0
6556          UI       0     145     543     823    1171    1719    1229     877     575     262
6557          UI     176      87      44      44       0       0       0       0       0       0
6558          UI       0       0       0       0       0       0       0       0       0       0
6559          UI       0       0       0       0       0       0       0       0       0       0
6560          UI       0       0       0       0       0       0       0       0       0       0
              *

6561          KK  DL56REDIVERT
6562          KM        Retention volume estimated based on aerial
6563          DT    RL56    93.5     0.0
6564          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6565          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6566          KK   DL521RETRIEVE
6567          DR  DL521S
              *

6568          KK  L52L56ROUTE
6569          KM        Cross-section: Assumed v-ditch in ROW, widths based on aerials
6570          KM        Manning's N Value: clean earth; straight; street ROB
6571          RS       2    FLOW
6572          RC   0.016   0.022   0.022    5292  0.0051    0.00
6573          RX  100.00  112.00  122.00  128.00  134.00  140.00  152.00  164.00
6574          RY  1089.5 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1089.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6575          KK   CPL56COMBINE
6576          HC       3   6.496
              *

6577          KK   DL561DIVERT
6578          KM        Indian School at Citrus split flow
6579          DT  DL561S     0.0     0.0
6580          DI     0.0    74.1   987.7  4308.5  9171.0     0.0     0.0     0.0     0.0     0.0
6581          DQ     0.0     0.0   322.7  1829.1  4074.0     0.0     0.0     0.0     0.0     0.0
              *

6582          KK   DL562DIVERT
6583          KM        Indian School at Citrus split flow
6584          DT  DL562S     0.0     0.0
6585          DI     0.0    74.1   665.0  2479.3  5097.1     0.0     0.0     0.0     0.0     0.0
6586          DQ     0.0     1.7    15.7    37.0    63.6     0.0     0.0     0.0     0.0     0.0
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6587            KK  L56L57ROUTE
6588            KM        Cross-section: Estimated 2' depth, width and side slopes based on aerial
6589            KM        Manning's N Value: clean earth; straight; street ROB
6590            RS       3    FLOW
6591            RC   0.022   0.022   0.013    5299  0.0034    0.00
6592            RX  100.00  101.00  108.00  118.00  124.00  134.00  145.00  146.00
6593            RY  1080.6 1080.50 1080.00 1078.00 1078.10 1080.00 1080.50 1080.60
                *

6594            KK     L57BASIN
6595            KM        BASIN BOUNDARY FROM TALAVERDE ESTATES, LIBRARY PROP TRUST, TEN303
6596            BA   0.997
6597            LG    0.49    0.25    4.45    0.56       1
6598            UI       0      50      50      50     102     139     227     300     269     336
6599            UI     385     424     421     420     429     392     351     367     387     265
6600            UI     272     282     201     194     154     141     159     107      93      81
6601            UI      75      62      62      49      45      47      37      29      28      29
6602            UI      28      27       7       6       6       7       6       6       7       6
                *

6603            KK   DL522RETRIEVE
6604            DR  DL522S
                *

6605            KK  L52L57ROUTE
6606            KM        Cross-section: Estimated 1' deep and 4:1 side slopes
6607            KM        width based on aerial / Manning's N Value: clean earth; straight
6608            RS      22    FLOW
6609            RC   0.038   0.038   0.038    7451  0.0058    0.00
6610            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6611            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6612            KK   DL531RETRIEVE
6613            DR  DL531S
                *

6614            KK  L53L57ROUTE
6615            KM        Cross-section: Cross section estimated from aerial
6616            KM        Manning's N Value: street  ROW and clean earth
6617            RS       3    FLOW
6618            RC   0.016   0.022   0.022    5274  0.0032    0.00
6619            RX  100.00  113.00  126.00  141.00  166.00  186.00  201.00  214.00
6620            RY  1077.0 1076.25 1076.00 1075.00 1075.10 1076.00 1076.25 1077.00
                *

6621            KK   CPL57COMBINE
6622            HC       4  15.398
                *

6623            KK   DL571DIVERT
6624            KM        Indian School at Cotton split flow
6625            DT  DL571S      0.0     0.0
6626            DI     0.0    60.8   404.7  1424.5  3101.9     0.0     0.0     0.0     0.0     0.0
6627            DQ     0.0     2.7    39.0   238.0   569.0     0.0     0.0     0.0     0.0     0.0
                *

6628            KK   DL572DIVERT
6629            KM        Indian School at Cotton split flow
6630            DT  DL572S      0.0     0.0
6631            DI     0.0    58.1   365.6  1186.5  2532.9     0.0     0.0     0.0     0.0     0.0
6632            DQ     0.0     2.7    17.6    39.4    66.5     0.0     0.0     0.0     0.0     0.0
                *

6633            KK  L57L58ROUTE
6634            KM        Cross-section: Width and side slopes estimated from topo
6635            KM        and aerial / Manning's N Value: clean earth; straight
6636            RS       1    FLOW
6637            RC   0.022   0.022   0.022    2016  0.0030    0.00
6638            RX  100.00  102.00  104.00  106.00  206.00  254.00  264.00  274.00
6639            RY  1061.0 1060.00 1059.50 1059.00 1059.50 1060.00 1060.25 1061.00
                *

6640            KK     L58BASIN
6641            KM        BASIN BOUNDARY FROM 1990 TOPO
6642            BA   0.443
6643            LG    0.47    0.25    4.60    0.50       6
6644            UI       0      27      28      40      66     122     159     153     207     216
6645            UI     228     228     227     193     194     200     141     158     117     103
6646            UI      83      77      73      52      43      38      34      29      25      25
6647            UI      18      15      16      15      13       3       4       3       3       4
6648            UI       3       4       3       3       4       3       4       3       3       4
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6649            KK   DL532RETRIEVE
6650            DR  DL532S
                *

6651            KK  L53L58ROUTE
6652            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6653            KM        Manning's N Value: avg value for cultivated areas from
6654            KM        Estimated Manning's Roughness Coefficient for Stream
6655            KM        Channels and Flood Plains in MC
6656            RS      16    FLOW
6657            RC   0.038   0.038   0.038    5615  0.0045    0.00
6658            RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6659            RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *

6660            KK  DL54SERETRIEVE
6661            DR   DL54S
                *

6662            KK  L54L58ROUTE
6663            KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6664            KM        Manning's N Value: avg value for cultivated areas from
6665            KM        EstimatedManning's Roughness Coefficient for Stream Channels
6666            KM        and Flood Plains in MC
6667            RS       7    FLOW
6668            RC   0.038   0.038   0.038    5313  0.0028    0.00
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6669          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6670          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6671          KK   CPL58COMBINE
6672          HC       4   30.82
              *

6673          KK   DL581DIVERT
6674          KM        Indian School at L303 split flow
6675          DT  DL581S      0.0     0.0
6676          DI     0.0   284.1  1096.6  3059.3  6274.0     0.0     0.0     0.0     0.0     0.0
6677          DQ     0.0   185.2   614.3  1315.2  2413.8     0.0     0.0     0.0     0.0     0.0
              *

6678          KK   DL582DIVERT
6679          KM        Indian School at L303 split flow
6680          DT  DL582S      0.0     0.0
6681          DI     0.0    98.9   482.2  1744.1  3860.2     0.0     0.0     0.0     0.0     0.0
6682          DQ     0.0    15.9    45.0    82.7   127.3     0.0     0.0     0.0     0.0     0.0
              *

6683          KK  L58B55ROUTE
6684          KM        Cross-section: Assumed v-ditch in street ROW, width based on aerial
6685          KM        Manning's N Value: clean straight earth; road ROB
6686          RS       2    FLOW
6687          RC   0.022   0.022   0.016    3319  0.0042    0.00
6688          RX  100.00  110.00  135.00  148.00  149.00  162.00  188.00  200.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6689          RY  1050.2 1050.10 1050.00 1049.00 1048.90 1050.00 1050.50 1052.00
              *

6690          KK     B55BASIN
6691          KM        BASIN BOUNDARY FROM 1990 TOPO
6692          BA   0.530
6693          LG    0.49    0.25    4.80    0.45       3
6694          UI       0      32      32      48      78     142     189     178     246     253
6695          UI     270     272     269     231     229     248     168     182     149     123
6696          UI     103      90      94      62      53      47      40      37      30      29
6697          UI      24      18      19      18      18       5       4       4       4       4
6698          UI       4       4       4       4       4       4       4       4       4       4
              *

6699          KK   CPB55COMBINE
6700          HC       2   31.35
              *

6701          KK  B55B56ROUTE
6702          KM        Cross-section: assumed 3' depth, 4:1 sideslope, width based on
6703          KM        aerial / Manning's N Value: clean earth; straight
6704          RS       4    FLOW
6705          RC   0.022   0.022   0.022    7006  0.0027    0.00
6706          RX  100.00  102.00  104.00  124.00  154.00  174.00  194.00  214.00
6707          RY  1037.0 1036.25 1036.00 1033.00 1033.10 1036.00 1036.25 1037.00
              *

6708          KK     B56BASIN
6709          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5
6710          BA   1.136
6711          LG    0.36    0.25    4.70    0.41      14
6712          UI       0      38      38      38      37      70     124     143     168     182
6713          UI     196     214     227     239     268     284     307     355     425     461
6714          UI     497     429     383     356     327     305     291     262     239     227
6715          UI     205     189     176     151     125     110      70      66      66      62
6716          UI      62      51      38      38      38      38      16      11      12      11
              *

6717          KK  DB56REDIVERT
6718          KM        Retention volume estimated based on aerial
6719          DT    RB56    46.1     0.0
6720          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6721          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6722          KK   CPB56COMBINE
6723          HC       2  32.486
              *

6724          KK  B56B57ROUTE
6725          KM        Cross-section: Estimated 4:1 side slopes, 3' depth
6726          KM        width based on aerial / Manning's N Value: gravel
6727          RS       4    FLOW
6728          RC   0.023   0.023   0.023    1680  0.0018    0.00
6729          RX  100.00  113.00  122.00  128.00  148.00  156.00  171.00  184.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6730          RY  1027.0 1025.25 1025.00 1022.00 1022.10 1025.00 1025.25 1027.00
              *

6731          KK     B57BASIN
6732          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5 AND 1990 TOPO
6733          BA   1.119
6734          LG    0.24    0.24    5.10    0.33      21
6735          UI       0     156     564     877    1214    1887    1397    1021     710     332
6736          UI     219     128      48      48      48       0       0       0       0       0
6737          UI       0       0       0       0       0       0       0       0       0       0
6738          UI       0       0       0       0       0       0       0       0       0       0
6739          UI       0       0       0       0       0       0       0       0       0       0
              *

6740          KK  DB57REDIVERT
6741          KM        Retention volume estimated based on aerial
6742          DT    RB57    80.8     0.0
6743          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6744          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6745          KK   CPB57COMBINE
6746          HC       3  59.466
              *

6747          KK  B57B58ROUTE
6748          KM        Bullard Wash Basin HEC-1 L33PE4H9.OUT
6749          KM        dated April 18, 2007 by Wood Patel, from
6750          KM        Indian School Rd to Thomas Rd-RBD3N
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6751          RS       2    FLOW
6752          RC   0.030   0.030   0.030    5318  0.0027    0.00
6753          RX    0.00   70.00   83.00   96.00  109.00  122.00  135.00  205.00
6754          RY  1022.8 1015.80 1015.70 1015.60 1015.70 1015.80 1015.90 1022.80
              *

6755          KK     B58BASIN
6756          KM        BASIN BOUNDARY FROM PEBBLE CREEK PHASE 1
6757          BA   1.197
6758          LG    0.21    0.25    5.60    0.28      27
6759          UI       0     154     491     816    1072    1678    1637    1197     874     583
6760          UI     275     203     119      48      48      47       0       0       0       0
6761          UI       0       0       0       0       0       0       0       0       0       0
6762          UI       0       0       0       0       0       0       0       0       0       0
6763          UI       0       0       0       0       0       0       0       0       0       0
              *

6764          KK  DB58REDIVERT
6765          KM        Pebblecreek Development Phase I - West Half Drainage
6766          KM        Report, Pebblecreek Development Phase I - East Half Drainage Report
6767          DT    RB58    55.4     0.0
6768          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6769          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6770          KK   CPB58COMBINE
6771          HC       2  60.663
              *

6772          KK  B58B59ROUTE
6773          KM        Bullard Wash Basin HEC-1 L33PE4H9.OUT
6774          KM        dated April 18, 2007 by Wood Patel,
6775          KM        from Thomas Rd to McDowell Rd-RDB4N
6776          RS       2    FLOW
6777          RC   0.030   0.030   0.030    6454  0.0048    0.00
6778          RX    0.00    0.00   18.40   36.70   55.10   73.40   97.80   91.80
6779          RY  1013.1 1005.70 1005.60 1005.50 1005.60 1005.70 1005.80 1013.10
              *

6780          KK     B59BASIN
6781          KM        BASIN BOUNDARY FROM PUEBLO VERDE, ESTRELLA FALLS, AND RIO PASEO
6782          BA   0.699
6783          LG    0.42    0.25    5.80    0.27       9
6784          UI       0      33      34      34      93     128     155     173     195     211
6785          UI     240     269     317     396     438     363     315     287     259     228
6786          UI     206     181     160     138     101      69      60      56      55      35
6787          UI      34      33      17      10      10      11      10      10      10      11
6788          UI      10      10       0       0       0       0       0       0       0       0
              *

6789          KK  DB59REDIVERT
6790          KM        Final Drainage Report for Rio Paseo Parcel 8, Drainage Report for
6791          KM        Parcels 9, 10, & 11 of Goodyear Planned Regional Center
6792          KM        (60% retention used)
6793          DT    RB59    10.0     0.0
6794          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6795          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6796          KK   CPB59COMBINE
6797          HC       2  61.362
              *

6798          KK  B59B65ROUTE
6799          KM        Cross-section: Estimated based on aerial
6800          KM        Manning's N Value: clean earth; straight
6801          RS       1    FLOW
6802          RC   0.022   0.022   0.022    1254  0.0040    0.00
6803          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
6804          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *

6805          KK     B61BASIN
6806          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
6807          KM        BY DEL RIO ENG (2006)
6808          BA   0.963
6809          LG    0.20    0.25    4.80    0.39      27
6810          UI       0      90     159     364     476     591     729    1076     979     764
6811          UI     621     495     380     211     153     117      90      37      27      27
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6812          UI      28      28       0       0       0       0       0       0       0       0
6813          UI       0       0       0       0       0       0       0       0       0       0
6814          UI       0       0       0       0       0       0       0       0       0       0
              *

6815          KK  DB61REDIVERT
6816          KM        Pebblecreek Phase II Master Drainage Report (east half)
6817          DT    RB61    68.2     0.0
6818          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6819          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6820          KK  B61B62ROUTE
6821          KM        Cross-section: assumed ROW V-Ditch, 4:1 sideslopes
6822          KM        width based on aerial / Manning's N Value: clean earth;
6823          KM        straight; street LOB
6824          RS      10    FLOW
6825          RC   0.016   0.022   0.022    4105  0.0010    0.00
6826          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
6827          RY  1012.5 1012.25 1012.00 1009.00 1009.10 1012.00 1012.25 1012.50
              *

6828          KK     B62BASIN
6829          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT BY DEL RIO
6830          KM        ENG (2006), MODIFIED TO INCLUDE NE AREA CONTRIBUTES AT ROAD OVERTOPPING
6831          BA   0.427
6832          LG    0.27    0.27    4.80    0.34      22
6833          UI       0      45     106     209     268     345     504     507     388     295
6834          UI     230     151      78      65      46      17      14      14      14       0
6835          UI       0       0       0       0       0       0       0       0       0       0
6836          UI       0       0       0       0       0       0       0       0       0       0
6837          UI       0       0       0       0       0       0       0       0       0       0
              *
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6838          KK  DB62REDIVERT
6839          KM        Retention volume estimated based on aerial
6840          DT    RB62     27.8      0.0
6841          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6842          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6843          KK   CPB62COMBINE
6844          HC       2     1.39
              *

6845          KK  B62B63ROUTE
6846          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
6847          KM        Manning's N Value: avg value for cultivated areas from
6848          KM        Estimated Manning's Roughness Coefficient for Stream
6849          KM        Channels and Flood Plains in MC
6850          RS       5     FLOW
6851          RC   0.038    0.038    0.038     1382  0.0058     0.00
6852          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6853          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6854          KK     B63BASIN
6855          KM        BASIN BOUNDARY FROM 1990 TOPO AND PEBBLE CREEK MARKETPLACE
6856          BA   0.124
6857          LG    0.41     0.27     4.80     0.41        9
6858          UI       0       18       51      104      143      153      131      106       79       55
6859          UI      34       25       17       13       10        4        2        2        2        3
6860          UI       2        2        2        0        0        0        0        0        0        0
6861          UI       0        0        0        0        0        0        0        0        0        0
6862          UI       0        0        0        0        0        0        0        0        0        0
              *

6863          KK   CPB63COMBINE
6864          HC       2    1.514
              *

6865          KK   SRB63STORAGE
6866          KM        Basin at I-10
6867          KO
6868          RS       1     STOR
6869          SV            0.17     1.61     4.19
6870          SQ           82.00   694.00  1687.00
6871          SE  1002.8  1003.00  1003.50  1004.00
6872          ST
              *

6873          KK  B63B65ROUTE
6874          KM        Cross-section: Cross-section determined from aerial and
6875          KM        1991 topo / Manning's N Value: earth w/ sparse trees and brush
6876          RS       2     FLOW
6877          RC   0.032    0.032    0.032     2605  0.0054     0.00
6878          RX  100.00   104.00   108.00   122.00   123.00   137.00   140.00   145.00
6879          RY  998.50   998.25   998.00   995.00   995.10   998.00   999.00  1000.00
              *

6880          KK     B64BASIN
6881          KM        BASIN BOUNDARY FROM GOODYEAR PLANNED RC AND ALEXAN ESTRELLA FALLS
6882          BA   0.229
6883          LG    0.36     0.25     4.80     0.42       11
6884          UI       0       16       16       50       71       87      101      118      146      200
6885          UI     188      155      130      110       95       78       55       35       28       25
6886          UI      17       17        5        5        5        5        5        5        5        0
6887          UI       0        0        0        0        0        0        0        0        0        0
6888          UI       0        0        0        0        0        0        0        0        0        0
              *

6889          KK  DB64REDIVERT
6890          KM        Drainage Report for Parcels 9, 10, & 11 of Goodyear Planned
6891          KM        Regional Center (40% retention used)
6892          DT    RB64      2.7      0.0
6893          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6894          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6895          KK  B64B65ROUTE
6896          RS       6     FLOW
6897          RC   0.038    0.038    0.038     3124  0.0032     0.00
6898          RX  100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
6899          RY  1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

6900          KK     B65BASIN
6901          KM        BASIN BOUNDARY FROM 1990 TOPO AND GOODYEAR CENTERPOINTE
6902          BA   0.234
6903          LG    0.45     0.25     5.10     0.39       13
6904          UI       0       36      118      222      291      297      255      189      126       91
6905          UI      55       39       29       20       11        4        5        4        5        4
6906          UI       5        4        0        0        0        0        0        0        0        0
6907          UI       0        0        0        0        0        0        0        0        0        0
6908          UI       0        0        0        0        0        0        0        0        0        0
              *

6909          KK   CPB65COMBINE
6910          HC       4   63.339
              *

6911          KK  B65B66ROUTE
6912          KM        Cross-section: Cross-section determined from 1991
6913          KM        topo / Manning's N Value: clean straight earth
6914          RS       3     FLOW
6915          RC   0.022    0.022    0.022     4400  0.0023     0.00
6916          RX  100.00   200.00   400.00   600.00   800.00  1000.00  1200.00  1400.00
6917          RY  950.00   949.00   948.00   947.00   947.10   948.00   949.00   950.00
              *

6918          KK     S01BASIN
6919          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR ESTRELLA PARKWAY AND
6920          KM        1-10 DATED 8/26/04 BY KIMLEY HORN, FINAL DRAINAGE REPORT FOR PARKWAY
6921          KM        VILLAGE DATED 11/22/05 BY LANDFORM, FINAL DRAINAGE STATEMENT FOR
6922          KM        ESTRELLA SHOPS C DATED 6/5/07 BY CLC ASSOCIATES, BELLA
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6923          BA   0.268
6924          LG    0.25    0.27    4.80    0.40      46
6925          UI       0      38     137     214     298     452     335     242     165      77
6926          UI      51      29      12      11      12       0       0       0       0       0
6927          UI       0       0       0       0       0       0       0       0       0       0
6928          UI       0       0       0       0       0       0       0       0       0       0
6929          UI       0       0       0       0       0       0       0       0       0       0
              *

6930          KK  DS01REDIVERT
6931          KM        Final Drainage Report Estrella Parkway and I-10, Final Drainage Report
6932          KM        for Parkway Village, Final Drainage Report for Canyon Trails Plaza
6933          KM        Phase II,  Final Drainage Statement for Estrella Shops C, Final Drainage
6934          KM        Report for Safeway at NWC of Estrella Parkway and Van Buren, Bella
6935          KM        Rosa Subdivision Final Drainage Study, Final Drainage Report for Travis
6936          KM        Park at Canyon Trails Parcel 3M1 (portion of retention used), Drainage
6937          KM        Report for Canyon Trails Unit 3A (portion of retention used)
6938          DT    RS01     26.9     0.0
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6939          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6940          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6941          KK   DS011DIVERT
6942          KM        Van Buren at Estrella split flow
6943          DT  DS011S      0.0     0.0
6944          DI     0.0   137.2   537.6  1491.9  2902.6     0.0     0.0     0.0     0.0     0.0
6945          DQ     0.0    75.1   298.1   885.3  1750.8     0.0     0.0     0.0     0.0     0.0
              *

6946          KK   DS012DIVERT
6947          KM        Van Buren at Estrella split flow
6948          DT  DS012S      0.0     0.0
6949          DI     0.0    62.1   239.4   606.7  1151.8     0.0     0.0     0.0     0.0     0.0
6950          DQ     0.0    18.2    61.5   119.3   188.6     0.0     0.0     0.0     0.0     0.0
              *

6951          KK  S01B66ROUTE
6952          KM        Cross-section: Estimated 3' deep ; side slopes and
6953          KM        width based on aerial / Manning's N Value: clean straight earth
6954          RS      14    FLOW
6955          RC   0.022   0.022   0.022    3048  0.0052    0.00
6956          RX  100.00  112.00  124.00  134.00  140.00  150.00  158.00  166.00
6957          RY  986.50  986.25  986.00  983.00  983.10  986.00  986.25  986.50
              *

6958          KK     B66BASIN
6959          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR
6960          KM        SYNDERS OF HANOVER DATED 11/11/05, FINAL DRAINAGE REPORT FOR
6961          KM        RANCHO EL  MIRAGE DATED 6/2/99
6962          BA   0.759
6963          LG    0.39    0.25    4.80    0.43      16
6964          UI       0      56      57     111     215     327     330     432     470     471
6965          UI     470     394     410     340     317     249     203     164     166     108
6966          UI      90      76      69      52      51      37      32      31      32       7
6967          UI       7       7       7       7       7       7       7       7       7       7
6968          UI       7       7       7       7       7       0       0       0       0       0
              *

6969          KK  DB66REDIVERT
6970          KM        Final Drainage Report Snyder's of Hanover I-10 and Bullard Ave
6971          KM        Final Drainage Report for Rancho Mirage, Final Drainage Report for
6972          KM        Southwest Specialty Foods, Drainage Statement for Estrella Crossroads
6973          DT    RB66     13.6     0.0
6974          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6975          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6976          KK   CPB66COMBINE
6977          HC       3  64.366
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6978          KK  B66B68ROUTE
6979          KM        Cross-section: Cross-section determined from aerial
6980          KM        and 1991 topo / Manning's N Value: clean earth channel
6981          KM        cultivated areas LOB and ROB
6982          RS       4    FLOW
6983          RC   0.038   0.022   0.038    5325  0.0030    0.00
6984          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
6985          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *

6986          KK   DS011RETRIEVE
6987          DR  DS011S
              *

6988          KK  S01S02ROUTE
6989          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
6990          KM        width based on aerial / Manning's N Value: earth with
6991          KM        sparse trees and shrubs; clean straight earth LOB
6992          RS      24    FLOW
6993          RC   0.022   0.032   0.032    5352  0.0034    0.00
6994          RX  100.00  112.00  124.00  136.00  146.00  158.00  170.00  182.00
6995          RY  991.50  991.25  991.00  988.00  988.10  991.00  991.25  991.50
              *

6996          KK     S02BASIN
6997          KM        BASIN BOUNDARY FROM 1990 TOPO, MASTER DRAINAGE PLAN FOR WILDFLOWER
6998          KM        COMMUNITY DATED 4/96 BY KEOGH ENGINEERING, DRAINAGE REPORT FOR DESERT
6999          KM        EDGE HIGH SCHOOL DATED 12/13/00 BY KPFF CONSULTING ENGINEERS
7000          BA   0.606
7001          LG    0.42    0.25    4.80    0.43      14
7002          UI       0      42      42      75     126     231     230     313     324     349
7003          UI     349     335     292     307     249     231     194     159     122     124
7004          UI      95      72      64      52      46      38      39      25      24      23
7005          UI      24       7       6       5       5       5       6       5       5       5
7006          UI       5       6       5       5       5       5       6       5       5       0
              *

7007          KK  DS02REDIVERT
7008          KM        Drainage Report for Desert Edge High School, Remaining retention v
7009          KM        volume estimated from aerial
7010          DT    RS02     21.2     0.0
```

```
7011          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7012          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7013          KK   CPS02COMBINE
7014          HC       2   0.874
              *
1                                        HEC-1 INPUT                                          PAGE179

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7015          KK   DS021DIVERT
7016          KM        Yuma at Estrella split flow
7017          DT  DS021S     0.0     0.0
7018          DI     0.0    26.4   184.9   540.1  1546.9     0.0     0.0     0.0     0.0     0.0
7019          DQ     0.0     5.3    79.0   220.3   670.4     0.0     0.0     0.0     0.0     0.0
              *

7020          KK   DS022DIVERT
7021          KM        Yuma at Estrella split flow
7022          DT  DS022S     0.0     0.0
7023          DI     0.0    21.1   105.9   319.8   876.5     0.0     0.0     0.0     0.0     0.0
7024          DQ     0.0     9.9    42.9    88.9   144.9     0.0     0.0     0.0     0.0     0.0
              *

7025          KK  S02B67ROUTE
7026          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7027          KM        width based on aerial / Manning's N Value: clean straight
7028          KM        earth; earth with sparse trees and shrubs LOB and ROB
7029          RS       3    FLOW
7030          RC   0.032   0.022   0.032    1877  0.0021    0.00
7031          RX  100.00  120.00  140.00  148.00  152.00  160.00  168.00  176.00
7032          RY  972.50  972.25  972.00  970.00  970.10  972.00  972.25  972.50
              *

7033          KK     B67BASIN
7034          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CENTERRA
7035          KM        DATED 11/20/00 BY PREMIER ENGINEERING CO.
7036          BA   0.328
7037          LG    0.35    0.26    4.80    0.39      22
7038          UI       0      30      54     123     162     198     246     355     339     262
7039          UI     212     171     131      75      52      41      31      14      10       9
7040          UI       9      10       0       0       0       0       0       0       0       0
7041          UI       0       0       0       0       0       0       0       0       0       0
7042          UI       0       0       0       0       0       0       0       0       0       0
              *

7043          KK  DB67REDIVERT
7044          KM        Drainage Report for Centerra (50% retention volume used)
7045          DT    RB67    12.8     0.0
7046          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7047          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7048          KK   DS012RETRIEVE
7049          DR  DS012S
              *

7050          KK  S01B67ROUTE
7051          KM        Cross-section: Ag field, assumed 0.5% side slopes
7052          KM        V-ditch / Manning's N Value: avg value for cultivated areas
7053          KM        from Estimated Manning's Roughness Coefficient for
7054          KM        Stream Channels and Flood Plains in MC
7055          RS      76    FLOW
7056          RC   0.038   0.038   0.038    5930  0.0035    0.00
1                                        HEC-1 INPUT                                          PAGE180

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7057          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7058          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7059          KK   CPB67COMBINE
7060          HC       3   1.202
              *

7061          KK  B67B68ROUTE
7062          KM        Cross-section: Estimated based on aerial
7063          KM        Manning's N Value: clean straight earth
7064          RS       1    FLOW
7065          RC   0.022   0.022   0.022    1410  0.0085    0.00
7066          RX  100.00  110.00  120.00  132.00  144.00  156.00  166.00  176.00
7067          RY  968.50  968.25  968.00  965.00  965.10  968.00  968.25  968.50
              *

7068          KK     B68BASIN
7069          KM        BASIN BOUNDARY FROM 1990 TOPO AND DRAINAGE REPORT
7070          KM        FOR CENTERRA DATED 11/20/00 BY PREMIER ENGINEERING CO.
7071          BA   0.736
7072          LG    0.43    0.26    5.30    0.33       6
7073          UI       0      47      47      76     126     224     275     290     364     389
7074          UI     395     399     363     327     355     278     256     237     179     149
7075          UI     135     133      89      76      66      58      50      42      43      28
7076          UI      27      26      27      14       6       5       6       6       6       6
7077          UI       6       6       6       5       6       6       6       6       6       6
              *

7078          KK  DB68REDIVERT
7079          KM        Drainage Report for Centerra (50% retention volume used)
7080          DT    RB68    12.8     0.0
7081          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7082          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7083          KK   CPB68COMBINE
7084          HC       3  66.036
              *

7085          KK  B68B69ROUTE
7086          KM        Cross-section: Cross-section determined from 1991
7087          KM        topo and aerial/ Manning's N Value: clean straight earth
7088          RS       5    FLOW
7089          RC   0.022   0.022   0.022    5518  0.0031    0.00
7090          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
7091          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *

7092          KK     B69BASIN
```

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7093          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7094          BA   0.909
7095          LG    0.46     0.25     5.30     0.36        3
7096          UI       0       54       55       77      125      229      319      285      428      404
7097          UI     450      460      450      410      382      404      325      295      287      209
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7098          UI     191      155      165      119       96       86       72       66       55       49
7099          UI      49       33       31       31       30       24        7        6        7        7
7100          UI       7        7        6        7        7        7        6        7        7        7
              *

7101          KK   DS022RETRIEVE
7102          DR  DS022S
              *

7103          KK  S02B69ROUTE
7104          KM        Cross-section: Ag field, assumed 0.5%
7105          KM        side slopes, V-ditch / Manning's N Value: avg value
7106          KM        for cultivated areas from Estimated Manning's Roughness
7107          KM        Coefficient for Stream Channels and Flood Plains in MC
7108          RS       25     FLOW
7109          RC    0.038    0.038    0.038     6447   0.0043     0.00
7110          RX   100.00   200.00   400.00   500.00   550.00   600.00   800.00   900.00
7111          RY   1000.0   999.50   998.50   998.00   998.25   998.50   999.50  1000.00
              *

7112          KK   CPB69COMBINE
7113          HC        3   66.945
              *

7114          KK  B69B70ROUTE
7115          KM        As-builts for Bullard Wash Channel Improvements Project
7116          KM        FCD No 4700731 by Sverdrup dated August 2008,
7117          KM        from Lower Buckeye Rd to UPRR-C1
7118          RS        3     FLOW
7119          RC    0.035    0.022    0.035     4315   0.0012     0.00
7120          RX   100.00   115.00   121.00   127.00   207.00   211.00   215.00   225.00
7121          RY   942.00   937.00   935.00   933.00   932.90   935.00   937.00   942.00
              *

7122          KK     B85BASIN
7123          KM        BASIN BOUNDARY FROM 1990 TOPO
7124          BA   0.407
7125          LG    0.30     0.31     5.80     0.24       27
7126          UI       0       37       67      150      200      243      304      443      420      323
7127          UI     265      213      163       96       65       52       37       19       12       11
7128          UI      12       11        0        0        0        0        0        0        0        0
7129          UI       0        0        0        0        0        0        0        0        0        0
7130          UI       0        0        0        0        0        0        0        0        0        0
              *

7131          KK  DB85REDIVERT
7132          KM        Final Drainage Report for Central Marketplace, Drainage Report for
7133          KM        the Roomstore, Drainage Report for Palm Valley Condominiums
7134          KM        Drainage Report for Palm Valley Crossing Phase II, Remaining
7135          KM        retention volume estimated from aerial
7136          DT    RB85     11.9      0.0
7137          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7138          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7139          KK  B85B86ROUTE
7140          KM        Cross-section: Estimated based on aerial
7141          KM        Manning's N Value: street and ROW
7142          RS        4     FLOW
7143          RC    0.022    0.016    0.022     5274   0.0030     0.00
7144          RX   100.00   120.00   141.00   143.00   226.00   228.00   248.00   269.00
7145          RY   1001.0  1000.50  1000.00   999.60   999.50  1000.00  1000.50  1001.00
              *

7146          KK     B86BASIN
7147          KM        BASIN BOUNDARY FROM 1990 TOPO
7148          BA   0.619
7149          LG    0.28     0.26     5.10     0.34       31
7150          UI       0       61      124      262      338      427      572      749      593      466
7151          UI     371      292      176      106       87       61       28       19       19       18
7152          UI      19        0        0        0        0        0        0        0        0        0
7153          UI       0        0        0        0        0        0        0        0        0        0
7154          UI       0        0        0        0        0        0        0        0        0        0
              *

7155          KK  DB86REDIVERT
7156          KM        Retention volume estimated based on aerial
7157          DT    RB86      2.9      0.0
7158          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7159          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7160          KK   CPB86COMBINE
7161          HC        2    1.026
              *

7162          KK  B86B89ROUTE
7163          KM        Cross-section: Estimated based on aerial
7164          KM        Manning's N Value: street and ROW
7165          RS        1     FLOW
7166          RC    0.022    0.016    0.022     4090   0.0024     0.00
7167          RX   100.00   111.00   121.00   123.00   206.00   208.00   220.00   240.00
7168          RY   1001.0   999.80   999.50   999.00   999.10   999.50   999.80  1001.00
              *

7169          KK     B87BASIN
7170          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7171          BA   0.273
7172          LG    0.19     0.26     5.20     0.32       47
7173          UI       0      121      374      675      512      271       96       36       20        0
7174          UI       0        0        0        0        0        0        0        0        0        0
7175          UI       0        0        0        0        0        0        0        0        0        0
7176          UI       0        0        0        0        0        0        0        0        0        0
7177          UI       0        0        0        0        0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7178          KK  DB87REDIVERT
7179          KM        Retention volume estimated based on aerial
7180          DT    RB87     7.3     0.0
7181          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7182          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7183          KK  B87B88ROUTE
7184          KM        Cross-section: Estimated based on aerial
7185          KM        Manning's N Value: street and ROW
7186          RS       6    FLOW
7187          RC   0.022   0.016   0.022    7579  0.0021    0.00
7188          RX  100.00  102.00  105.00  107.00  243.00  245.00  247.00  250.00
7189          RY  1001.0 1000.10 1000.00  999.50  999.60 1000.00 1000.10 1001.00
              *

7190          KK     B88BASIN
7191          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7192          BA   0.509
7193          LG    0.23    0.26    4.80    0.37      39
7194          UI       0      56     142     264     340     447     667     577     447     339
7195          UI     253     139      95      63      41      17      18      17      17       0
7196          UI       0       0       0       0       0       0       0       0       0       0
7197          UI       0       0       0       0       0       0       0       0       0       0
7198          UI       0       0       0       0       0       0       0       0       0       0
              *

7199          KK  DB88REDIVERT
7200          KM        Retention volume estimated based on aerial
7201          DT    RB88     7.5     0.0
7202          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7203          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7204          KK   CPB88COMBINE
7205          HC       2   0.782
              *

7206          KK  B88B89ROUTE
7207          KM        Cross-section: Estimated based on aerial
7208          KM        Manning's N Value: street and ROW
7209          RS       3    FLOW
7210          RC   0.022   0.016   0.022    5377  0.0019    0.00
7211          RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
7212          RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
              *

7213          KK     B89BASIN
7214          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FIELD VISIT. PONDS BEHIND
7215          KM        RAILROAD TRACKS AND SPILLS INTO PHOENIX-GOODYEAR AIRPORT
7216          BA   0.377
7217          LG    0.23    0.28    4.80    0.36      35
7218          UI       0      81     296     447     736     583     379     199      99      48
7219          UI      20      21       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7220          UI       0       0       0       0       0       0       0       0       0       0
7221          UI       0       0       0       0       0       0       0       0       0       0
7222          UI       0       0       0       0       0       0       0       0       0       0
              *

7223          KK  DB89REDIVERT
7224          KM        Final Drainage Report for Goodyear Public Storage
7225          DT    RB89     1.0     0.0
7226          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7227          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7228          KK   CPB89COMBINE
7229          HC       3   2.185
              *

7230          KK   SRB89STORAGE
7231          KM        Storage at airport ramp (WLB)
7232          KO
7233          RS       1    STOR
7234          SV            0.06    3.14   15.08   45.28  110.59  221.78  290.44  449.81
7235          SQ           10.00  100.00  250.00  370.00  380.00  383.00  383.00 8928.00
7236          SE  951.30  952.00  954.00  956.00  958.00  960.00  962.00  962.80  964.00
7237          ST
              *

7238          KK  DB89SWDIVERT
7239          KM        Divert flow from 96"" Storm Drain into Agua Fria River.
7240          DT  DB89SD     0.0     0.0
7241          DI     0.0    10.0   100.0   250.0   370.0   380.0   500.0   600.0  5000.0     0.0
7242          DQ     0.0    10.0   100.0   250.0   370.0   380.0   380.0   380.0   380.0     0.0
              *

7243          KK  B89B92ROUTE
7244          KM        Cross-section: Cross-section determined from 1991
7245          KM        topo and aerial / Manning's N Value: clean straight earth
7246          RS       1    FLOW
7247          RC   0.022   0.022   0.022    8019  0.0045    0.00
7248          RX  100.00  120.00  140.00  152.00  166.00  178.00  198.00  218.00
7249          RY  934.50  934.25  934.00  930.00  930.10  934.00  934.25  934.50
              *

7250          KK     B90BASIN
7251          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7252          BA   0.455
7253          LG    0.46    0.25    4.80    0.45       7
7254          UI       0      41      55     115     235     252     334     344     353     294
7255          UI     311     220     209     150     122     105      72      59      48      38
7256          UI      34      23      23      18       5       5       5       6       5       5
7257          UI       5       5       6       5       5       5       5       0       0       0
7258          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7259          KK  DB90REDIVERT
7260          KM        Drainage Report for Goodyear Industrial Park
```

```
7261          DT    RB90      1.3      0.0
7262          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7263          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7264          KK  B90B91ROUTE
7265          KM        Cross-section: Cross-section determined from 1991 topo
7266          KM        Manning's N Value: avg value for cultivated areas from
7267          KM        Estimated Manning's Roughness Coefficient for Stream
7268          KM        Channels and Flood Plains in MC
7269          RS       12    FLOW
7270          RC   0.038    0.038    0.038     5756  0.0030     0.00
7271          RX  100.00   200.00   400.00   500.00  550.00   600.00  800.00  900.00
7272          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
              *

7273          KK     B91BASIN
7274          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FINAL DRAINAGE REPORT FOR
7275          KM        VENIDA BUSINESS PARK AT CROSSPOINTE PHASE 1
7276          BA   0.586
7277          LG    0.47     0.25     4.70     0.47        4
7278          UI       0       33       34       42       70      124      181      188      217      254
7279          UI     279      279      279      276      237      230      259      181      181      172
7280          UI     129      116       95      101       78       61       54       47       40       38
7281          UI      30       30       27       19       18       19       19       12        4        4
7282          UI       4        5        4        4        4        4        4        5        4        4
              *

7283          KK  DB91REDIVERT
7284          KM        Final Drainage Report for Venida Business Park at
7285          KM        Crosspointe Phase I
7286          DT    RB91      3.7      0.0
7287          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7288          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7289          KK   CPB91COMBINE
7290          HC       2   1.041
              *

7291          KK  B91B92ROUTE
7292          KM        Cross-section: Cross-section determined from 1991 topo
7293          KM        Manning's N Value: clean straight earth
7294          RS       9    FLOW
7295          RC   0.022    0.022    0.022    12337  0.0033     0.00
7296          RX  100.00   150.00   190.00   230.00  290.00   350.00  370.00  390.00
7297          RY  956.50   956.25   956.00   954.00  954.10   956.00  957.00  958.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7298          KK     B92BASIN
7299          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7300          KM        ROUTING FROM BULLARD WASH IMPROV PLANS
7301          BA   1.371
7302          LG    0.16     0.26     4.80     0.39       29
7303          UI       0      425     1422     2365     2978     1810      903      394      162       85
7304          UI       0        0        0        0        0        0        0        0        0        0
7305          UI       0        0        0        0        0        0        0        0        0        0
7306          UI       0        0        0        0        0        0        0        0        0        0
7307          UI       0        0        0        0        0        0        0        0        0        0
              *

7308          KK   CPB92COMBINE
7309          HC       3   4.597
              *

7310          KK  B92B70ROUTE
7311          KM        Cross-section: Cross-section determined from aerial
7312          KM        and 1991 topo / Manning's N Value: concrete channel
7313          RS       1    FLOW
7314          RC   0.016    0.016    0.016      115  0.0010     0.00
7315          RX  100.00   120.00   140.00   156.00  172.00   188.00  208.00  228.00
7316          RY  930.50   930.25   930.00   920.00  920.10   930.00  930.25  930.50
              *

7317          KK     B70BASIN
7318          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7319          BA   0.110
7320          LG    0.33     0.25     5.10     0.37       15
7321          UI       0       12       20       50       72       95      101       96       87       72
7322          UI      62       43       36       24       18       14       11        9        7        6
7323          UI       2        1        2        1        2        1        2        1        2        1
7324          UI       2        0        0        0        0        0        0        0        0        0
7325          UI       0        0        0        0        0        0        0        0        0        0
              *

7326          KK   CPB70COMBINE
7327          HC       3  71.652
              *

7328          KK  B70B93ROUTE
7329          KM        As-builts for Bullard Wash Channel Improvements
7330          KM        Project FCD No 4700731 by Sverdrup dated August 2008,
7331          KM        from UPRR to Broadway Rd-A3
7332          RS       1    FLOW
7333          RC   0.035    0.022    0.035     1268  0.0012     0.00
7334          RX  100.00   110.00   114.00   118.00  198.00   202.00  206.00  216.00
7335          RY  920.00   915.00   913.00   911.00  910.90   913.00  915.00  920.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7336          KK     B93BASIN
7337          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7338          BA   0.424
7339          LG    0.38     0.27     4.40     0.53       21
7340          UI       0       20       21       21       37       51       83      111      121      123
7341          UI     159      157      171      171      173      171      151      144      154      147
7342          UI     108      112      112       84       76       64       60       62       49       39
7343          UI      34       33       26       25       22       19       19       19       13       11
7344          UI      12       12       11       10        3        2        3        3        2        3
              *

7345          KK  DB93REDIVERT
7346          KM        Drainage Report for Goodyear 4 Industrial
```

```
7347          DT    RB93      0.6      0.0
7348          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7349          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7350          KK   CPB93COMBINE
7351          HC       2  72.076
              *

7352          KK  B93B94ROUTE
7353          KM        As-builts for Bullard Wash Channel Improvements
7354          KM        Project FCD No 4700731 by Sverdrup dated
7355          KM        August 2008, from Broadway to Gila River-A2
7356          RS       1    FLOW
7357          RC   0.035   0.022   0.035    3258  0.0015    0.00
7358          RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
7359          RY  918.00  913.00  911.00  909.00  908.90  911.00  913.00  918.00
              *

7360          KK     B94BASIN
7361          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
7362          KM        FLOW ENTERS BUCKEYE CANAL
7363          BA   0.507
7364          LG    0.50    0.25    5.10    0.40       0
7365          UI       0      30      30      42      68     125     176     157     236     220
7366          UI     251     253     248     231     210     223     189     161     166     117
7367          UI     109      87      89      73      55      48      41      37      32      28
7368          UI      27      21      17      17      17      17       4       3       4       4
7369          UI       4       3       4       4       3       4       4       4       3       4
              *

7370          KK   CPB94COMBINE
7371          HC       2  72.583
              *

7372          KK     L63BASIN
7373          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7374          BA   0.089
7375          LG    0.47    0.25    4.55    0.52       7
7376          UI       0      12      25      63      83      97      92      85      64      46
7377          UI      35      23      16      13      10       6       5       2       1       2
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7378          UI       1       2       1       2       1       1       0       0       0       0
7379          UI       0       0       0       0       0       0       0       0       0       0
7380          UI       0       0       0       0       0       0       0       0       0       0
              *

7381          KK   DL572RETRIEVE
7382          DR  DL572S
              *

7383          KK  L57L63ROUTE
7384          KM        Cross-section: Ag field, assumed 0.5% side slopes
7385          KM        V-ditch / Manning's N Value: avg value for cultivated
7386          KM        areas from Estimated Manning's Roughness Coefficient
7387          KM        for Stream Channels and Flood Plains in MC
7388          RS       6    FLOW
7389          RC   0.038   0.038   0.038    2225  0.0054    0.00
7390          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7391          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7392          KK   DL581RETRIEVE
7393          DR  DL581S
              *

7394          KK  L58L63ROUTE
7395          KM        Cross-section: Ag field, assumed 0.5% side slopes
7396          KM        V-ditch / Manning's N Value: avg value for cultivated
7397          KM        areas from Estimated Manning's Roughness Coefficient
7398          KM        for Stream Channels and Flood Plains in MC
7399          RS       2    FLOW
7400          RC   0.038   0.038   0.038    1423  0.0084    0.00
7401          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7402          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7403          KK   CPL63COMBINE
7404          HC       3  30.909
              *

7405          KK  DL63SEDIVERT
7406          KM        L303 south of Indian School split flow
7407          DT   DL63S     0.0     0.0
7408          DI     0.0   260.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
7409          DQ     0.0     0.0   740.0  1740.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7410          KK  L63B95ROUTE
7411          RS       6    FLOW
7412          RC   0.038   0.038   0.038     912  0.0044    0.00
7413          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7414          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7415          KK     B95BASIN
7416          KM        BASIN BOUNDARY FROM FIELD VISIT, WALL ON SOUTH BOUNDARY
7417          BA   0.075
7418          LG    0.48    0.25    4.80    0.45       4
7419          UI       0      14      48      84     106      95      79      54      36      20
7420          UI      15      10       7       2       2       2       1       2       1       2
7421          UI       0       0       0       0       0       0       0       0       0       0
7422          UI       0       0       0       0       0       0       0       0       0       0
7423          UI       0       0       0       0       0       0       0       0       0       0
              *

7424          KK   DL582RETRIEVE
7425          DR  DL582S
              *

7426          KK  L58B95ROUTE
7427          KM        Cross-section: Ag field, assumed 0.5% side slopes
7428          KM        V-ditch / Manning's N Value: avg value for cultivated
```

```
7429          KM        areas from Estimated Manning's Roughness Coefficient
7430          KM        for Stream Channels and Flood Plains in MC
7431          RS       4    FLOW
7432          RC   0.038   0.038   0.038    1645  0.0061    0.00
7433          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7434          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7435          KK   CPB95COMBINE
7436          HC       3  30.984
              *

7437          KK  B95B96ROUTE
7438          KM        Cross-section: Ag field, assumed 0.5% side slopes
7439          KM        V-ditch / Manning's N Value: avg value for cultivated areas
7440          KM        from Estimated Manning's Roughness Coefficient for
7441          KM        Stream Channels and Flood Plains in MC
7442          RS      17    FLOW
7443          RC   0.038   0.038   0.038    8075  0.0020    0.00
7444          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7445          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
              *

7446          KK     B96BASIN
7447          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
7448          KM        BY DEL RIO ENG (2006)
7449          BA   0.692
7450          LG    0.36    0.25    4.70    0.46      10
7451          UI       0      52      53     106     218     304     326     414     441     439
7452          UI     421     370     399     273     294     206     174     153     130      91
7453          UI      81      64      55      48      42      30      30      30      13       6
7454          UI       7       6       7       6       7       7       6       7       6       7
7455          UI       6       7       6       7       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7456          KK  DB96REDIVERT
7457          KM        Retention volume estimated based on aerial
7458          DT    RB96     4.0     0.0
7459          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7460          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7461          KK   CPB96COMBINE
7462          HC       2  31.676
              *

7463          KK  B96B97ROUTE
7464          KM        Cross-section: estimated from aerial and topo
7465          KM        V-ditch / Manning's N Value: grass - golf course
7466          RS      28    FLOW
7467          RC   0.025   0.025   0.025    6205  0.0020    0.00
7468          RX  100.00  145.00  190.00  240.00  340.00  390.00  435.00  455.00
7469          RY  1018.0 1017.75 1017.50 1015.00 1015.50 1017.50 1017.75 1018.00
              *

7470          KK     B97BASIN
7471          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
7472          KM        BY DEL RIO ENG (2006)
7473          BA   0.931
7474          LG    0.23    0.25    4.70    0.39      25
7475          UI       0     112     321     561     736    1053    1333     972     748     549
7476          UI     309     192     125      72      35      35      34       0       0       0
7477          UI       0       0       0       0       0       0       0       0       0       0
7478          UI       0       0       0       0       0       0       0       0       0       0
7479          UI       0       0       0       0       0       0       0       0       0       0
              *

7480          KK   CPB97COMBINE
7481          HC       2  32.607
              *

7482          KK  DB97REDIVERT
7483          KM        Pebblecreek Phase II Master Drainage Report (west half)
7484          DT    RB97    94.0     0.0
7485          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7486          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7487          KK   SRB97STORAGE
7488          KM        Storage per Palm Valley Phase 8 basin
7489          KO
7490          RS       1    STOR
7491          SV           15.40   58.50   67.00
7492          SQ           10.00   55.00 1000.00
7493          SE  1001.0 1003.00 1009.00 1010.00
7494          ST
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7495          KK  DB97SEDIVERT
7496          KM        Split flow: bleed pipe from basin to south, overflow will pond at RID
7497          KM        then goes SW
7498          DT   DD97S     0.0     0.0
7499          DI     0.0     3.6     9.8    11.5    13.3    14.8    16.2  5000.0     0.0     0.0
7500          DQ     0.0     3.6     9.8    11.5    13.3    14.8    16.2    16.2     0.0     0.0
              *

7501          KK  B97B99ROUTE
7502          KM        Cross-section: Ag field, assumed 0.5% side slopes
7503          KM        V-ditch / Manning's N Value: Ag field
7504          RS      48    FLOW
7505          RC   0.038   0.038   0.038    3043  0.0001    0.00
7506          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7507          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7508          KK     L60BASIN
7509          KM        BASIN BOUNDARY FROM 1990 TOPO
7510          BA   1.004
7511          LG    0.49    0.25    4.00    0.70       0
7512          UI       0      52      52      54     109     155     253     313     283     405
7513          UI     381     442     439     436     444     376     364     396     336     275
7514          UI     310     225     200     175     148     159     126      97      85      80
```

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7515          UI      64      64      51      48      47      38      29      30      29      30
7516          UI      21       7       6       7       7       6       7       6       7       6
              *

7517          KK   DL552RETRIEVE
7518          DR  DL552S
              *

7519          KK  L55L60ROUTE
7520          KM        Cross-section: Ag field, assumed 0.5% side slopes
7521          KM        V-ditch / Manning's N Value: avg value for cultivated
7522          KM        areas from Estimated Manning's Roughness Coefficient
7523          KM        for Stream Channels and Flood Plains in MC
7524          RS      30    FLOW
7525          RC   0.038   0.038   0.038    7477  0.0072    0.00
7526          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7527          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7528          KK   DL561RETRIEVE
7529          DR  DL561S
              *

7530          KK  L56L60ROUTE
7531          KM        Cross-section: Ag field, assumed 0.5% side slopes
7532          KM        V-ditch / Manning's N Value: avg value for cultivated
7533          KM        areas from Estimated Manning's Roughness Coefficient
7534          KM        for Stream Channels and Flood Plains in MC
7535          RS      12    FLOW
7536          RC   0.038   0.038   0.038    5317  0.0049    0.00
1                                          HEC-1 INPUT                                                    PAGE192

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7537          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7538          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7539          KK   CPL60COMBINE
7540          HC       3     7.5
              *

7541          KK   DL601DIVERT
7542          KM        Thomas at Citrus split flow
7543          DT  DL601S     0.0     0.0
7544          DI     0.0    67.0   791.7  2066.5  4118.1     0.0     0.0     0.0     0.0     0.0
7545          DQ     0.0    36.8   382.7   978.6  1804.2     0.0     0.0     0.0     0.0     0.0
              *

7546          KK   DL602DIVERT
7547          KM        Thomas at Citrus split flow
7548          DT  DL602S     0.0     0.0
7549          DI     0.0    30.3   409.0  1087.9  2314.0     0.0     0.0     0.0     0.0     0.0
7550          DQ     0.0     8.1    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *

7551          KK  L60L61ROUTE
7552          KM        Cross-section: Ag field, assumed 0.5% side slopes
7553          KM        V-ditch / Manning's N Value: avg value for cultivated
7554          KM        areas from Estimated Manning's Roughness Coefficient
7555          KM        for Stream Channels and Flood Plains in MC
7556          RS       6    FLOW
7557          RC   0.038   0.038   0.038    2719  0.0022    0.00
7558          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7559          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7560          KK     L61BASIN
7561          KM        BASIN BOUNDARY FROM 1990 TOPO
7562          BA   0.510
7563          LG    0.50    0.25    4.30    0.61       0
7564          UI       0      29      30      40      64     120     169     160     216     222
7565          UI     247     251     248     236     210     217     203     156     173     123
7566          UI     114      91      83      87      56      49      46      36      36      28
7567          UI      26      26      17      17      17      17      11       4       4       4
7568          UI       3       4       4       3       4       4       3       4       4       3
              *

7569          KK   DL562RETRIEVE
7570          DR  DL562S
              *

7571          KK  L56L61ROUTE
7572          KM        Cross-section: Ag field, assumed 0.5%
7573          KM        side slopes, V-ditch / Manning's N Value: avg value
7574          KM        for cultivated areas from Estimated Manning's Roughness
7575          KM        Coefficient for Stream Channels and Flood Plains in MC
7576          RS      29    FLOW
7577          RC   0.038   0.038   0.038    5938  0.0056    0.00
1                                          HEC-1 INPUT                                                    PAGE193

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7578          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7579          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7580          KK   CPL61COMBINE
7581          HC       3    8.01
              *

7582          KK  DL61SEDIVERT
7583          KM        Thomas at ag road split flow
7584          DT   DL61S     0.0     0.0
7585          DI     0.0   496.7  1797.8  4333.9  7784.2     0.0     0.0     0.0     0.0     0.0
7586          DQ     0.0   322.8  1118.2  2702.6  4870.5     0.0     0.0     0.0     0.0     0.0
              *

7587          KK  L61L62ROUTE
7588          KM        Cross-section: Ag field, assumed 0.5% side slopes
7589          KM        V-ditch / Manning's N Value: avg value for cultivated
7590          KM        areas from Estimated Manning's Roughness Coefficient
7591          KM        for Stream Channels and Flood Plains in MC
7592          RS       5    FLOW
7593          RC   0.038   0.038   0.038    2568  0.0031    0.00
7594          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7595          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7596          KK     L62BASIN
```

```
7597          KM        BASIN BOUNDARY FROM 1990 TOPO
7598          BA   0.494
7599          LG    0.50    0.25    4.55    0.52       0
7600          UI       0      29      30      42      67     123     172     154     233     215
7601          UI     248     247     244     222     208     217     180     158     159     115
7602          UI     104      85      88      67      53      47      39      37      30      26
7603          UI      27      19      17      16      17      15       3       4       4       3
7604          UI       4       4       3       4       4       3       4       4       4       3
              *

7605          KK   DL571RETRIEVE
7606          DR  DL571S
              *

7607          KK  L57L62ROUTE
7608          KM        Cross-section: Estimated side slopes and width
7609          KM        based on aerial and topo / Manning's N Value:
7610          KM        natural wash w/ heavy vegetation
7611          RS       5    FLOW
7612          RC   0.045   0.045   0.045    5320  0.0043    0.00
7613          RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
7614          RY  1050.5 1050.25 1050.00 1047.00 1047.10 1050.00 1050.25 1050.50
              *
1                                          HEC-1 INPUT                                                    PAGE194

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7615          KK   CPL62COMBINE
7616          HC       3  17.406
              *

7617          KK  L62L68ROUTE
7618          KM        Cross-section: Estimated side slopes and width
7619          KM        based on aerial and topo / Manning's N Value:
7620          KM        natural wash w/ heavy vegetation
7621          RS       3    FLOW
7622          RC   0.045   0.045   0.045    5299  0.0045    0.00
7623          RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
7624          RY  1050.5 1050.25 1050.00 1047.00 1047.10 1049.00 1050.25 1050.50
              *

7625          KK     L64BASIN
7626          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7627          BA   0.196
7628          LG    0.45    0.25    4.50    0.54      13
7629          UI       0      15      15      34      65      88     104     118     129     127
7630          UI     117     110     105      81      78      58      45      47      29      24
7631          UI      21      18      14      14       9       8       9       6       2       2
7632          UI       2       2       1       2       2       2       2       2       2       2
7633          UI       2       2       2       0       0       0       0       0       0       0
              *

7634          KK  DL63SERETRIEVE
7635          DR   DL63S
              *

7636          KK  L63L64ROUTE
7637          KM        Cross-section: Ag field, assumed 0.5% side slopes
7638          KM        V-ditch / Manning's N Value: Ag field
7639          RS       6    FLOW
7640          RC   0.038   0.038   0.038    4081  0.0037    0.00
7641          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7642          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7643          KK   CPL64COMBINE
7644          HC       2  31.105
              *

7645          KK  L64L67ROUTE
7646          KM        Cross-section: Ag field, assumed 0.5% side slopes
7647          KM        V-ditch / Manning's N Value: avg value for cultivated
7648          KM        areas from Estimated Manning's Roughness Coefficient
7649          KM        for Stream Channels and Flood Plains in MC
7650          RS       7    FLOW
7651          RC   0.038   0.038   0.038    4621  0.0037    0.00
7652          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7653          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                                    PAGE195

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7654          KK     L67BASIN
7655          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
7656          BA   0.101
7657          LG    0.43    0.25    4.65    0.48      17
7658          UI       0       7       7      12      20      37      39      52      52      57
7659          UI      57      57      48      50      43      38      34      26      22      20
7660          UI      17      13      11       8       8       7       6       5       4       4
7661          UI       3       2       1       1       1       1       1       1       1       0
7662          UI       1       1       1       1       1       1       1       0       1       0
              *

7663          KK   CPL67COMBINE
7664          HC       2  31.206
              *

7665          KK  L67L68ROUTE
7666          KM        Cross-section: Assumed 2' depth V-Ditch, width
7667          KM        based on aerial / Manning's N Value: clean earth; straight
7668          RS       1    FLOW
7669          RC   0.022   0.022   0.022     802  0.0025    0.00
7670          RX  100.00  125.00  150.00  158.00  162.00  170.00  190.00  210.00
7671          RY  1023.5 1022.25 1022.00 1020.00 1020.10 1022.00 1022.25 1023.50
              *

7672          KK   DL602RETRIEVE
7673          DR  DL602S
              *

7674          KK  L60L68ROUTE
7675          KM        Cross-section: Ag field, assumed 0.5% side slopes
7676          KM        V-ditch / Manning's N Value: avg value for cultivated
7677          KM        areas from Estimated Manning's Roughness Coefficient
7678          KM        for Stream Channels and Flood Plains in MC
7679          RS      36    FLOW
7680          RC   0.038   0.038   0.038    9173  0.0043    0.00
```

```
7681          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7682          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7683          KK  DL61SERETRIEVE
7684          DR   DL61S
              *

7685          KK  L61L68ROUTE
7686          KM        Cross-section: Assumed 3' depth V-Ditch, width based
7687          KM        aerial / Manning's N Value: clean earth; straight
7688          RS       3    FLOW
7689          RC   0.022   0.022   0.022    7340  0.0044    0.00
7690          RX  100.00  120.00  140.00  148.00  150.00  158.00  178.00  198.00
7691          RY  1040.5 1040.25 1040.00 1037.00 1037.10 1040.00 1040.25 1040.50
              *
1                                        HEC-1 INPUT                                                    PAGE196

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7692          KK     L68BASIN
7693          KM        BASIN BOUNDARY FROM L303 AS-BUILT
7694          KM        AND DETAILED L303 1' CI TOPO, DETENTION FACILITY
7695          BA   1.000
7696          LG    0.22    0.25    4.40    0.55      17
7697          UI       0      95     136     302     539     660     746     793     779     674
7698          UI     625     541     376     299     276     174     143     118      88      80
7699          UI      55      54      40      12      12      12      12      11      12      12
7700          UI      12      12      12      12      12       0       0       0       0       0
7701          UI       0       0       0       0       0       0       0       0       0       0
              *

7702          KK   CPL68COMBINE
7703          HC       5  34.214
              *

7704          KK  L68L72ROUTE
7705          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7706          KM        Manning's N Value: earth w/ sparse trees and brush
7707          RS       1    FLOW
7708          RC   0.032   0.032   0.032    1189  0.0050    0.00
7709          RX  100.00  120.00  140.00  152.00  160.00  172.00  192.00  212.00
7710          RY  1015.5 1014.25 1014.00 1011.00 1011.10 1014.00 1014.25 1015.50
              *

7711          KK     L72BASIN
7712          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
7713          KM        DRAINING TO CULVERT UNDER I-10
7714          BA   0.193
7715          LG    0.10    0.25    4.55    0.47      86
7716          UI       0      90     278     499     353     173      64      20      15       0
7717          UI       0       0       0       0       0       0       0       0       0       0
7718          UI       0       0       0       0       0       0       0       0       0       0
7719          UI       0       0       0       0       0       0       0       0       0       0
7720          UI       0       0       0       0       0       0       0       0       0       0
              *

7721          KK  DL72REDIVERT
7722          KM        Retention volume estimated based on aerial
7723          DT    RL72     4.4     0.0
7724          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7725          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7726          KK   CPL72COMBINE
7727          HC       2  34.407
              *

7728          KK  DL72SEDIVERT
7729          KM        I-10 at Cotton split flow
7730          DT   DL72S     0.0     0.0
7731          DI     0.0    49.0   204.1   558.2  1073.4     0.0     0.0     0.0     0.0     0.0
7732          DQ     0.0    22.8    67.7   148.1   257.3     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                                    PAGE197

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7733          KK  L72B99ROUTE
7734          KM        Cross-section: Cross-section determined from
7735          KM        V-ditch / Manning's N Value: avg value for cultivated
7736          KM        areas from Estimated Manning's Roughness Coefficient
7737          KM        for Stream Channels and Flood Plains in MC
7738          RS       6    FLOW
7739          RC   0.038   0.038   0.038    3015  0.0019    0.00
7740          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
7741          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

7742          KK     B99BASIN
7743          KM        BASIN BOUNDARY FROM RID, 1990 TOPO
7744          BA   0.158
7745          LG    0.42    0.24    4.60    0.49      13
7746          UI       0      18      36      96     123     152     158     137     127     101
7747          UI      68      57      36      27      21      18      10      11       5       2
7748          UI       3       2       2       3       2       3       2       2       0       0
7749          UI       0       0       0       0       0       0       0       0       0       0
7750          UI       0       0       0       0       0       0       0       0       0       0
              *

7751          KK   CPB99COMBINE
7752          HC       3  36.263
              *

7753          KK  B99S11ROUTE
7754          KM        Cross-section: Cross-section determined from
7755          KM        aerial and 1991 topo / Manning's N Value: earth
7756          KM        w/ sparse trees and brush
7757          RS       1    FLOW
7758          RC   0.032   0.032   0.032     382  0.0001    0.00
7759          RX  100.00  102.00  104.00  134.00  224.00  274.00  276.00  278.00
7760          RY  1020.2 1020.10 1020.00 1008.00 1008.10 1020.00 1020.10 1020.20
              *

7761          KK     S11BASIN
7762          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
7763          BA   0.064
7764          LG    0.34    0.23    4.60    0.47      27
```

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7765          UI       0       7      11      30      40      55      58      56      51      42
7766          UI      37      25      20      15      11       8       7       5       4       4
7767          UI       1       1       1       0       1       1       1       1       1       1
7768          UI       1       0       0       0       0       0       0       0       0       0
7769          UI       0       0       0       0       0       0       0       0       0       0
              *

7770          KK   CPS11COMBINE
7771          HC       2  36.327
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7772          KK   SRS11STORAGE
7773          KM        Storage behind canal
7774          KO
7775          RS       1    STOR
7776          SV            6.24   21.77   28.91
7777          SQ                          726.00
7778          SE  1007.4 1008.00 1008.70 1009.00
7779          ST
              *

7780          KK  S11S14ROUTE
7781          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7782          KM        width based on aerial / Manning's N Value: clean straight earth
7783          RS      31    FLOW
7784          RC   0.022   0.022   0.022    4396  0.0036    0.00
7785          RX  100.00  105.00  110.00  122.00  172.00  184.00  189.00  194.00
7786          RY  1004.5 1004.25 1004.00 1001.00 1001.10 1004.00 1004.25 1004.50
              *

7787          KK     S12BASIN
7788          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
7789          BA   0.203
7790          LG    0.19    0.28    4.80    0.37      23
7791          UI       0     189     597     458     194      81      31      16       0       0
7792          UI       0       0       0       0       0       0       0       0       0       0
7793          UI       0       0       0       0       0       0       0       0       0       0
7794          UI       0       0       0       0       0       0       0       0       0       0
7795          UI       0       0       0       0       0       0       0       0       0       0
              *

7796          KK  DL72SERETRIEVE
7797          DR   DL72S
              *

7798          KK  L72S12ROUTE
7799          KM        Cross-section: assumed 2' v-ditch, width based
7800          KM        on aerial / Manning's N Value: clean straight earth
7801          RS       1    FLOW
7802          RC   0.022   0.022   0.022    2028  0.0049    0.00
7803          RX  100.00  120.00  140.00  152.00  168.00  180.00  200.00  220.00
7804          RY  1012.5 1012.25 1012.00 1009.00 1009.10 1012.00 1012.25 1012.50
              *

7805          KK   CPS12COMBINE
7806          HC       2   34.61
              *

7807          KK   SRS12STORAGE
7808          KM        Storage behind canal (WLB)
7809          KO
7810          RS       1    STOR
7811          SV            3.78    5.29   57.30
7812          SQ                   46.0016968.00
7813          SE  1006.7 1007.80 1008.00 1010.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7814          ST
              *

7815          KK  S12S13ROUTE
7816          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7817          KM        width based on aerial / Manning's N Value: clean straight earth
7818          RS       2    FLOW
7819          RC   0.022   0.022   0.022    3446  0.0055    0.00
7820          RX  100.00  125.00  150.00  170.00  210.00  270.00  290.00  310.00
7821          RY  1002.5 1002.25 1002.00  998.00  998.10 1002.00 1002.25 1002.50
              *

7822          KK     S13BASIN
7823          KM        BASIN BOUNDARY FROM COTTON LANE RV & GOLF RESORT MASTER DRAINAGE
7824          KM        REPORT DATED 5/97 BY KAMINSKI HUBBARD ENGINEERING
7825          BA   0.306
7826          LG    0.13    0.25    5.10    0.40      13
7827          UI       0      74     262     399     639     453     286     126      70      26
7828          UI      18       0       0       0       0       0       0       0       0       0
7829          UI       0       0       0       0       0       0       0       0       0       0
7830          UI       0       0       0       0       0       0       0       0       0       0
7831          UI       0       0       0       0       0       0       0       0       0       0
              *

7832          KK  DS13REDIVERT
7833          KM        Retention volume estimated based on aerial
7834          DT    RS13     3.3     0.0
7835          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7836          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7837          KK   CPS13COMBINE
7838          HC       2  34.916
              *

7839          KK  DS13SEDIVERT
7840          KM        Van Buren at Cotton split flow
7841          DT   DS13S     0.0     0.0
7842          DI     0.0   216.0  1302.0  2400.0     0.0     0.0     0.0     0.0     0.0     0.0
7843          DQ     0.0     0.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7844          KK  S13S14ROUTE
7845          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7846          KM        width based on aerial / Manning's N Value: clean straight earth
7847          RS       2    FLOW
7848          RC   0.022   0.022   0.022     963  0.0005    0.00
```

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7849          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
7850          RY  991.00  990.25  990.00  987.00  987.10  990.00  990.25  991.00
              *
1                                        HEC-1 INPUT                                                    PAGE200

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7851          KK     S14BASIN
7852          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
7853          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
7854          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
7855          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
7856          BA   0.361
7857          LG    0.36    0.25    4.70    0.42      20
7858          UI       0      39      96     183     235     308     459     413     322     245
7859          UI     185     109      67      48      34      12      12      12      12       0
7860          UI       0       0       0       0       0       0       0       0       0       0
7861          UI       0       0       0       0       0       0       0       0       0       0
7862          UI       0       0       0       0       0       0       0       0       0       0
              *

7863          KK  DS14REDIVERT
7864          KM        Final Drainage Report for Glen River at Canyon Trails Parcel 3L
7865          KM        Final Drainage Report for Canyon Trails Court Homes
7866          KM        Remaining retention volume estimated from aerial
7867          DT    RS14    20.1     0.0
7868          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7869          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7870          KK   CPS14COMBINE
7871          HC       3  37.197
              *

7872          KK  S14S16ROUTE
7873          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7874          KM        width based on aerial / Manning's N Value: grass
7875          RS       3    FLOW
7876          RC   0.025   0.025   0.025    5363  0.0041    0.00
7877          RX  100.00  112.00  124.00  136.00  186.00  198.00  208.00  218.00
7878          RY  982.50  982.25  982.00  979.00  979.10  982.00  982.25  982.50
              *

7879          KK     B98BASIN
7880          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
7881          KM        BY DEL RIO ENG (2006)
7882          BA   0.267
7883          LG    0.25    0.25    4.70    0.36      30
7884          UI       0     102     327     588     534     310     118      51      19      19
7885          UI       0       0       0       0       0       0       0       0       0       0
7886          UI       0       0       0       0       0       0       0       0       0       0
7887          UI       0       0       0       0       0       0       0       0       0       0
7888          UI       0       0       0       0       0       0       0       0       0       0
              *

7889          KK  DB98REDIVERT
7890          KM        Retention volume estimated based on aerial
7891          DT    RB98    26.1     0.0
7892          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7893          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7894          KK  B98100ROUTE
7895          KM        Cross-section: Estimated based on aerial
7896          KM        Manning's N Value: street and ROW
7897          RS       1    FLOW
7898          RC   0.022   0.016   0.022    1163  0.0050    0.00
7899          RX  100.00  120.00  140.00  142.00  162.00  164.00  184.00  204.00
7900          RY  1002.5 1002.25 1002.00 1001.50 1001.40 1001.90 1002.20 1002.50
              *

7901          KK    B100BASIN
7902          KM        BASIN BOUNDARY RID AND PALM VALLEY, 1990 TOPO
7903          BA   0.120
7904          LG    0.43    0.25    5.20    0.37      16
7905          UI       0      27     103     169     188     157     109      69      38      24
7906          UI      16      12       2       3       3       3       2       3       0       0
7907          UI       0       0       0       0       0       0       0       0       0       0
7908          UI       0       0       0       0       0       0       0       0       0       0
7909          UI       0       0       0       0       0       0       0       0       0       0
              *

7910          KK  DB97SERETRIEVE
7911          DR   DD97S
              *

7912          KK  CPB100COMBINE
7913          HC       3  32.994
              *

7914          KK   B100SROUTE
7915          KM        Cross-section: Cross-section determined from
7916          KM        aerial and 1991 topo / Manning's N Value: grass
7917          RS       3    FLOW
7918          RC   0.032   0.016   0.032    4838  0.0025    0.00
7919          RX  100.00  112.00  124.00  136.00  176.00  188.00  200.00  212.00
7920          RY  998.50  998.25  998.00  995.00  995.10  998.00  998.25  998.50
              *

7921          KK     S15BASIN
7922          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
7923          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
7924          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
7925          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
7926          BA   0.482
7927          LG    0.26    0.27    4.65    0.37      24
7928          UI       0     142     475     771    1039     662     361     150      70      29
7929          UI      29       0       0       0       0       0       0       0       0       0
7930          UI       0       0       0       0       0       0       0       0       0       0
7931          UI       0       0       0       0       0       0       0       0       0       0
7932          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                                    PAGE202

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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7933          KK  DS15REDIVERT
7934          KM        Final Drainage Report for Broadstone at Canyon Trails
7935          KM        Drainage Report for The Rock of Refuge Church
7936          KM        Remaining retention volume estimated from aerial
7937          DT    RS15     24.8      0.0
7938          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7939          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7940          KK   CPS15COMBINE
7941          HC       2  33.476
              *

7942          KK  S15S16ROUTE
7943          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7944          KM        width based on aerial / Manning's N Value: grass
7945          RS       6    FLOW
7946          RC   0.025    0.025    0.025     6178  0.0029     0.00
7947          RX  100.00   108.00   116.00   128.00  178.00   190.00   202.00   222.00
7948          RY  977.50   977.25   977.00   975.00  975.10   977.00   977.25   977.50
              *

7949          KK     S16BASIN
7950          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT
7951          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
7952          BA   0.683
7953          LG    0.28     0.26     5.20     0.32      23
7954          UI       0       59       86      222     295      359      432      580      733      575
7955          UI     477      392      314      244     143      101       84       59       37       18
7956          UI      19       18       18       18       0        0        0        0        0        0
7957          UI       0        0        0        0       0        0        0        0        0        0
7958          UI       0        0        0        0       0        0        0        0        0        0
              *

7959          KK  DS16REDIVERT
7960          KM        Final Drainage Report for Canyon Trails Unit 3 Infrastructure
7961          KM        Final Drainage Report for Curtis Commons
7962          KM        Remaining retention volume estimated from aerial
7963          DT    RS16     53.9      0.0
7964          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7965          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7966          KK   CPS16COMBINE
7967          HC       3  38.749
              *

7968          KK  S16S18ROUTE
7969          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7970          KM        width based on aerial / Manning's N Value: clean straight earth
7971          RS       3    FLOW
7972          RC   0.022    0.022    0.022     6594  0.0039     0.00
7973          RX  100.00   112.00   124.00   136.00  176.00   188.00   208.00   228.00
7974          RY  956.50   956.25   956.00   953.00  953.10   956.00   956.25   956.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7975          KK     S17BASIN
7976          KM        BASIN BOUNDARY FROM 1990 TOPO AND FINAL DRAINAGE REPORT
7977          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
7978          BA   0.260
7979          LG    0.50     0.25     5.80     0.29       0
7980          UI       0       16       17       26      43       76       96       98      124      136
7981          UI     138      138      131      114     122      104       87       88       65       55
7982          UI      48       51       30       28      25       21       19       15       15       12
7983          UI       9        9        9        8       2        2        2        2        3        2
7984          UI       2        2        2        2       2        2        2        2        2        2
              *

7985          KK  S17S18ROUTE
7986          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7987          KM        width based on aerial / Manning's N Value: clean straight earth
7988          RS       4    FLOW
7989          RC   0.022    0.022    0.022     5337  0.0049     0.00
7990          RX  100.00   120.00   140.00   156.00  186.00   202.00   222.00   242.00
7991          RY  952.50   952.25   952.00   950.00  949.90   952.00   952.25   952.50
              *

7992          KK     S18BASIN
7993          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4
7994          KM        SOUTH INFRASTRUCTURE DATED 2/8/05 BY CVL AND MASTER DRAINAGE REPORT
7995          KM        FOR CANYON TRAILS DATED 11/12/99 BY CVL. AT THE OUTLET OF THIS BASIN
7996          KM        THERE IS A CULVERT UNDER LOWER BUCKEYE ROAD THAT DOES NOT GO
7997          KM        UNDER THE ROAD.  THE WATER WILL POND UP AND SPILL OVER LOWER
7998          KM        BUCKEYE ROAD.
7999          BA   0.740
8000          LG    0.28     0.25     4.90     0.33      17
8001          UI       0       75      157      332     427      535      738      916      688      545
8002          UI     427      325      175      126      89       65       24       23       23       23
8003          UI       0        0        0        0       0        0        0        0        0        0
8004          UI       0        0        0        0       0        0        0        0        0        0
8005          UI       0        0        0        0       0        0        0        0        0        0
              *

8006          KK  DS18REDIVERT
8007          KM        Final Drainage Report for Canyon Trails Unit 4 South I
8008          KM        Infrastructure, Final Drainage Report for Canyon Trails Unit 4
8009          KM        South Parcel B, Final Drainage Report for Canyon Trails
8010          KM        Unit 4 South Parcel A, Final Drainage Report for
8011          KM        Canyon Trails Unit 4 South Parcels C & G, Final Drainage Report for
8012          KM        Canyon Trails Unit 4 South Parcel D, E and F, Drainage Report for Aldea
8013          DT    RS18     61.4      0.0
8014          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8015          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8016          KK   CPS18COMBINE
8017          HC       3  39.749
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8018          KK  S18S21ROUTE
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8019          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8020          KM        width based on aerial / Manning's N Value: clean straight earth
8021          RS       3    FLOW
8022          RC   0.022   0.022   0.022    5383  0.0045    0.00
8023          RX  100.00  120.00  140.00  148.00  168.00  172.00  182.00  198.00
8024          RY  931.00  930.25  930.00  928.00  927.90  930.00  930.25  931.00
              *

8025          KK     S19BASIN
8026          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
8027          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
8028          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
8029          BA   0.806
8030          LG    0.34    0.25    4.50    0.53       9
8031          UI       0      48      50      96     178     232     263     295     345     392
8032          UI     517     624     532     448     398     345     294     259     218     160
8033          UI     105      85      80      60      49      45      15      15      15      15
8034          UI      15      15      15      15       0       0       0       0       0       0
8035          UI       0       0       0       0       0       0       0       0       0       0
              *

8036          KK  DS19REDIVERT
8037          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel F
8038          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel B3
8039          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel E
8040          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel H
8041          DT    RS19    43.2     0.0
8042          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8043          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8044          KK  DS13SERETRIEVE
8045          DR   DS13S
              *

8046          KK  S13S19ROUTE
8047          KM        Cross-section: Cross-section determined from
8048          KM        V-ditch / Manning's N Value: avg value for cultivated
8049          KM        areas from Estimated Manning's Roughness Coefficient
8050          KM        for Stream Channels and Flood Plains in MC
8051          RS       9    FLOW
8052          RC   0.038   0.038   0.038    5108  0.0047    0.00
8053          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8054          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8055          KK   CPS19COMBINE
8056          HC       2  35.722
              *

8057          KK  S19S20ROUTE
8058          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8059          KM        width based on aerial / Manning's N Value: clean straight earth
8060          RS       3    FLOW
8061          RC   0.022   0.022   0.022    5288  0.0049    0.00
8062          RX  100.00  112.00  124.00  132.00  134.00  142.00  162.00  182.00
8063          RY  957.00  956.25  956.00  954.00  953.90  956.00  956.25  957.00
              *

8064          KK     S20BASIN
8065          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR UNITS I, II, & III
8066          KM        COTTONFLOWER COMMUNITY DATED 8/24/99 BY AMERICAN ENGINEERING COMPANY
8067          BA   0.608
8068          LG    0.33    0.26    4.65    0.40       19
8069          UI       0      48      52     169     226     272     322     386     550     570
8070          UI     453     383     311     259     210     136      84      79      52      47
8071          UI      18      15      15      14      15      15       0       0       0       0
8072          UI       0       0       0       0       0       0       0       0       0       0
8073          UI       0       0       0       0       0       0       0       0       0       0
              *

8074          KK  DS20REDIVERT
8075          KM        Final Drainage Report for Units I, II, & III - Cottonflower
8076          KM        Community, Final Drainage Report for Sin Lomas
8077          DT    RS20    24.1     0.0
8078          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8079          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8080          KK   CPS20COMBINE
8081          HC       2   36.33
              *

8082          KK  S20S21ROUTE
8083          KM        Cross-section: Ag field, assumed 0.5% side slopes
8084          KM        V-ditch / Manning's N Value: avg value for cultivated
8085          KM        areas from Estimated Manning's Roughness Coefficient
8086          KM        for Stream Channels and Flood Plains in MC
8087          RS      11    FLOW
8088          RC   0.038   0.038   0.038    5288  0.0047    0.00
8089          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8090          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8091          KK     S21BASIN
8092          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8093          BA   0.159
8094          LG    0.50    0.25    4.60    0.50       0
8095          UI       0       9       9      12      19      35      50      50      60      71
8096          UI      75      77      76      75      64      64      70      47      50      45
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8097          UI      35      31      26      28      20      16      15      12      10      10
8098          UI       9       8       7       5       5       5       6       2       1       1
8099          UI       1       1       1       1       2       1       1       1       1       1
              *

8100          KK   CPS21COMBINE
8101          HC       3  41.322
              *

8102          KK  DS21SEDIVERT
8103          KM        Converging basins at road, assume 50-50 split
8104          DT   DS21S     0.0     0.0
```

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8105          DI     0.0   100.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
8106          DQ     0.0    50.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8107          KK  S21S23ROUTE
8108          KM        Cross-section: Ag field, assumed 0.5% side slopes
8109          KM        V-ditch / Manning's N Value: avg value for cultivated
8110          KM        areas from Estimated Manning's Roughness Coefficient
8111          KM        for Stream Channels and Flood Plains in MC
8112          RS       9    FLOW
8113          RC   0.038   0.038   0.038    3328  0.0010    0.00
8114          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8115          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8116          KK    B101BASIN
8117          KM        BASIN BOUNDARY FROM 1990 TOPO AND ADOT MAPPING
8118          KM        INCLUDING CULVERT LOCATIONS FROM I-10 WIDENING PROJECT
8119          BA   0.076
8120          LG    0.42    0.25    4.80    0.44      16
8121          UI       0      13      44      79     101      98      80      59      39      24
8122          UI      16      12       7       5       2       2       1       2       1       2
8123          UI       1       0       0       0       0       0       0       0       0       0
8124          UI       0       0       0       0       0       0       0       0       0       0
8125          UI       0       0       0       0       0       0       0       0       0       0
              *

8126          KK  SRB101STORAGE
8127          KM        Storage behind I-10
8128          KO
8129          RS       1    STOR
8130          SV            0.70    5.68    7.84   10.00
8131          SQ           16.00  227.00  435.00 1468.00
8132          SE  1005.5 1006.90 1009.50 1010.00 1011.00
8133          ST
              *

8134          KK   B101SROUTE
8135          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8136          KM        width based on aerial / Manning's N Value: grass
8137          RS       5    FLOW
8138          RC   0.025   0.025   0.025    4663  0.0034    0.00
8139          RX  100.00  110.00  120.00  132.00  162.00  174.00  184.00  194.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8140          RY  1006.5 1006.25 1006.00 1003.00 1003.10 1006.00 1006.25 1006.50
              *

8141          KK     S06BASIN
8142          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS UNIT 2 &
8143          KM        INFRASTRUCTURE DATED 7/20/02 BY CVL, DRAINAGE REPORT FOR CANYON TRAILS
8144          KM        UNIT 3A DATED 3/28/03 BY CVL, FINAL DRAINAGE REPORT FOR TRAVIS PARK AT
8145          KM        CANYON TRAILS PARCEL 3M1
8146          BA   0.390
8147          LG    0.29    0.28    4.80    0.33      18
8148          UI       0      91     323     492     802     582     377     173      95      39
8149          UI      21      21       0       0       0       0       0       0       0       0
8150          UI       0       0       0       0       0       0       0       0       0       0
8151          UI       0       0       0       0       0       0       0       0       0       0
8152          UI       0       0       0       0       0       0       0       0       0       0
              *

8153          KK  DS06REDIVERT
8154          KM        Borrow Pit (volume estimated from 1990 topo), Drainage Report
8155          KM        for Canyon Trails Unit 3A (portion of retention used), Final
8156          KM        Drainage Report for Travis Park at Canyon Trails Parcel 3M
8157          KM        (portion of retention used), Preliminary Drainage Report Arizona
8158          KM        Public Service Company Wildflower Substation, Drainage Report
8159          KM        or Verle Naber, Remaining retention volume estimated from aerial
8160          DT    RS06   643.5     0.0
8161          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8162          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8163          KK   CPS06COMBINE
8164          HC       2   0.466
              *

8165          KK  S06S07ROUTE
8166          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8167          KM        width based on aerial / Manning's N Value: earth with
8168          KM        sparse trees and shrubs
8169          RS       9    FLOW
8170          RC   0.032   0.032   0.032    6891  0.0033    0.00
8171          RX  100.00  104.00  108.00  120.00  130.00  142.00  146.00  150.00
8172          RY  990.50  990.25  990.00  987.00  987.10  990.00  990.25  990.50
              *

8173          KK     S07BASIN
8174          KM        BASIN BOUNDARY FROM MASTER DRAINAGE PLAN
8175          KM        FOR WILDFLOWER COMMUNITY DATED 4/96 BY KEOGH ENGINEERING
8176          BA   0.423
8177          LG    0.25    0.26    4.70    0.37      31
8178          UI       0      62     240     359     518     741     509     363     227     106
8179          UI      70      30      19      19       0       0       0       0       0       0
8180          UI       0       0       0       0       0       0       0       0       0       0
8181          UI       0       0       0       0       0       0       0       0       0       0
8182          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8183          KK  DS07REDIVERT
8184          KM        Master Drainage Plan Wildflower Community
8185          DT    RS07    37.3     0.0
8186          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8187          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8188          KK   CPS07COMBINE
8189          HC       2   0.889
              *

8190          KK  S07S08ROUTE
8191          KM        Cross-section: Estimated 3' deep and 4:1 side
8192          KM        slopes, width based on aerial / Manning's N Value
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8193          KM        earth with sparse trees and shrubs
8194          RS       7    FLOW
8195          RC   0.032   0.032   0.032    5382  0.0039    0.00
8196          RX  100.00  102.00  104.00  116.00  126.00  138.00  158.00  178.00
8197          RY  952.50  952.25  952.00  949.00  949.10  952.00  952.25  952.50
              *

8198          KK     S08BASIN
8199          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
8200          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
8201          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
8202          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE PH
8203          BA   0.267
8204          LG    0.25    0.26    4.65    0.38      30
8205          UI       0      60     216     326     533     406     265     130      67      30
8206          UI      15      15       0       0       0       0       0       0       0       0
8207          UI       0       0       0       0       0       0       0       0       0       0
8208          UI       0       0       0       0       0       0       0       0       0       0
8209          UI       0       0       0       0       0       0       0       0       0       0
              *

8210          KK  DS08REDIVERT
8211          KM        Drainage Design Report for Pueblo Verde (portion of retention
8212          KM        used), Remaining retention volume estimated from aerial
8213          DT    RS08     30.3     0.0
8214          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8215          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8216          KK   CPS08COMBINE
8217          HC       2   1.156
              *

8218          KK  S08S09ROUTE
8219          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8220          KM        width based on aerial / Manning's N Value: clean straight earth
8221          RS       5     FLOW
8222          RC   0.022   0.022   0.022    5017  0.0080    0.00
8223          RX  100.00  102.00  104.00  116.00  136.00  148.00  158.00  166.00
8224          RY  936.50  936.25  936.00  933.00  933.10  936.00  936.25  936.50
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8225          KK     S09BASIN
8226          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
8227          KM        FOR SARIVAL VILLAGE PARCEL 7 DATED 7/27/04 BY CMX
8228          BA   0.370
8229          LG    0.27    0.29    4.60    0.38      23
8230          UI       0     101     341     540     794     526     312     130      67      21
8231          UI      22       0       0       0       0       0       0       0       0       0
8232          UI       0       0       0       0       0       0       0       0       0       0
8233          UI       0       0       0       0       0       0       0       0       0       0
8234          UI       0       0       0       0       0       0       0       0       0       0
              *

8235          KK  DS09REDIVERT
8236          KM        Drainage Report for Sarival Village Parcel 7, Preliminary
8237          KM        Drainage Report Sarival Crossing Business Park, Drainage
8238          KM        Report for Gordon-Darby Goodyear, Drainage Report for
8239          KM        Parcel #500-06-314, Remaining retention volume
8240          KM        estimated from aerial
8241          DT    RS09     22.3     0.0
8242          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8243          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8244          KK   CPS09COMBINE
8245          HC       2   1.526
              *

8246          KK   SRS09STORAGE
8247          KM        Storage behind UPRR
8248          KO
8249          RS       1     STOR
8250          SV            6.00   20.90   43.80   78.60
8251          SQ                          750.00 3076.00
8252          SE  909.00  910.00  911.00  912.60  913.10
8253          ST
              *

8254          KK   DS091DIVERT
8255          KM        MC85/RR Tracks/Sarival split flow
8256          DT  DS091W     0.0     0.0
8257          DI     0.0   750.6  3075.7  7642.2 13750.8     0.0     0.0     0.0     0.0     0.0
8258          DQ     0.0   501.7  2037.5  5216.1  9516.4     0.0     0.0     0.0     0.0     0.0
              *

8259          KK   DS092DIVERT
8260          KM        MC85/RR Tracks/Sarival split flow
8261          DT  DS092W     0.0     0.0
8262          DI     0.0   248.9  1038.2  2426.1  4234.3     0.0     0.0     0.0     0.0     0.0
8263          DQ     0.0     1.9    27.9    69.2   121.4     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8264          KK  S09S23ROUTE
8265          KM        Cross-section: Ag field, assumed 0.5% side slopes
8266          KM        V-ditch / Manning's N Value: avg value for cultivated
8267          KM        areas from Estimated Manning's Roughness Coefficient
8268          KM        for Stream Channels and Flood Plains in MC
8269          RS       1     FLOW
8270          RC   0.038   0.038   0.038    2041  0.0002    0.00
8271          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8272          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8273          KK     S22BASIN
8274          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
8275          KM        FOR SARIVAL GARDENS DATED 11/1/99 BY CLOUSE ENGINEERING INC.
8276          BA   0.267
8277          LG    0.30    0.25    4.60    0.34       5
8278          UI       0      38     140     217     303     455     329     239     161      74
8279          UI      49      26      12      12      12       0       0       0       0       0
8280          UI       0       0       0       0       0       0       0       0       0       0
```

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8281          UI       0       0       0       0       0       0       0       0       0       0
8282          UI       0       0       0       0       0       0       0       0       0       0
              *

8283          KK  DS22REDIVERT
8284          KM        Drainage Report for Sarival Gardens
8285          DT    RS22    11.8     0.0
8286          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8287          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8288          KK  S22S23ROUTE
8289          KM        Cross-section: Ag field, assumed 0.5% side slopes
8290          KM        V-ditch / Manning's N Value: avg value for cultivated
8291          KM        areas from Estimated Manning's Roughness Coefficient
8292          KM        for Stream Channels and Flood Plains in MC
8293          RS      16    FLOW
8294          RC   0.038   0.038   0.038    5505  0.0065    0.00
8295          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8296          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8297          KK     S23BASIN
8298          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR ESTRELLA-INDUSTRIAL
8299          KM        PARK DATED 1/4/00 BY CVL AND MASTER DRAINAGE REPORT FOR GOODYEAR
8300          KM        CROSSING INDUSTRIAL PARK DATED 11/29/07 BY V3
8301          BA   1.029
8302          LG    0.41    0.25    4.50    0.47       4
8303          UI       0      95     132     282     539     632     748     797     799     670
8304          UI     682     521     438     328     286     208     156     122     101      88
8305          UI      64      54      54      22      12      12      12      12      12      12
8306          UI      12      12      12      12      12      12       0       0       0       0
8307          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8308          KK  DS23REDIVERT
8309          KM        Master Drainage Report for Estrella - Industrial Park
8310          DT    RS23    55.9     0.0
8311          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8312          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8313          KK   CPS23COMBINE
8314          HC       4  44.144
              *

8315          KK   SRS23STORAGE
8316          KM        Storage behind UPRR (WLB)
8317          KO
8318          RS       1    STOR
8319          SV            0.04    0.10    0.12    0.26   58.75  156.65
8320          SQ           11.00   14.00   23.00  370.00 7710.0038388.00
8321          SE  904.40  905.20  905.50  906.00  908.10  910.00  911.20
8322          ST
              *

8323          KK  S23S24ROUTE
8324          KM        Cross-section: Ag field, assumed 0.5% side slopes
8325          KM        V-ditch / Manning's N Value: avg value for cultivated
8326          KM        areas from Estimated Manning's Roughness Coefficient
8327          KM        for Stream Channels and Flood Plains in MC
8328          RS       5    FLOW
8329          RC   0.038   0.038   0.038    2937  0.0027    0.00
8330          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8331          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8332          KK     S03BASIN
8333          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
8334          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
8335          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
8336          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE
8337          KM        PHASE D DATED 1/4/02 BY CMX
8338          BA   0.719
8339          LG    0.28    0.25    4.80    0.37      31
8340          UI       0      58      69     207     279     338     396     491     705     651
8341          UI     522     446     360     295     226     133      99      86      58      44
8342          UI      18      18      17      18      18       0       0       0       0       0
8343          UI       0       0       0       0       0       0       0       0       0       0
8344          UI       0       0       0       0       0       0       0       0       0       0
              *

8345          KK  DS03REDIVERT
8346          KM        Master Drainage Study Estrella Vista Parcels A Through H
8347          KM        and Parcel 8, Drainage Design Report for Pueblo Verde
8348          KM        (portion of retention used), Drainage Report for Sarival Village
8349          KM        Parcel 2, Drainage Report for Sarival Village Parcel 4
8350          KM        Drainage Report for Sarival Village Parcel 5
8351          DT    RS03    55.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8352          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8353          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8354          KK   DS021RETRIEVE
8355          DR  DS021S
              *

8356          KK  S02S03ROUTE
8357          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8358          KM        width based on aerial / Manning's N Value: clean straight earth
8359          RS       5    FLOW
8360          RC   0.022   0.022   0.022    5334  0.0037    0.00
8361          RX  100.00  114.00  128.00  140.00  150.00  162.00  182.00  202.00
8362          RY  970.50  970.25  970.00  967.00  967.10  970.00  970.10  970.20
              *

8363          KK   CPS03COMBINE
8364          HC       2   1.593
              *

8365          KK  S03S04ROUTE
8366          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
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8367          KM        width based on aerial / Manning's N Value: earth
8368          KM        with sparse trees and shrubs
8369          RS      17    FLOW
8370          RC   0.032   0.032   0.032    5843  0.0065    0.00
8371          RX  100.00  120.00  140.00  210.00  470.00  482.00  492.00  502.00
8372          RY  918.00  917.75  917.50  916.00  916.10  918.00  918.20  918.25
              *

8373          KK     S04BASIN
8374          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR SARIVAL VILLAGE PHASE B1 AND
8375          KM        B2 DATED 10/3/01 BY CMX AND DRAINAGE REPORT FOR SARVIAL VILLAGE PARCEL 6
8376          KM        DATED 10/3/01 BY CMX
8377          BA   0.702
8378          LG    0.34    0.25    4.70    0.44      18
8379          UI       0      60      73     152     303     351     450     501     508     471
8380          UI     423     416     324     276     213     173     151     104      86      74
8381          UI      56      54      34      34      34      13       7       8       7       8
8382          UI       7       8       7       8       7       7       8       7       8       0
8383          UI       0       0       0       0       0       0       0       0       0       0
              *

8384          KK  DS04REDIVERT
8385          KM        Drainage Report for Sarival Village Parcel 6, Arizona Galvanizing
8386          KM        Drainage Report, Hydrologic and Hydraulics Report for Estrella
8387          KM        Crossings Business Park, Remaining retention volume estimated from aeria
8388          DT    RS04    26.7     0.0
8389          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8390          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8391          KK   CPS04COMBINE
8392          HC       2   2.295
              *

8393          KK   SRS04STORAGE
8394          KM        Storage behind UPRR (WLB)
8395          KO
8396          RS       1    STOR
8397          SV            0.08    8.33   14.16   23.37
8398          SQ           50.00  285.00  778.00 4586.00
8399          SE  908.50  910.10  914.00  915.00  916.00
8400          ST
              *

8401          KK  S04S10ROUTE
8402          KM        Cross-section: Ag field, assumed 0.5% side slopes
8403          KM        V-ditch / Manning's N Value: avg value for cultivated
8404          KM        areas from Estimated Manning's Roughness Coefficient
8405          KM        for Stream Channels and Flood Plains in MC
8406          RS      13    FLOW
8407          RC   0.038   0.038   0.038    4699  0.0021    0.00
8408          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8409          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8410          KK   DS091RETRIEVE
8411          DR  DS091W
              *

8412          KK  S09S10ROUTE
8413          KM        Cross-section: Ag field, assumed 0.5% side slopes
8414          KM        V-ditch / Manning's N Value: avg value for cultivated
8415          KM        areas from Estimated Manning's Roughness Coefficient
8416          KM        for Stream Channels and Flood Plains in MC
8417          RS       1    FLOW
8418          RC   0.038   0.038   0.038    2851  0.0007    0.00
8419          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8420          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8421          KK     S05BASIN
8422          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
8423          KM        AND TRAVELS WEST
8424          BA   0.212
8425          LG    0.48    0.25    4.90    0.43       5
8426          UI       0      13      13      19      30      55      75      71      98      99
8427          UI     107     109     106      94      90      99      69      71      64      47
8428          UI      43      36      39      25      21      19      16      16      11      12
8429          UI      11       7       7       8       7       3       2       1       2       2
8430          UI       1       2       1       2       2       1       2       1       2       2
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8431          KK  S05S10ROUTE
8432          KM        Cross-section: Ag field, assumed 0.5% side slopes
8433          KM        V-ditch / Manning's N Value: avg value for cultivated
8434          KM        areas from Estimated Manning's Roughness Coefficient
8435          KM        for Stream Channels and Flood Plains in MC
8436          RS      18    FLOW
8437          RC   0.038   0.038   0.038    5430  0.0015    0.00
8438          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8439          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8440          KK     S10BASIN
8441          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
8442          KM        AND TRAVELS WEST
8443          BA   0.615
8444          LG    0.47    0.25    4.80    0.44       5
8445          UI       0      28      28      29      47      61     100     148     173     148
8446          UI     198     218     237     235     238     237     236     204     195     212
8447          UI     205     148     152     163     114     107      95      82      81      84
8448          UI      53      50      47      42      34      35      29      26      26      25
8449          UI      17      16      16      16      16      16       3       4       4       3
              *

8450          KK   CPS10COMBINE
8451          HC       4   4.648
              *

8452          KK  S10S24ROUTE
8453          KM        Cross-section: Ag field, assumed 0.5% side slopes
8454          KM        V-ditch / Manning's N Value: avg value for cultivated
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8455          KM        areas from Estimated Manning's Roughness Coefficient
8456          KM        for Stream Channels and Flood Plains in MC
8457          RS       8    FLOW
8458          RC   0.038   0.038   0.038    2857  0.0014    0.00
8459          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8460          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8461          KK   DS092RETRIEVE
8462          DR  DS092W
              *

8463          KK  S09S24ROUTE
8464          KM        Cross-section: Ag field, assumed 0.5% side slopes
8465          KM        V-ditch / Manning's N Value: avg value for cultivated
8466          KM        areas from Estimated Manning's Roughness Coefficient
8467          KM        for Stream Channels and Flood Plains in MC
8468          RS       1    FLOW
8469          RC   0.038   0.038   0.038    4898  0.0018    0.00
8470          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8471          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8472          KK     S24BASIN
8473          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS BEHIND
8474          KM        BUCKEYE CANAL AND OVERTOPS
8475          BA   0.416
8476          LG    0.48    0.25    5.00    0.41       2
8477          UI       0      29      29      55      99     170     161     216     242     247
8478          UI     243     227     205     220     154     166     115     103      82      85
8479          UI      56      47      39      36      28      26      22      16      17      16
8480          UI       8       4       4       3       4       4       3       4       3       4
8481          UI       4       3       4       4       3       4       4       0       0       0
              *

8482          KK   CPS24COMBINE
8483          HC       4  47.682
              *

8484          KK  S24S25ROUTE
8485          KM        Cross-section: Ag field, assumed 0.5% side slopes
8486          KM        V-ditch / Manning's N Value: avg value for cultivated
8487          KM        areas from Estimated Manning's Roughness Coefficient
8488          KM        for Stream Channels and Flood Plains in MC
8489          RS      11    FLOW
8490          RC   0.038   0.038   0.038    5984  0.0020    0.00
8491          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8492          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8493          KK     S25BASIN
8494          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8495          BA   0.591
8496          LG    0.49    0.23    6.20    0.25       0
8497          UI       0      27      27      27      44      56      93     140     164     141
8498          UI     183     204     226     224     229     224     224     198     187     201
8499          UI     205     141     141     162     115     102      96      78      75      88
8500          UI      53      50      44      43      33      33      31      24      25      25
8501          UI      19      15      15      16      15      15       9       3       4       3
              *

8502          KK   CPS25COMBINE
8503          HC       2  48.273
              *

8504          KK     S81BASIN
8505          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8506          BA   0.130
8507          LG    0.50    0.23    6.20    0.25       0
8508          UI       0      11      14      30      61      66      87      94      97      87
8509          UI      82      71      64      45      39      33      23      19      15      12
8510          UI      10       9       7       6       5       2       1       2       1       1
8511          UI       2       1       2       1       2       1       1       2       0       0
8512          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8513          KK     S82BASIN
8514          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8515          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
8516          BA   0.204
8517          LG    0.50    0.17    6.80    0.20       0
8518          UI       0      11      11      11      21      32      51      64      57      83
8519          UI      77      90      89      89      90      76      74      80      69      55
8520          UI      64      45      41      35      31      32      26      20      16      17
8521          UI      13      13      10      10      10       8       5       6       6       6
8522          UI       4       2       1       2       1       1       2       1       1       2
              *

8523          KK  S82S83ROUTE
8524          KM        Cross-section: Ag field, assumed 0.5% side slopes
8525          KM        V-ditch / Manning's N Value: avg value for cultivated
8526          KM        areas from Estimated Manning's Roughness Coefficient
8527          KM        for Stream Channels and Flood Plains in MC
8528          RS      30    FLOW
8529          RC   0.038   0.038   0.038    6889  0.0008    0.00
8530          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8531          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8532          KK     S83BASIN
8533          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS
8534          KM        BEHIND EXTENSION CANAL, OVERTOPS AND ENTERS GILA RIVER
8535          BA   0.215
8536          LG    0.40    0.25    5.60    0.31      19
8537          UI       0      10      10       9      17      22      35      51      61      52
8538          UI      70      77      81      83      84      83      82      70      70      74
8539          UI      71      51      54      57      40      37      33      29      28      29
8540          UI      18      18      16      15      12      12      10       9       9       9
8541          UI       6       5       6       6       6       5       1       1       2       1
              *

8542          KK   CPS83COMBINE
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8543          HC       2   0.419
              *

8544          KK     S84BASIN
8545          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
8546          BA   0.207
8547          LG    0.30    0.13    8.40    0.10      12
8548          UI       0      19      25      53     108     118     150     159     160     135
8549          UI     139     101      94      68      56      47      32      26      22      17
8550          UI      14      11      11       7       2       3       2       2       3       2
8551          UI       3       2       2       3       2       2       3       0       0       0
8552          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8553          KK   DUMMYCOMBINE
8554          HC       4
              *

8555          KK   DUMMYCOMBINE
8556          HC       3
              *

8557          KK     W28BASIN
8558          KM        BASIN BOUNDARY FROM 1990 TOPO, BEAUTIFUL AZ ESTATES
8559          BA   0.992
8560          LG    0.34    0.33    4.45    0.37       1
8561          UI       0     127     371     762    1059    1215    1134     854     624     442
8562          UI     316     228     162     115      87      51      31      31      31      31
8563          UI       0       0       0       0       0       0       0       0       0       0
8564          UI       0       0       0       0       0       0       0       0       0       0
8565          UI       0       0       0       0       0       0       0       0       0       0
              *

8566          KK  DW28REDIVERT
8567          KM        Preliminary Drainage Report for Jackrabbit Estates
8568          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
8569          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
8570          DT    RW28     7.2     0.0
8571          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8572          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8573          KK  W28W29ROUTE
8574          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
8575          KM        width based on aerial / Manning's N Value: earth
8576          KM        w/ sparse trees and shrubs
8577          RS       8    FLOW
8578          RC   0.032   0.032   0.032    6604  0.0035    0.00
8579          RX  100.00  118.00  136.00  144.00  152.00  160.00  180.00  400.00
8580          RY  1148.5 1148.25 1148.00 1146.00 1146.10 1147.00 1147.10 1148.50
              *

8581          KK     W29BASIN
8582          KM        BASIN BOUNDARY FROM 1990 TOPO, JACKRABBIT ESTATES
8583          BA   0.640
8584          LG    0.34    0.32    4.10    0.46       1
8585          UI       0      86     285     557     767     833     720     514     364     252
8586          UI     178     125      87      59      41      21      21      21      21       0
8587          UI       0       0       0       0       0       0       0       0       0       0
8588          UI       0       0       0       0       0       0       0       0       0       0
8589          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8590          KK  DW29REDIVERT
8591          KM        Preliminary Drainage Report for Jackrabbit Estates
8592          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
8593          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
8594          DT    RW29    10.8     0.0
8595          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8596          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8597          KK   CPW29COMBINE
8598          HC       2   1.632
              *

8599          KK  W29W30ROUTE
8600          KM        Cross-section: Estimated 1.5' deep and 4:1 side slopes
8601          KM        width based on aerial / Manning's N Value: clean straight earth
8602          RS       1    FLOW
8603          RC   0.022   0.022   0.022    2938  0.0068    0.00
8604          RX  100.00  102.00  104.00  116.00  122.00  134.00  144.00  150.00
8605          RY  1117.2 1116.10 1116.00 1114.50 1114.60 1116.00 1116.10 1117.20
              *

8606          KK     W30BASIN
8607          KM        BASIN BOUNDARY FROM 1990 TOPO
8608          BA   0.266
8609          LG    0.31    0.28    4.30    0.41       4
8610          UI       0      72     250     392     573     376     221      91      47      15
8611          UI      16       0       0       0       0       0       0       0       0       0
8612          UI       0       0       0       0       0       0       0       0       0       0
8613          UI       0       0       0       0       0       0       0       0       0       0
8614          UI       0       0       0       0       0       0       0       0       0       0
              *

8615          KK   CPW30COMBINE
8616          HC       2   1.898
              *

8617          KK  W30L59ROUTE
8618          KM        Cross-section: Width and side slopes based on aerial
8619          KM        and topo / Manning's N Value: earth w/ sparse trees and shrubs
8620          RS       2    FLOW
8621          RC   0.032   0.032   0.032    2996  0.0087    0.00
8622          RX  100.00  115.00  130.00  170.00  194.00  234.00  254.00  274.00
8623          RY  1095.0 1094.50 1094.00 1092.00 1092.10 1094.00 1094.25 1094.50
              *

8624          KK     L59BASIN
8625          KM        BASIN BOUNDARY FROM LITCHFIELD FARMS
8626          BA   0.502
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8627          LG    0.30    0.25    4.00    0.47       5
8628          UI       0      65     214     353     463     742     671     490     363     224
8629          UI     113      80      42      20      20      20       0       0       0       0
8630          UI       0       0       0       0       0       0       0       0       0       0
8631          UI       0       0       0       0       0       0       0       0       0       0
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8632          UI       0       0       0       0       0       0       0       0       0       0
              *

8633          KK  DL59REDIVERT
8634          KM        Retention volume estimated based on aerial
8635          DT    RL59    37.6     0.0
8636          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8637          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8638          KK   DL551RETRIEVE
8639          DR  DL551S
              *

8640          KK  L55L59ROUTE
8641          KM        Cross-section: Assumed 2' depth, width based on
8642          KM        aerial, wall included / Manning's N Value:
8643          KM        earth w/ sparse trees and brush; street LOB
8644          RS      14    FLOW
8645          RC   0.016   0.032   0.032    5728  0.0038    0.00
8646          RX  100.00  112.00  124.00  132.00  138.00  146.00  148.00  150.00
8647          RY  1104.5 1104.25 1104.00 1102.00 1102.10 1104.00 1104.25 1105.00
              *

8648          KK   CPL59COMBINE
8649          HC       3   2.897
              *

8650          KK  L59L65ROUTE
8651          KM        Cross-section: Assumed 3' depth, width based on aerial
8652          KM        Manning's N Value: earth w/ sparse trees and brush
8653          RS       2    FLOW
8654          RC   0.032   0.032   0.032    6594  0.0067    0.00
8655          RX  100.00  115.00  130.00  146.00  154.00  170.00  190.00  210.00
8656          RY  1074.5 1074.25 1074.00 1071.00 1071.10 1074.00 1074.25 1074.50
              *

8657          KK     W31BASIN
8658          KM        BASIN BOUNDARY FROM 1990 TOPO
8659          BA   0.233
8660          LG    0.31    0.28    4.00    0.47       6
8661          UI       0      57     199     303     488     344     218      96      53      20
8662          UI      13       0       0       0       0       0       0       0       0       0
8663          UI       0       0       0       0       0       0       0       0       0       0
8664          UI       0       0       0       0       0       0       0       0       0       0
8665          UI       0       0       0       0       0       0       0       0       0       0
              *

8666          KK  W31W32ROUTE
8667          KM        Cross-section: Side slopes and width based
8668          KM        on aerial and topo / Manning's N Value:
8669          KM        earth w/ sparse trees and shrubs
8670          RS       3    FLOW
8671          RC   0.032   0.032   0.032    6659  0.0070    0.00
8672          RX  100.00  115.00  130.00  146.00  162.00  178.00  198.00  218.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8673          RY  1090.5 1090.25 1090.00 1087.00 1087.10 1090.00 1090.25 1090.50
              *

8674          KK     W32BASIN
8675          KM        BASIN BOUNDARY FROM 1990 TOPO
8676          BA   0.613
8677          LG    0.31    0.27    4.10    0.50      10
8678          UI       0      53      75     191     296     397     462     507     499     458
8679          UI     365     295     235     186     153     117      95      81      56      49
8680          UI      37      36      19      13      12      13      13      13      13       0
8681          UI       0       0       0       0       0       0       0       0       0       0
8682          UI       0       0       0       0       0       0       0       0       0       0
              *

8683          KK   OW37

8684          KM            Manual input of overflow from Jackrabbit Trail channel
8685          BA     0.1

8686          QI       0       0       0       0       0       0       0       0       0       0
8687          QI       0       0       0       0       0       0       0       0       0       0
8688          QI       0       0       0       0       0       0       0       0       0       0
8689          QI       0       0       0       0       0       0       0       0       0       0
8690          QI       0       0       0       0       0       0       0       0       0       0
8691          QI       0     167       0       0       0       0       0       0       0       0
8692          QI       0       0       0       0       0       0       0       0       0       0
8693          QI       0       0       0       0       0       0       0       0       0       0
8694          QI       0       0       0       0       0       0       0       0       0       0
8695          QI       0       0       0       0       0       0       0       0
              *

8696          KK   CPW32COMBINE
8697          HC       3   0.846
              *

8698          KK  DW32SEDIVERT
8699          KM        Diversion under I-10 at culvert
8700          DT   DW32S     0.0     0.0
8701          DI     0.0  1500.0  1842.0  2604.0  3698.0  5158.0     0.0     0.0     0.0     0.0
8702          DQ     0.0  1500.0  1524.0  1524.0  1534.6  1569.2     0.0     0.0     0.0     0.0
              *

8703          KK  W32L65ROUTE
8704          KM        Cross-section: Natural Desert Wash w/ vegatation
8705          RS       1    FLOW
8706          RC   0.035   0.035   0.035    1714  0.0047    0.00
8707          RX  100.00  150.00  200.00  285.00  313.00  316.00  318.00  319.00
8708          RY  1050.0 1049.50 1049.00 1048.00 1048.00 1049.00 1049.50 1050.00
              *

8709          KK     L65BASIN
8710          KM        BASIN BOUNDARY FROM 1990 TOPO
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8711          BA   0.545
8712          LG    0.42    0.27    4.10    0.63       6
8713          UI       0      39      40      79     150     231     231     303     338     331
8714          UI     332     289     291     251     218     192     150     118     120      80
8715          UI      68      56      49      40      36      30      23      22      23      10
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8716          UI       4       5       5       5       5       5       5       5       5       5
8717          UI       5       5       5       5       5       5       0       0       0       0
              *

8718          KK   CPL65COMBINE
8719          HC       3   4.288
              *

8720          KK  L65S34ROUTE
8721          KM        Cross-section: ROW V-Ditch, assumed 3' depth
8722          KM        width based on aerial / Manning's N Value:
8723          KM        street  ROW and clean w sparse trees/brush
8724          RS       2    FLOW
8725          RC   0.016   0.032   0.032    4295  0.0072    0.00
8726          RX  100.00  112.00  122.00  134.00  142.00  154.00  174.00  194.00
8727          RY  1025.0 1024.25 1024.00 1021.00 1021.10 1024.00 1024.25 1025.00
              *

8728          KK  DW32SERETRIEVE
8729          DR   DW32S
              *

8730          KK  W32S34ROUTE
8731          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8732          KM        width based on aerial / Manning's N Value: clean straight earth
8733          RS       3    FLOW
8734          RC   0.022   0.022   0.022    6007  0.0065    0.00
8735          RX  100.00  120.00  140.00  152.00  156.00  168.00  183.00  198.00
8736          RY  1043.0 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1043.00
              *

8737          KK     S34BASIN
8738          KM        BASIN BOUNDARY FROM 1990 TOPO
8739          BA   0.906
8740          LG    0.37    0.26    4.55    0.44      12
8741          UI       0      71      77     250     336     405     475     577     803     860
8742          UI     673     570     469     385     317     205     125     117      79      72
8743          UI      29      22      21      22      22      22       0       0       0       0
8744          UI       0       0       0       0       0       0       0       0       0       0
8745          UI       0       0       0       0       0       0       0       0       0       0
              *

8746          KK   CPS34COMBINE
8747          HC       3   5.194
              *

8748          KK  DS34SEDIVERT
8749          KM        Van Buren at Perryville split flow
8750          DT   DS34S     0.0     0.0
8751          DI     0.0   693.9  1872.9  4178.4  7379.2     0.0     0.0     0.0     0.0     0.0
8752          DQ     0.0   360.6  1020.0  2351.2  4235.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8753          KK  S34S44ROUTE
8754          KM        Cross-section: Ag field, assumed 0.5% side slopes
8755          KM        V-ditch / Manning's N Value: avg value for cultivated
8756          KM        areas from Estimated Manning's Roughness Coefficient
8757          KM        for Stream Channels and Flood Plains in MC
8758          RS       1    FLOW
8759          RC   0.038   0.038   0.038    1378  0.0058    0.00
8760          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8761          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8762          KK     L66BASIN
8763          KM        BASIN BOUNDARY FROM 1990 TOPO
8764          BA   0.998
8765          LG    0.44    0.25    4.45    0.55       4
8766          UI       0      47      47      47      82     108     180     244     288     261
8767          UI     372     338     394     393     393     394     373     331     326     357
8768          UI     295     247     271     226     180     170     141     130     150      97
8769          UI      87      75      74      58      58      51      42      43      43      29
8770          UI      26      27      27      26      26       6       6       6       6       5
              *

8771          KK   DL601RETRIEVE
8772          DR  DL601S
              *

8773          KK  L60L66ROUTE
8774          KM        Cross-section: Ag field, assumed 0.5% side slopes
8775          KM        V-ditch / Manning's N Value: avg value for cultivated
8776          KM        areas from Estimated Manning's Roughness Coefficient
8777          KM        for Stream Channels and Flood Plains in MC
8778          RS       9    FLOW
8779          RC   0.038   0.038   0.038    5281  0.0053    0.00
8780          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8781          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8782          KK   CPL66COMBINE
8783          HC       2   8.498
              *

8784          KK  L66L71ROUTE
8785          KM        Cross-section: assumed 3' depth, width based on aerial
8786          KM        Manning's N Value: clean earth; straight; street LOB
8787          RS       1    FLOW
8788          RC   0.016   0.022   0.022    1163  0.0043    0.00
8789          RX  100.00  108.00  116.00  124.00  130.00  138.00  158.00  178.00
8790          RY  1027.0 1026.10 1026.00 1024.00 1024.40 1026.00 1026.25 1027.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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8791          KK     L71BASIN
8792          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
8793          BA   0.108
8794          LG    0.19    0.25    4.65    0.41      49
8795          UI       0      98     314     286     101      26      11       0       0       0
8796          UI       0       0       0       0       0       0       0       0       0       0
8797          UI       0       0       0       0       0       0       0       0       0       0
8798          UI       0       0       0       0       0       0       0       0       0       0
8799          UI       0       0       0       0       0       0       0       0       0       0
              *

8800          KK  DL71REDIVERT
8801          KM        Arizona Storage Preliminary Drainage Report
8802          DT    RL71     1.4     0.0
8803          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8804          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8805          KK   CPL71COMBINE
8806          HC       2   8.606
              *

8807          KK  L71S35ROUTE
8808          KM        Cross-section: Ag field, assumed 0.5% side slopes
8809          KM        V-ditch / Manning's N Value: avg value for cultivated
8810          KM        areas from Estimated Manning's Roughness Coefficient
8811          KM        for Stream Channels and Flood Plains in MC
8812          RS       7    FLOW
8813          RC   0.038   0.038   0.038    5048  0.0036    0.00
8814          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8815          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8816          KK     L69BASIN
8817          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
8818          BA   0.058
8819          LG    0.14    0.25    4.15    0.60      61
8820          UI       0     110     258      70      10       0       0       0       0       0
8821          UI       0       0       0       0       0       0       0       0       0       0
8822          UI       0       0       0       0       0       0       0       0       0       0
8823          UI       0       0       0       0       0       0       0       0       0       0
8824          UI       0       0       0       0       0       0       0       0       0       0
              *

8825          KK   SRL69STORAGE
8826          KM        Storage behind I-10
8827          KO
8828          RS       1    STOR
8829          SV            3.47   10.56   14.12   23.26
8830          SQ          100.00  188.00  244.00 1303.00
8831          SE  1037.6 1040.00 1041.50 1042.00 1043.00
8832          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8833          KK  L69S35ROUTE
8834          KM        Cross-section: Ag field, assumed 0.5% side slopes
8835          KM        V-ditch / Manning's N Value: avg value for cultivated
8836          KM        areas from Estimated Manning's Roughness Coefficient
8837          KM        for Stream Channels and Flood Plains in MC
8838          RS      11    FLOW
8839          RC   0.038   0.038   0.038    4541  0.0070    0.00
8840          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8841          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8842          KK     L70BASIN
8843          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
8844          BA   0.048
8845          LG    0.15    0.25    4.45    0.50      59
8846          UI       0     119     217      31       0       0       0       0       0       0
8847          UI       0       0       0       0       0       0       0       0       0       0
8848          UI       0       0       0       0       0       0       0       0       0       0
8849          UI       0       0       0       0       0       0       0       0       0       0
8850          UI       0       0       0       0       0       0       0       0       0       0
              *

8851          KK   SRL70STORAGE
8852          KM        Storage behind I-10
8853          KO
8854          RS       1    STOR
8855          SV            0.23    1.37    1.97    4.62
8856          SQ           18.00   75.00  115.00 1063.00
8857          SE  1032.9 1034.00 1035.50 1036.00 1037.00
8858          ST
              *

8859          KK  L70S35ROUTE
8860          KM        Cross-section: Ag field, assumed 0.5% side slopes
8861          KM        V-ditch / Manning's N Value: avg value for cultivated
8862          KM        areas from Estimated Manning's Roughness Coefficient
8863          KM        for Stream Channels and Flood Plains in MC
8864          RS      10    FLOW
8865          RC   0.038   0.038   0.038    4125  0.0068    0.00
8866          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8867          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8868          KK     S35BASIN
8869          KM        ROUTING FROM I-10 CULVERT WASH LOMR STUDY, FCDMC
8870          BA   0.743
8871          LG    0.41    0.25    4.55    0.48       9
8872          UI       0      69     117     274     437     561     636     668     625     514
8873          UI     404     321     248     196     149     120      96      74      53      47
8874          UI      37      16      17      17      17      17      17       0       0       0
8875          UI       0       0       0       0       0       0       0       0       0       0
8876          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8877          KK   CPS35COMBINE
8878          HC       4   9.455
              *
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8879          KK  S35S44ROUTE
8880          KM        Cross-section:. Clean straight earth
8881          RS       6    FLOW
8882          RC   0.022   0.022   0.022    3189  0.0006    0.00
8883          RX  100.00  101.00  102.00  384.00  562.00  580.00  581.00  582.00
8884          RY  1006.0 1005.00 1004.50 1004.00 1003.90 1004.50 1005.00 1006.00
              *

8885          KK     S44BASIN
8886          KM        BASIN BOUNDARY FROM 1990 TOPO, I-10 CULVERT WASH FDS
8887          BA   0.078
8888          LG    0.32    0.26    4.80    0.34       6
8889          UI       0      20      70     106     166     113      71      29      16       5
8890          UI       5       0       0       0       0       0       0       0       0       0
8891          UI       0       0       0       0       0       0       0       0       0       0
8892          UI       0       0       0       0       0       0       0       0       0       0
8893          UI       0       0       0       0       0       0       0       0       0       0
              *

8894          KK   CPS44COMBINE
8895          HC       3   14.23
              *

8896          KK   SRS44STORAGE
8897          KM        Storage behind canal (I-10 Culvert Wash)
8898          KO
8899          RS       1    STOR
8900          SV           12.20   42.30   67.40  241.40
8901          SQ                          420.00 1290.00
8902          SE  1007.5 1009.00 1010.00 1011.00 1012.00
8903          ST
              *

8904          KK  S44S45ROUTE
8905          KM        Cross-section: Estimated 2' deep and 3:1 side
8906          KM        slopes, width based on aerial / Manning's N
8907          KM        Value: clean straight earth
8908          RS      12    FLOW
8909          RC   0.022   0.022   0.022    5749  0.0002    0.00
8910          RX  100.00  106.00  112.00  118.00  120.00  126.00  146.00  366.00
8911          RY  1005.0 1003.90 1003.00  997.00  997.10 1001.00 1002.00 1005.00
              *

8912          KK  DS34SERETRIEVE
8913          DR   DS34S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8914          KK  S34S45ROUTE
8915          KM        Cross-section: Estimated 3' deep and 4:1
8916          KM        side slopes, width based on aerial / Manning's
8917          KM        N Value: clean straight earth
8918          RS       3    FLOW
8919          RC   0.022   0.022   0.022    7089  0.0013    0.00
8920          RX  100.00  101.00  106.00  112.00  122.00  128.00  130.00  134.00
8921          RY  1004.0 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1004.00
              *

8922          KK     S45BASIN
8923          KM        BLUE HORIZONS
8924          BA   0.490
8925          LG    0.10    0.24    4.60    0.53       5
8926          UI       0      73     277     422     616     847     591     419     257     124
8927          UI      78      33      22      22       0       0       0       0       0       0
8928          UI       0       0       0       0       0       0       0       0       0       0
8929          UI       0       0       0       0       0       0       0       0       0       0
8930          UI       0       0       0       0       0       0       0       0       0       0
              *

8931          KK  DS45REDIVERT
8932          KM        Final Drainage Report for Vista De Montana
8933          DT    RS45     52.0     0.0
8934          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8935          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8936          KK   CPS45COMBINE
8937          HC       3   14.72
              *

8938          KK  S45S46ROUTE
8939          KM        Cross-section: Estimated 3' deep and 4:1 side
8940          KM        slopes, width based on aerial / Manning's N
8941          KM        Value: clean straight earth
8942          RS       2    FLOW
8943          RC   0.022   0.022   0.022    1537  0.0010    0.00
8944          RX  100.00  108.00  116.00  128.00  134.00  146.00  166.00  286.00
8945          RY  1005.5 1004.25 1004.00 1001.00 1001.10 1002.00 1003.00 1005.50
              *

8946          KK     S46BASIN
8947          KM        BLUE HORIZONS
8948          BA   0.904
8949          LG    0.10    0.25    3.95    0.40       5
8950          UI       0     204     733    1101    1802    1378     895     440     229     104
8951          UI      49      49       0       0       0       0       0       0       0       0
8952          UI       0       0       0       0       0       0       0       0       0       0
8953          UI       0       0       0       0       0       0       0       0       0       0
8954          UI       0       0       0       0       0       0       0       0       0       0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8955          KK  DS46REDIVERT
8956          KM        Final Drainage Report for Blue Horizons Phase 1
8957          KM        (100-year, 6-hour)
8958          DT    RS46     64.6     0.0
8959          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8960          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8961          KK   CPS46COMBINE
8962          HC       2  15.624
              *
```

```
8963          KK   SRS46STORAGE
8964          KM        Storage behind canal (WLB) Blue Horizons basins
8965          KO
8966          RS       1    STOR
8967          SV            0.32     4.52   15.06   24.62
8968          SQ                             845.00 4777.00
8969          SE  1001.5 1002.00 1003.00 1004.00 1004.50
8970          ST
              *

8971          KK  S46S47ROUTE
8972          KM        Cross-section: Ag field, assumed 0.5% side slopes
8973          KM        V-ditch / Manning's N Value: avg value for cultivated
8974          KM        areas from Estimated Manning's Roughness Coefficient
8975          KM        for Stream Channels and Flood Plains in MC
8976          RS      31    FLOW
8977          RC   0.038   0.038   0.038    7068  0.0059    0.00
8978          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8979          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

8980          KK     S47BASIN
8981          KM        BASIN BOUNDARY FROM 1990 TOPO
8982          BA   0.477
8983          LG    0.45    0.25    4.10    0.63       3
8984          UI       0      31      30      51      82     148     179     190     237     256
8985          UI     256     261     233     214     233     175     168     148     117      96
8986          UI      89      81      56      50      42      38      31      28      27      17
8987          UI      18      17      18       6       4       4       4       3       4       4
8988          UI       4       4       4       3       4       4       4       4       4       3
              *

8989          KK   CPS47COMBINE
8990          HC       2  16.101
              *

8991          KK  S47S48ROUTE
8992          KM        Cross-section: Estimated 2' deep and 4:1 side
8993          KM        slopes, width based on aerial / Manning's N
8994          KM        Value: clean straight earth, street LOB
8995          RS      25    FLOW
8996          RC   0.016   0.022   0.022    5291  0.0076    0.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8997          RX  100.00  108.00  116.00  122.00  126.00  132.00  152.00  272.00
8998          RY  951.00  950.50  950.00  948.00  948.10  949.00  949.50  951.00
              *

8999          KK     S48BASIN
9000          KM        BASIN BOUNDARY FROM 1990 TOPO
9001          BA   0.359
9002          LG    0.35    0.25    4.30    0.53      11
9003          UI       0      38      62     156     225     297     322     316     274     249
9004          UI     205     147     112      90      65      47      37      32      22      21
9005          UI      10       5       5       5       5       4       5       5       5       5
9006          UI       5       0       0       0       0       0       0       0       0       0
9007          UI       0       0       0       0       0       0       0       0       0       0
              *

9008          KK   CPS48COMBINE
9009          HC       2   16.46
              *

9010          KK   DS48SDIVERT
9011          KM        Broadway at Jackrabbit Trail split flow
9012          DI   DS48S     0.0     0.0
9013          DI     0.0  1258.3  3015.3  5339.9  8214.3     0.0     0.0     0.0     0.0     0.0
9014          DQ     0.0     4.3    62.7   189.5   448.6     0.0     0.0     0.0     0.0     0.0
              *

9015          KK  S48S50ROUTE
9016          KM        Cross-section: Ag field, assumed 0.5% side slopes
9017          KM        V-ditch / Manning's N Value: avg value for cultivated
9018          KM        areas from Estimated Manning's Roughness Coefficient
9019          KM        for Stream Channels and Flood Plains in MC
9020          RS       5    FLOW
9021          RC   0.038   0.038   0.038    4341  0.0058    0.00
9022          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9023          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9024          KK     S49BASIN
9025          KM        BASIN BOUNDARY FROM 1990 TOPO
9026          BA   0.376
9027          LG    0.50    0.25    4.65    0.49       0
9028          UI       0      22      23      32      51      95     132     118     177     167
9029          UI     186     191     186     170     158     167     134     122     119      86
9030          UI      79      64      68      50      40      36      29      27      23      20
9031          UI      20      14      13      12      13      10       3       2       3       3
9032          UI       3       3       3       2       3       3       3       3       3       2
              *

9033          KK  S49S50ROUTE
9034          KM        Cross-section: Ag field, assumed 0.5% side slopes
9035          KM        V-ditch / Manning's N Value: avg value for cultivated
9036          KM        areas from Estimated Manning's Roughness Coefficient
9037          KM        for Stream Channels and Flood Plains in MC
9038          RS       6    FLOW
9039          RC   0.038   0.038   0.038    3542  0.0062    0.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9040          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9041          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9042          KK     S50BASIN
9043          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9044          BA   0.307
9045          LG    0.48    0.25    4.70    0.46       2
9046          UI       0      21      22      38      66     119     116     160     167     177
9047          UI     177     171     147     159     123     118      95      79      63      63
9048          UI      46      36      31      27      23      19      19      12      12      12
9049          UI      12       3       2       3       3       2       3       2       3       3
9050          UI       2       3       2       3       3       2       3       3       0       0
              *
```

```
9051          KK   CPS50COMBINE
9052          HC       3  17.143
              *

9053          KK   SRS50STORAGE
9054          KM        Storage behind UPRR (WLB)
9055          KO
9056          RS       1    STOR
9057          SV            0.24   17.91   40.51
9058          SQ           74.00  252.00 1465.00
9059          SE  887.00  891.90  895.00  896.00
9060          ST
              *

9061          KK  S50S51ROUTE
9062          KM        Cross-section: Estimated 3' deep and 4:1 side
9063          KM        slopes, width based on aerial / Manning's N
9064          KM        Value: earth w/ sparse trees and shrubs
9065          RS       1    FLOW
9066          RC   0.032   0.032   0.032     296  0.0068    0.00
9067          RX  100.00  106.00  112.00  125.00  146.00  156.00  200.00  203.00
9068          RY  894.20  894.10  894.00  886.00  886.10  894.00  894.10  894.20
              *

9069          KK     S36BASIN
9070          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
9071          KM        DRAINING TO CULVERT UNDER I-10
9072          BA   0.291
9073          LG    0.29    0.25    4.35    0.57      19
9074          UI       0      28      51     122     184     237     266     269     248     190
9075          UI     149     117      90      69      55      43      30      25      20      16
9076          UI       7       7       7       7       7       7       0       0       0       0
9077          UI       0       0       0       0       0       0       0       0       0       0
9078          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE230

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9079          KK  DS36REDIVERT
9080          KM        Master Drainage Report for Cotton Lane RV and Golf Resort
9081          DT    RS36   106.2     0.0
9082          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9083          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9084          KK   SRS36STORAGE
9085          KM        Borrow pit (WLB)
9086          KO
9087          RS       1    STOR
9088          SV            6.32   19.56  300.91  635.31  899.95  942.11  979.46
9089          SQ                                             715.00 2198.00
9090          SE  970.40  972.00  980.00  990.00 1000.00 1007.00 1008.00 1008.80
9091          ST
              *

9092          KK  S36S37ROUTE
9093          KM        Cross-section: Ag field, assumed 0.5% side slopes
9094          KM        V-ditch / Manning's N Value: avg value for cultivated
9095          KM        areas from Estimated Manning's Roughness Coefficient
9096          KM        for Stream Channels and Flood Plains in MC
9097          RS       1    FLOW
9098          RC   0.038   0.038   0.038    6104  0.0059    0.00
9099          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9100          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9101          KK     S37BASIN
9102          KM        BASIN BOUNDARY FROM 1990 TOPO
9103          BA   1.030
9104          LG    0.44    0.26    4.65    0.45       4
9105          UI       0      75      76     146     278     435     432     567     634     628
9106          UI     626     544     549     481     410     367     286     224     223     158
9107          UI     129     109      92      77      68      58      43      43      42      23
9108          UI       9       9      10       9       9      10       9       9      10       9
9109          UI       9      10       9       9      10       9       0       0       0       0
              *

9110          KK   CPS37COMBINE
9111          HC       2   1.321
              *

9112          KK  S37S38ROUTE
9113          KM        Cross-section: Ag field, assumed 0.5% side slopes
9114          KM        V-ditch / Manning's N Value: avg value for cultivated
9115          KM        areas from Estimated Manning's Roughness Coefficient
9116          KM        for Stream Channels and Flood Plains in MC
9117          RS       7    FLOW
9118          RC   0.038   0.038   0.038    5485  0.0062    0.00
9119          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9120          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE231

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9121          KK     S38BASIN
9122          KM        BASIN BOUNDARY FROM 1990 TOPO
9123          BA   0.778
9124          LG    0.48    0.25    4.70    0.45       2
9125          UI       0      51      52      90     148     265     299     360     401     435
9126          UI     429     440     368     376     357     271     287     205     178     147
9127          UI     156      98      85      75      63      54      48      47      29      29
9128          UI      29      30       8       6       7       6       7       6       7       6
9129          UI       7       6       7       6       7       6       7       6       7       6
              *

9130          KK   CPS38COMBINE
9131          HC       2   2.099
              *

9132          KK  S38S39ROUTE
9133          KM        Cross-section: Ag field, assumed 0.5% side slopes
9134          KM        V-ditch / Manning's N Value: avg value for cultivated
9135          KM        areas from Estimated Manning's Roughness Coefficient
9136          KM        for Stream Channels and Flood Plains in MC
9137          RS       6    FLOW
9138          RC   0.038   0.038   0.038    5289  0.0061    0.00
```

```
9139          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9140          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9141          KK     S39BASIN
9142          KM        BASIN BOUNDARY FROM 1990 TOPO
9143          BA   0.597
9144          LG    0.50    0.25    4.70    0.47       0
9145          UI       0      33      34      44      71     130     185     192     222     264
9146          UI     280     288     284     285     238     238     263     181     184     173
9147          UI     133     115      98     104      77      61      55      47      42      38
9148          UI      30      31      26      19      20      19      19      11       4       4
9149          UI       4       4       5       4       4       4       4       5       4       4
              *

9150          KK   CPS39COMBINE
9151          HC       2   2.696
              *

9152          KK  S39S43ROUTE
9153          KM        Cross-section: Ag field, assumed 0.5% side slopes
9154          KM        V-ditch / Manning's N Value: avg value for cultivated
9155          KM        areas from Estimated Manning's Roughness Coefficient
9156          KM        for Stream Channels and Flood Plains in MC
9157          RS       8    FLOW
9158          RC   0.038   0.038   0.038    5424  0.0029    0.00
9159          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9160          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                                    PAGE232

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9161          KK     S40BASIN
9162          KM        BASIN BOUNDARY FROM 1990 TOPO
9163          BA   0.512
9164          LG    0.49    0.25    4.70    0.46       0
9165          UI       0      36      37      70     128     212     205     268     309     307
9166          UI     305     276     260     257     195     196     143     120     106      93
9167          UI      66      60      44      42      33      34      22      21      21      20
9168          UI       5       4       5       4       5       5       4       5       4       5
9169          UI       4       5       4       5       4       5       5       0       0       0
              *

9170          KK  S40S41ROUTE
9171          KM        Cross-section: Ag field, assumed 0.5% side slopes
9172          KM        V-ditch / Manning's N Value: avg value for cultivated
9173          KM        areas from Estimated Manning's Roughness Coefficient
9174          KM        for Stream Channels and Flood Plains in MC
9175          RS       8    FLOW
9176          RC   0.038   0.038   0.038    5301  0.0070    0.00
9177          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9178          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9179          KK     S41BASIN
9180          KM        BASIN BOUNDARY FROM 1990 TOPO AND COTTONWOOD UNIT 1 - FINAL DRAINAGE
9181          KM        REPORT (3RD REVIEW) DATED 12/7/05 BY DEA
9182          BA   1.003
9183          LG    0.49    0.25    4.65    0.47       0
9184          UI       0      52      53      55     111     160     256     316     293     417
9185          UI     381     445     440     444     445     371     365     404     320     275
9186          UI     316     212     200     167     150     165     110      95      85      76
9187          UI      64      63      49      48      48      32      30      30      30      30
9188          UI      13       7       7       6       7       6       7       7       6       7
              *

9189          KK   CPS41COMBINE
9190          HC       2   1.515
              *

9191          KK  S41S42ROUTE
9192          KM        Cross-section: Ag field, assumed 0.5% side slopes
9193          KM        V-ditch / Manning's N Value: avg value for cultivated
9194          KM        areas from Estimated Manning's Roughness Coefficient
9195          KM        for Stream Channels and Flood Plains in MC
9196          RS       6    FLOW
9197          RC   0.038   0.038   0.038    5312  0.0064    0.00
9198          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9199          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                          HEC-1 INPUT                                                    PAGE233

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9200          KK     S42BASIN
9201          KM        BASIN BOUNDARY FROM 1990 TOPO
9202          BA   0.508
9203          LG    0.49    0.25    4.60    0.50       1
9204          UI       0      32      31      49      80     144     185     184     237     261
9205          UI     264     267     259     221     236     211     163     184     125     114
9206          UI      93      95      71      57      50      40      40      30      29      27
9207          UI      18      18      18      17       8       4       4       4       4       4
9208          UI       4       4       4       4       4       3       4       4       4       4
              *

9209          KK   CPS42COMBINE
9210          HC       2   2.023
              *

9211          KK  S42S43ROUTE
9212          KM        Cross-section: Ag field, assumed 0.5% side slopes
9213          KM        V-ditch / Manning's N Value: avg value for cultivated
9214          KM        areas from Estimated Manning's Roughness Coefficient
9215          KM        for Stream Channels and Flood Plains in MC
9216          RS       4    FLOW
9217          RC   0.038   0.038   0.038    3069  0.0039    0.00
9218          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9219          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9220          KK     S43BASIN
9221          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9222          BA   0.347
9223          LG    0.48    0.25    4.80    0.44       2
9224          UI       0      23      22      37      62     111     131     142     178     188
9225          UI     188     190     169     156     178     117     127     101      85      66
9226          UI      67      54      40      36      29      28      21      21      17      13
```

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9227          UI      13      12      11       3       3       3       3       2       3       3
9228          UI       3       3       3       2       3       3       3       3       3       2
              *

9229          KK   CPS43COMBINE
9230          HC       3   5.066
              *

9231          KK   SRS43STORAGE
9232          KM        Storage behind UPRR (WLB)
9233          KO
9234          RS       1    STOR
9235          SV            0.22   18.80   41.67   62.23   82.48
9236          SQ           24.00   57.00   67.00  798.00 3073.00
9237          SE  894.50  896.00  898.00  898.90  899.50  900.00
9238          ST
              *
1                                        HEC-1 INPUT                                                    PAGE234

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9239          KK  S43S51ROUTE
9240          KM        Cross-section: Ag field, assumed 0.5% side slopes
9241          KM        V-ditch / Manning's N Value: avg value for cultivated
9242          KM        areas from Estimated Manning's Roughness Coefficient
9243          KM        for Stream Channels and Flood Plains in MC
9244          RS       8    FLOW
9245          RC   0.038   0.038   0.038    3220  0.0006    0.00
9246          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9247          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9248          KK     S28BASIN
9249          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
9250          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
9251          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
9252          BA   0.136
9253          LG    0.14    0.26    4.45    0.55       6
9254          UI       0     232     585     199      30       0       0       0       0       0
9255          UI       0       0       0       0       0       0       0       0       0       0
9256          UI       0       0       0       0       0       0       0       0       0       0
9257          UI       0       0       0       0       0       0       0       0       0       0
9258          UI       0       0       0       0       0       0       0       0       0       0
              *

9259          KK  DS28REDIVERT
9260          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel G
9261          DT    RS28    10.6     0.0
9262          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9263          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9264          KK  S28S29ROUTE
9265          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
9266          KM        width based on aerial / Manning's N Value: clean straight earth
9267          RS       1    FLOW
9268          RC   0.022   0.022   0.022    5299  0.0070    0.00
9269          RX  100.00  140.00  180.00  192.00  193.00  205.00  225.00  245.00
9270          RY  958.50  958.25  958.00  956.00  956.10  958.00  958.10  958.20
              *

9271          KK     S29BASIN
9272          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9273          BA   0.623
9274          LG    0.43    0.25    4.65    0.44       5
9275          UI       0      46      47      94     184     272     282     361     393     389
9276          UI     383     328     346     264     271     187     163     134     130      85
9277          UI      76      58      53      43      42      27      26      27      19       6
9278          UI       6       5       6       6       6       5       6       6       6       6
9279          UI       5       6       6       6       5       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                                    PAGE235

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9280          KK   CPS29COMBINE
9281          HC       2   0.759
              *

9282          KK  S29S30ROUTE
9283          KM        Cross-section: Estimated 2' deep and 4:1 side
9284          KM        slopes, width based on aerial / Manning's N
9285          KM        Value: clean straight earth, street LOB
9286          RS       3    FLOW
9287          RC   0.016   0.022   0.022    5305  0.0066    0.00
9288          RX  100.00  120.00  140.00  152.00  156.00  168.00  208.00  248.00
9289          RY  932.50  932.25  932.00  930.00  930.10  932.00  932.25  932.50
              *

9290          KK     S30BASIN
9291          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9292          BA   0.465
9293          LG    0.49    0.25    4.60    0.50       2
9294          UI       0      28      29      43      70     129     165     162     217     229
9295          UI     238     242     239     200     207     208     148     166     122     108
9296          UI      86      82      75      54      46      39      36      30      26      26
9297          UI      19      16      16      17      12       4       3       4       3       4
9298          UI       3       4       4       3       4       3       4       3       4       3
              *

9299          KK   CPS30COMBINE
9300          HC       2   1.224
              *

9301          KK  S30S32ROUTE
9302          KM        Cross-section: Ag field, assumed 0.5% side slopes
9303          KM        V-ditch / Manning's N Value: avg value for cultivated
9304          KM        areas from Estimated Manning's Roughness Coefficient
9305          KM        for Stream Channels and Flood Plains in MC
9306          RS       3    FLOW
9307          RC   0.038   0.038   0.038    1375  0.0015    0.00
9308          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9309          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9310          KK     S31BASIN
9311          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9312          BA   0.440
```

```
9313          LG    0.49    0.25    4.55    0.51       1
9314          UI       0      29      30      52      86     154     169     215     225     249
9315          UI     246     249     206     218     195     155     158     116      96      84
9316          UI      84      56      47      40      37      28      27      24      17      17
9317          UI      17      14       3       4       4       3       4       4       3       4
9318          UI       4       4       3       4       4       3       4       4       3       4
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9319          KK  S31S32ROUTE
9320          KM        Cross-section: Ag field, assumed 0.5% side slopes
9321          KM        V-ditch / Manning's N Value: avg value for cultivated
9322          KM        areas from Estimated Manning's Roughness Coefficient
9323          KM        for Stream Channels and Flood Plains in MC
9324          RS       3    FLOW
9325          RC   0.038   0.038   0.038    1375  0.0015    0.00
9326          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9327          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9328          KK     S32BASIN
9329          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9330          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
9331          BA   0.147
9332          LG    0.43    0.25    4.80    0.41       3
9333          UI       0      10      11      19      32      58      56      77      82      86
9334          UI      85      80      72      77      57      58      43      37      30      32
9335          UI      19      17      15      12      11       9       9       6       6       6
9336          UI       4       2       1       1       1       1       2       1       1       1
9337          UI       2       1       1       1       2       1       1       1       0       0
              *

9338          KK   CPS32COMBINE
9339          HC       3   1.811
              *

9340          KK     S26BASIN
9341          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9342          BA   0.428
9343          LG    0.41    0.25    4.60    0.50      12
9344          UI       0      28      29      50      81     145     167     201     221     237
9345          UI     239     242     201     208     194     149     159     113      96      80
9346          UI      86      54      46      41      36      29      26      25      16      16
9347          UI      17      16       3       4       4       3       4       3       4       3
9348          UI       4       3       4       3       4       4       3       4       3       4
              *

9349          KK  DS26REDIVERT
9350          KM        Retention volume estimated based on aerial
9351          DT    RS26     8.5     0.0
9352          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9353          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9354          KK  DS21SERETRIEVE
9355          DR   DS21S
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9356          KK  S21S26ROUTE
9357          KM        Cross-section: Side slopes and width based
9358          KM        on aerial and topo / Manning's N Value: earth
9359          KM        w/ sparse trees and shrubs, parking lot ROB
9360          RS       4    FLOW
9361          RC   0.032   0.032   0.016    3015  0.0017    0.00
9362          RX  100.00  105.00  110.00  200.00  287.00  334.00  734.00  735.00
9363          RY  912.00  911.00  910.00  906.00  906.10  910.00  911.90  912.00
              *

9364          KK   CPS26COMBINE
9365          HC       2   41.75
              *

9366          KK  DS26SEDIVERT
9367          KM        175th alignment at RR tracks split flow
9368          DT   DS26S     0.0     0.0
9369          DI     0.0    37.5   197.1   950.1  2315.7     0.0     0.0     0.0     0.0     0.0
9370          DQ     0.0     0.0     0.0   231.5   781.2     0.0     0.0     0.0     0.0     0.0
              *

9371          KK  S26S27ROUTE
9372          KM        Cross-section: Based on aerial and topo
9373          KM        Manning's N Value: clean earth; straight;
9374          KM        earth w/ sparse trees and shrubs LOB and ROB
9375          RS       2    FLOW
9376          RC   0.035   0.022   0.035    2621  0.0031    0.00
9377          RX  100.00  110.00  120.00  130.00  295.00  575.00  585.00  595.00
9378          RY  906.00  905.50  905.00  904.00  904.10  905.80  905.90  906.00
              *

9379          KK     S27BASIN
9380          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9381          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
9382          BA   0.109
9383          LG    0.50    0.25    4.80    0.45       0
9384          UI       0      10      12      26      53      57      75      82      81      72
9385          UI      70      58      53      38      30      28      18      15      12       9
9386          UI       9       6       6       5       3       1       1       2       1       1
9387          UI       1       1       2       1       1       1       1       2       0       0
9388          UI       0       0       0       0       0       0       0       0       0       0
              *

9389          KK   CPS27COMBINE
9390          HC       2  41.859
              *

9391          KK  CP3227COMBINE
9392          HC       2   43.67
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
9393          KK  SR3227STORAGE
9394          KM        Storage Route at UPRR
9395          KO
9396          RS       1    STOR
9397          SV            0.17   40.13  133.48  154.54  192.63
9398          SQ           90.00  120.00  242.00  937.00 1741.00
9399          SE  894.50  898.00  900.00  901.70  902.00  902.50
9400          ST
              *

9401          KK  S32S33ROUTE
9402          KM        Cross-section: Ag field, assumed 0.5% side slopes
9403          KM        V-ditch / Manning's N Value: avg value for cultivated
9404          KM        areas from Estimated Manning's Roughness Coefficient
9405          KM        for Stream Channels and Flood Plains in MC
9406          RS      15    FLOW
9407          RC   0.038   0.038   0.038    5578  0.0011    0.00
9408          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9409          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9410          KK     S33BASIN
9411          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9412          KM        SOUTHERN BOUNDARY IS BOUNDED BY BUCKEYE CANAL
9413          BA   0.422
9414          LG    0.46    0.25    6.20    0.24       4
9415          UI       0      15      15      16      15      28      32      47      66      80
9416          UI      97      81      96     127     104     129     127     130     128     128
9417          UI     130     113     107     109     116     118      82      81      84      91
9418          UI      63      58      59      47      44      43      50      37      29      28
9419          UI      25      25      20      19      19      18      13      14      14      14
              *

9420          KK  DS26SERETRIEVE
9421          DR   DS26S
              *

9422          KK  S26S33ROUTE
9423          KM        Ag field, assumed 0.5% side slopes, V-ditch
9424          KM        Manning's N Value: avg value for cultivated areas from
9425          KM        Estimated Manning's Roughness Coefficient for
9426          KM        Stream Channels and Flood Plains in MC
9427          RS      40    FLOW
9428          RC   0.038   0.038   0.038    8161  0.0011    0.00
9429          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9430          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9431          KK   CPS33COMBINE
9432          HC       3  44.092
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9433          KK  S33S51ROUTE
9434          KM        Cross-section: Ag field, assumed 0.5% side slopes
9435          KM        V-ditch / Manning's N Value: avg value for cultivated
9436          KM        areas from Estimated Manning's Roughness Coefficient
9437          KM        for Stream Channels and Flood Plains in MC
9438          RS      31    FLOW
9439          RC   0.038   0.038   0.038    3874  0.0005    0.00
9440          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9441          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9442          KK     S51BASIN
9443          KM        Boundary based on Aerial
9444          BA   0.124
9445          LG    0.46    0.17    6.80    0.19       6
9446          UI       0       8       9      15      28      47      48      63      68      72
9447          UI      72      68      60      64      49      49      38      32      25      26
9448          UI      18      14      13      11      10       7       8       5       5       4
9449          UI       5       1       1       1       1       1       1       1       1       2
9450          UI       1       1       1       1       1       1       1       1       0       0
              *

9451          KK   CPS51COMBINE
9452          HC       4  58.925
              *

9453          KK   SRS51STORAGE
9454          KM        Storage behind canal (WLB)
9455          KO
9456          RS       1    STOR
9457          SV            3.80   61.42   88.60  116.74  146.56  179.56
9458          SQ                           1011.00 3120.00 5732.00
9459          SE  890.20  892.00  894.00  894.50  895.00  895.50  899.00
9460          ST
              *

9461          KK  S51S54ROUTE
9462          KM        Cross-section: Ag field, assumed 0.5% side slopes
9463          KM        V-ditch / Manning's N Value: avg value for cultivated
9464          KM        areas from Estimated Manning's Roughness Coefficient
9465          KM        for Stream Channels and Flood Plains in MC
9466          RS       4    FLOW
9467          RC   0.038   0.038   0.038    2654  0.0018    0.00
9468          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9469          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9470          KK     S52BASIN
9471          KM        BASIN BOUNDARY FROM 1990 TOPO
9472          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
9473          BA   0.417
9474          LG    0.50    0.15    7.60    0.14       0
9475          UI       0      20      20      20      35      46      76     104     120     112
9476          UI     158     143     163     166     167     165     154     139     140     151
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9477          UI     117     103     116      89      75      70      58      55      63      37
9478          UI      36      31      30      24      24      20      18      18      18      11
9479          UI      12      11      11      11       9       2       3       2       3       2
              *

9480          KK  S52S54ROUTE
```

```
9481          KM        Cross-section: side slopes, width based on aerial
9482          KM        and topo / Manning's N Value: clean straight earth
9483          KM        ag field ROB
9484          RS       4    FLOW
9485          RC   0.022   0.022   0.038    2643  0.0015    0.00
9486          RX  100.00  115.00  130.00  135.00  145.00  367.00  802.00 1237.00
9487          RY  886.00  885.00  884.00  882.00  882.10  884.00  885.00  886.00
              *

9488          KK     S54BASIN
9489          KM        BASIN BOUNDARY FROM 1990 TOPO
9490          BA   0.419
9491          LG    0.47    0.20    6.40    0.23       1
9492          UI       0      45      72     180     260     347     372     369     319     293
9493          UI     240     174     128     108      75      55      45      38      25      25
9494          UI      13       6       6       5       6       5       6       6       5       6
9495          UI       5       6       0       0       0       0       0       0       0       0
9496          UI       0       0       0       0       0       0       0       0       0       0
              *

9497          KK   CPS54COMBINE
9498          HC       3  59.761
              *

9499          KK  S54S55ROUTE
9500          KM        Cross-section: Ag field, assumed 0.5% side slopes
9501          KM        V-ditch / Manning's N Value: avg value for cultivated
9502          KM        areas from Estimated Manning's Roughness Coefficient
9503          KM        for Stream Channels and Flood Plains in MC
9504          RS       8    FLOW
9505          RC   0.038   0.038   0.038    3902  0.0011    0.00
9506          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9507          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9508          KK     S53BASIN
9509          KM        BASIN BOUNDARY FROM 1990 TOPO
9510          BA   0.401
9511          LG    0.49    0.15    7.60    0.14       0
9512          UI       0      22      23      28      47      82     121     130     144     170
9513          UI     188     191     188     188     164     156     172     132     120     123
9514          UI      90      81      66      67      59      42      37      34      27      28
9515          UI      20      21      20      13      13      12      13      11       3       3
9516          UI       3       3       2       3       3       3       3       2       3       3
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9517          KK  S53S55ROUTE
9518          KM        Cross-section: Ag field, assumed 0.5% side slopes
9519          KM        V-ditch / Manning's N Value: avg value for cultivated
9520          KM        areas from Estimated Manning's Roughness Coefficient
9521          KM        for Stream Channels and Flood Plains in MC
9522          RS      12    FLOW
9523          RC   0.038   0.038   0.038    5277  0.0019    0.00
9524          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9525          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9526          KK     S55BASIN
9527          KM        BASIN BOUNDARY FROM 1990 TOPO
9528          BA   0.754
9529          LG    0.49    0.15    8.00    0.13       1
9530          UI       0      36      37      37      68      91     149     200     213     220
9531          UI     284     282     304     305     309     304     268     258     273     259
9532          UI     192     199     200     146     139     112     103     113      85      70
9533          UI      59      58      45      45      40      33      33      33      22      21
9534          UI      20      21      21      16       5       4       5       5       4       5
              *

9535          KK   CPS55COMBINE
9536          HC       3  60.916
              *

9537          KK  S55S74ROUTE
9538          KM        Cross-section: Ag field, assumed 0.5% side slopes
9539          KM        V-ditch / Manning's N Value: avg value for cultivated
9540          KM        areas from Estimated Manning's Roughness Coefficient
9541          KM        for Stream Channels and Flood Plains in MC
9542          RS      17    FLOW
9543          RC   0.038   0.038   0.038    8197  0.0010    0.00
9544          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9545          RY  1001.0  999.50  998.50  998.00  998.25  998.50  999.50 1001.00
              *

9546          KK     W59BASIN
9547          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN
9548          KM        WOOD/PATEL 2006, NEW 2' CI TOPO OBTAINED 2008
9549          BA   0.168
9550          LG    0.32    0.34    4.10    0.48      13
9551          UI       0     143     468     391     171      77      29      13       0       0
9552          UI       0       0       0       0       0       0       0       0       0       0
9553          UI       0       0       0       0       0       0       0       0       0       0
9554          UI       0       0       0       0       0       0       0       0       0       0
9555          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9556          KK  W59W60ROUTE
9557          KM        Cross-section: Estimated 2' deep and 4:1 side
9558          KM        slopes, width based on aerial / Manning's N
9559          KM        Value: earth w/ sparse trees and shrubs
9560          RS       1    FLOW
9561          RC   0.032   0.032   0.032     841  0.0006    0.00
9562          RX  100.00  102.00  104.00  112.00  122.00  130.00  140.00  300.00
9563          RY  1097.0 1096.25 1096.00 1094.00 1094.10 1096.00 1096.10 1097.00
              *

9564          KK     W61BASIN
9565          BA   0.389
9566          LG    0.33    0.34    4.15    0.46       6
9567          UI       0     341    1105     889     393     170      65      31       0       0
9568          UI       0       0       0       0       0       0       0       0       0       0
9569          UI       0       0       0       0       0       0       0       0       0       0
9570          UI       0       0       0       0       0       0       0       0       0       0
```

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9571        UI       0       0       0       0       0       0       0       0       0       0
            *

9572        KK  DW61SEDIVERT
9573        KM        Divert culvert flows under I-10
9574        DT   DW61S      0.0     0.0
9575        DI     0.0   188.0  1000.0  2000.0  3000.0     0.0     0.0     0.0     0.0     0.0
9576        DQ     0.0   188.0   190.0   195.0   200.0     0.0     0.0     0.0     0.0     0.0
            *

9577        KK     W60BASIN
9578        KM        BASIN BOUNDARY FROM SIENNA HILLS AKA TESOTA HILLS
9579        KM        PRELIM DRAINAGE REPORT, CMX, 2006
9580        BA   0.161
9581        LG    0.34    0.35    3.95    0.40       5
9582        UI       0     136     443     374     168      75      29      13       0       0
9583        UI       0       0       0       0       0       0       0       0       0       0
9584        UI       0       0       0       0       0       0       0       0       0       0
9585        UI       0       0       0       0       0       0       0       0       0       0
9586        UI       0       0       0       0       0       0       0       0       0       0
            *

9587        KK   CPW60COMBINE
9588        HC       3   0.718
            *

9589        KK   SRW60STORAGE
9590        KM        Storage behind I-10
9591        KO
9592        RS       1    STOR
9593        SV            0.23    2.30   11.40   29.80   51.60   51.60
9594        SQ           12.00   45.00  100.00  140.00  152.00 7400.00
9595        SE  1095.0 1096.00 1097.00 1098.00 1099.00 1100.00 1101.00
9596        ST
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9597        KK  W60S61ROUTE
9598        KM        Cross-section: Estimated 3' deep and 4:1 side
9599        KM        slopes, width based on aerial / Manning's N
9600        KM        Value: earth w/ sparse trees and shrubs
9601        RS       5    FLOW
9602        RC   0.032   0.032   0.032    3609  0.0094    0.00
9603        RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
9604        RY  1000.0  999.75  999.25  999.00  999.00  999.25  999.75 1000.00
            *

9605        KK     S61BASIN
9606        KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9607        BA   0.234
9608        LG    0.26    0.31    4.15    0.51      20
9609        UI       0     223     701     522     217      91      33      19       0       0
9610        UI       0       0       0       0       0       0       0       0       0       0
9611        UI       0       0       0       0       0       0       0       0       0       0
9612        UI       0       0       0       0       0       0       0       0       0       0
9613        UI       0       0       0       0       0       0       0       0       0       0
            *

9614        KK   CPS61COMBINE
9615        HC       2   0.952
            *

9616        KK  S61S62ROUTE
9617        KM        Cross-section: Estimated 3' deep, side slopes
9618        KM        and width based on aerial and topo / Manning's
9619        KM        N Value: earth w/ sparse trees and shrubs
9620        RS       2    FLOW
9621        RC   0.032   0.032   0.032    2298  0.0070    0.00
9622        RX  100.00  120.00  140.00  170.00  194.00  224.00  244.00  264.00
9623        RY  1054.5 1054.25 1054.00 1051.00 1051.10 1054.00 1054.25 1054.50
            *

9624        KK     S62BASIN
9625        KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9626        BA   0.132
9627        LG    0.33    0.34    4.20    0.44       3
9628        UI       0     108     357     309     142      62      26      10       0       0
9629        UI       0       0       0       0       0       0       0       0       0       0
9630        UI       0       0       0       0       0       0       0       0       0       0
9631        UI       0       0       0       0       0       0       0       0       0       0
9632        UI       0       0       0       0       0       0       0       0       0       0
            *

9633        KK   CPS62COMBINE
9634        HC       2   1.084
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9635        KK  S62S64ROUTE
9636        KM        Cross-section: Estimated 2' deep, side slopes
9637        KM        and width based on aerial / Manning's N Value:
9638        KM        earth w/ sparse trees and shrubs
9639        RS       3    FLOW
9640        RC   0.032   0.032   0.032    5430  0.0074    0.00
9641        RX  100.00  108.00  116.00  128.00  144.00  168.00  188.00  208.00
9642        RY  1012.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.00
            *

9643        KK     S63BASIN
9644        KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9645        BA   0.599
9646        LG    0.19    0.27    4.20    0.55      23
9647        UI       0     169     656    1061    1062     695     408     241     149      85
9648        UI      42      29      29       0       0       0       0       0       0       0
9649        UI       0       0       0       0       0       0       0       0       0       0
9650        UI       0       0       0       0       0       0       0       0       0       0
9651        UI       0       0       0       0       0       0       0       0       0       0
            *

9652        KK  S63S64ROUTE
9653        KM        Cross-section: Estimated 2' deep and 4:1 side
9654        KM        slopes, width based on aerial / Manning's N Value
9655        KM        clean straight earth
9656        RS       1    FLOW
```

```
9657          RC   0.022   0.022   0.022    2415  0.0046    0.00
9658          RX  100.00  120.00  140.00  152.00  155.00  167.00  179.00  191.00
9659          RY  1013.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.50
              *

9660          KK     S64BASIN
9661          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
9662          BA   0.475
9663          LG    0.35    0.35    4.25    0.42       0
9664          UI       0     100     395     674     790     634     400     257     162     101
9665          UI      64      38      20      20      21       0       0       0       0       0
9666          UI       0       0       0       0       0       0       0       0       0       0
9667          UI       0       0       0       0       0       0       0       0       0       0
9668          UI       0       0       0       0       0       0       0       0       0       0
              *

9669          KK   CPS64COMBINE
9670          HC       3   2.158
              *

9671          KK  S64S67ROUTE
9672          KM        Cross-section: Estimated 1' deep, side slopes
9673          KM        and width based on aerial / Manning's N Value:
9674          KM        clean straight earth
9675          RS       3    FLOW
9676          RC   0.022   0.022   0.022    3576  0.0017    0.00
9677          RX  100.00  220.00  340.00  352.00  354.00  366.00  476.00  586.00
9678          RY  1006.0 1004.10 1004.00 1003.00 1003.10 1004.00 1004.10 1006.00
              *
1                                        HEC-1 INPUT                                          PAGE245

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9679          KK     S67BASIN
9680          KM        BASIN BOUNDARY FROM 1990 TOPO
9681          BA   0.159
9682          LG    0.28    0.28    4.25    0.45       2
9683          UI       0      84     310     380     228     116      58      31      10      10
9684          UI       0       0       0       0       0       0       0       0       0       0
9685          UI       0       0       0       0       0       0       0       0       0       0
9686          UI       0       0       0       0       0       0       0       0       0       0
9687          UI       0       0       0       0       0       0       0       0       0       0
              *

9688          KK   CPS67COMBINE
9689          HC       2   2.317
              *

9690          KK   SRS67STORAGE
9691          KM        Ponding behind canal (WLB)
9692          KO
9693          RS       1    STOR
9694          SV            0.39   11.45   14.26   19.91
9695          SQ                          128.00 2344.00
9696          SE  998.70 1000.00 1001.50 1001.80 1002.00
9697          ST
              *

9698          KK  S67S68ROUTE
9699          KM        Cross-section: Ag field, assumed 0.5% side slopes
9700          KM        V-ditch / Manning's N Value: avg value for cultivated
9701          KM        areas from Estimated Manning's Roughness Coefficient
9702          KM        for Stream Channels and Flood Plains in MC
9703          RS       6    FLOW
9704          RC   0.038   0.038   0.038    5203  0.0058    0.00
9705          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9706          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9707          KK     S68BASIN
9708          KM        BASIN BOUNDARY FROM 1990 TOPO
9709          BA   0.338
9710          LG    0.32    0.25    4.20    0.54      13
9711          UI       0      37      64     168     228     304     317     295     277     214
9712          UI     180     126     106      67      53      41      34      22      22      12
9713          UI       5       5       4       5       5       5       4       5       5       4
9714          UI       0       0       0       0       0       0       0       0       0       0
9715          UI       0       0       0       0       0       0       0       0       0       0
              *

9716          KK   CPS68COMBINE
9717          HC       2   2.655
              *
1                                        HEC-1 INPUT                                          PAGE246

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9718          KK  S68S69ROUTE
9719          KM        Cross-section: Ag field, assumed 0.5% side slopes
9720          KM        V-ditch / Manning's N Value: avg value for cultivated
9721          KM        areas from Estimated Manning's Roughness Coefficient
9722          KM        for Stream Channels and Flood Plains in MC
9723          RS       6    FLOW
9724          RC   0.038   0.038   0.038    5287  0.0076    0.00
9725          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9726          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9727          KK     S69BASIN
9728          KM        BASIN BOUNDARY FROM 1990 TOPO
9729          BA   0.468
9730          LG    0.38    0.25    4.00    0.69       8
9731          UI       0      36      36      75     152     208     232     283     305     297
9732          UI     282     254     264     188     195     137     112     108      79      61
9733          UI      51      45      34      33      25      20      21      19       5       4
9734          UI       5       4       5       4       4       5       4       5       4       5
9735          UI       4       5       4       5       0       0       0       0       0       0
              *

9736          KK   CPS69COMBINE
9737          HC       2   3.123
              *

9738          KK  S69S70ROUTE
9739          KM        Cross-section: Ag field, assumed 0.5% side slopes
9740          KM        V-ditch / Manning's N Value: avg value for cultivated
9741          KM        areas from Estimated Manning's Roughness Coefficient
9742          KM        for Stream Channels and Flood Plains in MC
```

```
9743          RS        5    FLOW
9744          RC   0.038   0.038   0.038    4987  0.0072    0.00
9745          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9746          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9747          KK     S70BASIN
9748          KM        BASIN BOUNDARY FROM 1990 TOPO, OVERTOPPING
9749          KM        LOCATION AT LOW PT (ELEV-896)
9750          BA   0.750
9751          LG    0.49    0.25    4.50    0.53       0
9752          UI       0      39      40      43      83     123     198     237     224     314
9753          UI     293     337     332     333     331     277     278     311     223     213
9754          UI     225     158     151     120     111     123      76      69      64      54
9755          UI      48      45      36      37      34      22      23      22      23      22
9756          UI       5       5       5       5       5       5       5       5       5       5
              *
1                                          HEC-1 INPUT                                          PAGE247

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9757          KK   CPS70COMBINE
9758          HC       2   3.873
              *

9759          KK  S70S71ROUTE
9760          KM        Cross-section: Side slopes and width
9761          KM        based on aerial and topo / Manning's N Value:
9762          KM        earth w/ sparse trees and shrubs
9763          RS       7    FLOW
9764          RC   0.032   0.032   0.032    4352  0.0009    0.00
9765          RX  100.00  106.00  112.00  128.00  142.00  362.00  372.00  382.00
9766          RY  892.20  892.10  892.00  890.00  889.90  892.00  882.10  882.20
              *

9767          KK     S71BASIN
9768          KM        BASIN BOUNDARY FROM 1990 TOPO, PONDING AT BUCKEYE CANAL
9769          KM        AND AIRPORT ROAD RESULTING IN A SPLIT FLOW
9770          BA   0.130
9771          LG    0.43    0.25    4.65    0.44       5
9772          UI       0       9       9      18      32      54      51      68      78      78
9773          UI      76      71      65      66      49      51      36      32      26      24
9774          UI      17      15      11      11       9       8       6       6       5       6
9775          UI       1       1       1       2       1       1       1       1       1       1
9776          UI       2       1       1       1       1       1       1       0       0       0
              *

9777          KK   CPS71COMBINE
9778          HC       2   4.003
              *

9779          KK   SRS71STORAGE
9780          KM        Ponding behind canal (WLB)
9781          KO
9782          RS       1    STOR
9783          SV            0.80    4.80   10.88   13.66   28.52   90.59
9784          SQ          495.00  715.00 1245.00 1453.00 7983.0039402.00
9785          SE  888.50  892.50  894.00  895.50  896.00  898.00  900.00
9786          ST
              *

9787          KK  DS71SWDIVERT
9788          KM        RID at Airport Road split flow
9789          DT   DS71W     0.0     0.0
9790          DI     0.0   795.5  1462.6  2330.9  3348.7     0.0     0.0     0.0     0.0     0.0
9791          DQ     0.0     0.0    21.5    60.7   111.5     0.0     0.0     0.0     0.0     0.0
              *

9792          KK  S71S74ROUTE
9793          KM        Cross-section: Ag field, assumed 0.5% side slopes
9794          KM        V-ditch / Manning's N Value: avg value for cultivated
9795          KM        areas from Estimated Manning's Roughness Coefficient
9796          KM        for Stream Channels and Flood Plains in MC
9797          RS       1    FLOW
9798          RC   0.038   0.038   0.038    5423  0.0041    0.00
1                                          HEC-1 INPUT                                          PAGE248

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9799          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9800          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9801          KK     S56BASIN
9802          KM        BASIN BOUNDARY FROM 1990 TOPO
9803          BA   0.606
9804          LG    0.43    0.25    4.00    0.64       5
9805          UI       0      50      58     120     235     288     364     417     419     416
9806          UI     351     382     260     270     195     152     151      97      80      65
9807          UI      56      46      41      28      29      28       7       6       7       6
9808          UI       6       6       7       6       6       6       7       6       6       6
9809          UI       7       0       0       0       0       0       0       0       0       0
              *

9810          KK  S56S57ROUTE
9811          KM        Cross-section: Ag field, assumed 0.5% side slopes
9812          KM        V-ditch / Manning's N Value: avg value for cultivated
9813          KM        areas from Estimated Manning's Roughness Coefficient
9814          KM        for Stream Channels and Flood Plains in MC
9815          RS       7    FLOW
9816          RC   0.038   0.038   0.038    5289  0.0072    0.00
9817          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9818          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9819          KK     S57BASIN
9820          KM        BASIN BOUNDARY FROM 1990 TOPO
9821          BA   0.767
9822          LG    0.41    0.25    4.10    0.58       3
9823          UI       0      66      83     171     348     390     506     554     561     512
9824          UI     485     427     371     278     225     196     149     111      89      76
9825          UI      62      53      38      38      33       8       9       8       8       9
9826          UI       8       8       9       8       8       9       8       8       9       0
9827          UI       0       0       0       0       0       0       0       0       0       0
              *

9828          KK   CPS57COMBINE
9829          HC       2   1.373
              *
```

```
9830          KK  S57S58ROUTE
9831          KM        Cross-section: Ag field, assumed 0.5% side slopes
9832          KM        V-ditch / Manning's N Value: avg value for cultivated
9833          KM        areas from Estimated Manning's Roughness Coefficient
9834          KM        for Stream Channels and Flood Plains in MC
9835          RS       4    FLOW
9836          RC   0.038   0.038   0.038    3501  0.0063    0.00
9837          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9838          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9839          KK   DS48SRETRIEVE
9840          DR   DS48S
              *

9841          KK  S48S58ROUTE
9842          KM        Cross-section: Ag field, assumed 0.5% side slopes
9843          KM        V-ditch / Manning's N Value: avg value for cultivated
9844          KM        areas from Estimated Manning's Roughness Coefficient
9845          KM        for Stream Channels and Flood Plains in MC
9846          RS      12    FLOW
9847          RC   0.038   0.038   0.038    2870  0.0063    0.00
9848          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9849          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9850          KK     S58BASIN
9851          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
9852          BA   0.204
9853          LG    0.50    0.25    4.50    0.54       0
9854          UI       0      15      15      28      52      86      83     109     124     123
9855          UI     122     110     105      99      79      77      56      47      43      35
9856          UI      26      22      18      17      13      13       9       8       8       7
9857          UI       1       2       2       2       2       2       2       1       2       2
9858          UI       2       2       2       1       2       2       0       0       0       0
              *

9859          KK   CPS58COMBINE
9860          HC       3  18.037
              *

9861          KK   SRS58STORAGE
9862          KM        Storage behind UPRR (WLB)
9863          KO
9864          RS       1    STOR
9865          SV            0.19    0.54    3.31    7.74
9866          SQ          138.00  153.00 1483.00 3332.00
9867          SE  894.40  898.00  898.40  900.00  900.50
9868          ST
              *

9869          KK  S58S59ROUTE
9870          KM        Cross-section: Ag field, assumed 0.5% side slopes
9871          KM        V-ditch / Manning's N Value: avg value for cultivated
9872          KM        areas from Estimated Manning's Roughness Coefficient
9873          KM        for Stream Channels and Flood Plains in MC
9874          RS       6    FLOW
9875          RC   0.038   0.038   0.038    3138  0.0019    0.00
9876          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9877          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9878          KK     S59BASIN
9879          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
9880          KM        AND OVERTOPS BUCKEYE CANAL
9881          BA   0.165
9882          LG    0.42    0.29    4.70    0.40       3
9883          UI       0      25      70     142     192     207     173     142     102      72
9884          UI      43      32      22      16      13       4       3       3       3       3
9885          UI       3       3       3       0       0       0       0       0       0       0
9886          UI       0       0       0       0       0       0       0       0       0       0
9887          UI       0       0       0       0       0       0       0       0       0       0
              *

9888          KK   CPS59COMBINE
9889          HC       2  18.202
              *

9890          KK   SRS59STORAGE
9891          KM        Storage behind canal (WLB)
9892          KO
9893          RS       1    STOR
9894          SV            0.08   14.16   18.99   64.86
9895          SQ                          21.00 2267.00
9896          SE  889.90  890.00  891.70  892.00  894.00
9897          ST
              *

9898          KK  S59S74ROUTE
9899          KM        Cross-section: Ag field, assumed 0.5% side slopes
9900          KM        V-ditch / Manning's N Value: avg value for cultivated
9901          KM        areas from Estimated Manning's Roughness Coefficient
9902          KM        for Stream Channels and Flood Plains in MC
9903          RS      16    FLOW
9904          RC   0.038   0.038   0.038    8042  0.0030    0.00
9905          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9906          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9907          KK     S72BASIN
9908          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
9909          BA   0.401
9910          LG    0.48    0.15    8.80    0.09       2
9911          UI       0      20      20      21      40      56      91     122     108     134
9912          UI     155     171     170     168     172     159     140     148     156     107
9913          UI     109     113      81      78      62      57      64      43      37      33
9914          UI      30      25      25      19      19      18      15      12      11      12
9915          UI      11      11       3       2       3       2       3       2       3       2
              *

9916          KK  S72S73ROUTE
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9917          KM        Cross-section: Ag field, assumed 0.5% side slopes
9918          KM        V-ditch / Manning's N Value: avg value for cultivated
9919          KM        areas from Estimated Manning's Roughness Coefficient
9920          KM        for Stream Channels and Flood Plains in MC
9921          RS       8    FLOW
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9922          RC   0.038   0.038   0.038    3142  0.0013    0.00
9923          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9924          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9925          KK     S73BASIN
9926          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
9927          BA   0.276
9928          LG    0.46    0.15    8.80    0.09       5
9929          UI       0      20      20      38      73     116     115     149     169     167
9930          UI     167     146     147     130     109     101      77      61      59      45
9931          UI      35      29      25      21      19      16      12      11      12       7
9932          UI       3       2       2       3       2       3       2       3       2       3
9933          UI       2       3       2       2       3       2       0       0       0       0
              *

9934          KK   CPS73COMBINE
9935          HC       2   0.677
              *

9936          KK  S73S74ROUTE
9937          KM        Cross-section: Ag field, assumed 0.5% side slopes
9938          KM        V-ditch / Manning's N Value: avg value for cultivated
9939          KM        areas from Estimated Manning's Roughness Coefficient
9940          KM        for Stream Channels and Flood Plains in MC
9941          RS      14    FLOW
9942          RC   0.038   0.038   0.038    5333  0.0011    0.00
9943          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9944          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9945          KK     S74BASIN
9946          KM        BASIN BOUNDARY FROM 1990 TOPO
9947          BA   1.608
9948          LG    0.48    0.15    7.30    0.16       1
9949          UI       0      57      57      57      57      97     119     162     231     298
9950          UI     359     302     330     415     432     468     476     485     475     475
9951          UI     484     462     397     403     401     432     407     297     299     332
9952          UI     302     231     218     212     170     164     161     183     131     108
9953          UI     101      93      92      75      71      70      67      52      52      52
              *

9954          KK   CPS74COMBINE
9955          HC       5  68.946
              *

9956          KK   DS741DIVERT
9957          KM        MC85 at Airport Road split flow
9958          DT  DS741W     0.0     0.0
9959          DI     0.0   332.5  1924.0  5255.7 11178.0     0.0     0.0     0.0     0.0     0.0
9960          DQ     0.0   142.5   854.3  2357.0  5037.5     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9961          KK   DS742DIVERT
9962          KM        MC85 at Airport Road split flow
9963          DT  DS742W     0.0     0.0
9964          DI     0.0   190.0  1069.7  2898.7  6140.5     0.0     0.0     0.0     0.0     0.0
9965          DQ     0.0    21.2    60.0   110.2   169.7     0.0     0.0     0.0     0.0     0.0
              *

9966          KK  S74S79ROUTE
9967          KM        Cross-section: Ag field, assumed 0.5% side slopes
9968          KM        V-ditch / Manning's N Value: avg value for cultivated
9969          KM        areas from Estimated Manning's Roughness Coefficient
9970          KM        for Stream Channels and Flood Plains in MC
9971          RS      13    FLOW
9972          RC   0.038   0.038   0.038    5186  0.0012    0.00
9973          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
9974          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

9975          KK  DW61SERETRIEVE
9976          DR   DW61S
              *

9977          KK  W61S65ROUTE
9978          KM        Cross-section: Estimated 2' deep, side slopes
9979          KM        and width based on aerial and topo / Manning's
9980          KM        N Value: earth w/ sparse trees and shrubs
9981          RS      11    FLOW
9982          RC   0.032   0.032   0.032    9453  0.0077    0.00
9983          RX  100.00  135.00  170.00  186.00  336.00  352.00  372.00  392.00
9984          RY  1052.5 1052.25 1052.00 1050.00 1050.10 1052.00 1053.00 1054.00
              *

9985          KK     S65BASIN
9986          KM        BASIN BOUNDARY FROM 1990 TOPO
9987          BA   0.879
9988          LG    0.30    0.33    4.40    0.42       9
9989          UI       0     111     317     661     916    1064    1004     768     563     398
9990          UI     288     207     150     107      77      53      27      27      27      27
9991          UI       0       0       0       0       0       0       0       0       0       0
9992          UI       0       0       0       0       0       0       0       0       0       0
9993          UI       0       0       0       0       0       0       0       0       0       0
              *

9994          KK   CPS65COMBINE
9995          HC       2   1.268
              *

9996          KK  S65S66ROUTE
9997          KM        Cross-section: Estimated 3' deep and 4:1 side
9998          KM        slopes, width based on aerial / Manning's N
9999          KM        Value: clean straight earth
10000         RS       6    FLOW
10001         RC   0.032   0.032   0.032    6405  0.0056    0.00
10002         RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
```

```
 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10003          RY  1000.5  999.75  999.25  999.00  999.10  999.25  999.75 1000.50
               *

10004          KK     S66BASIN
10005          KM        SUNDANCE, RBF, 2004
10006          BA   0.655
10007          LG    0.25    0.28    3.95    0.40      23
10008          UI       0     117     451     680    1102    1069     726     464     207     128
10009          UI      51      33      32       0       0       0       0       0       0       0
10010          UI       0       0       0       0       0       0       0       0       0       0
10011          UI       0       0       0       0       0       0       0       0       0       0
10012          UI       0       0       0       0       0       0       0       0       0       0
               *

10013          KK  DS66REDIVERT
10014          KM        Sundance
10015          DT    RS66    75.9     0.0
10016          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10017          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10018          KK   CPS66COMBINE
10019          HC       2   1.923
               *

10020          KK   SRS66STORAGE
10021          KM        Ponding behind road/canal, does not incl Sundance retention values
10022          KO
10023          RS       1    STOR
10024          SV           26.50   36.70   50.00
10025          SQ                  1414.00 2600.00
10026          SE  1000.0 1002.00 1003.00 1003.50
10027          ST
               *

10028          KK  S66S75ROUTE
10029          KM        Cross-section: Ag field, assumed 0.5% side slopes
10030          KM        V-ditch / Manning's N Value: avg value for cultivated
10031          KM        areas from Estimated Manning's Roughness Coefficient
10032          KM        for Stream Channels and Flood Plains in MC
10033          RS       5    FLOW
10034          RC   0.038   0.038   0.038    2958  0.0095    0.00
10035          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10036          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *

10037          KK     S75BASIN
10038          KM        BASIN BOUNDARY FROM 1990 TOPO
10039          BA   0.338
10040          LG    0.46    0.25    4.00    0.66       1
10041          UI       0      21      22      36      58     105     127     134     169     181
10042          UI     181     185     165     152     166     123     120     105      82      68
10043          UI      63      58      40      35      30      26      22      20      20      12
10044          UI      12      12      13       4       3       3       2       3       3       2
10045          UI       3       3       2       3       3       2       3       3       3       2
               *
```



```
 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10046          KK   CPS75COMBINE
10047          HC       2   2.261
               *

10048          KK  S75S76ROUTE
10049          KM        Cross-section: Ag field, assumed 0.5% side slopes
10050          KM        V-ditch / Manning's N Value: avg value for cultivated
10051          KM        areas from Estimated Manning's Roughness Coefficient
10052          KM        for Stream Channels and Flood Plains in MC
10053          RS       8    FLOW
10054          RC   0.038   0.038   0.038    5281  0.0081    0.00
10055          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10056          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *

10057          KK     S76BASIN
10058          KM        BASIN BOUNDARY FROM 1990 TOPO
10059          BA   1.006
10060          LG    0.50    0.25    4.15    0.67       0
10061          UI       0      52      53      52     109     153     247     312     277     398
10062          UI     384     440     437     436     441     381     363     395     344     272
10063          UI     305     240     196     180     151     155     134      98      85      83
10064          UI      64      64      54      47      48      41      29      30      30      29
10065          UI      27       6       7       6       7       6       7       6       7       6
               *

10066          KK   CPS76COMBINE
10067          HC       2   3.267
               *

10068          KK  S76S77ROUTE
10069          KM        Cross-section: Estimated 2' deep, side
10070          KM        slopes and width based on aerial / Manning's
10071          KM        N Value: clean straight earth
10072          RS       2    FLOW
10073          RC   0.022   0.022   0.022    7144  0.0052    0.00
10074          RX  100.00  103.00  106.00  116.00  148.00  158.00  178.00  198.00
10075          RY  900.00  899.00  898.00  896.00  896.10  898.00  898.10  898.20
               *

10076          KK     S77BASIN
10077          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
10078          BA   0.911
10079          LG    0.35    0.25    4.50    0.53      15
10080          UI       0      54      56      79     129     236     324     296     425     419
10081          UI     460     463     456     404     387     419     303     307     275     207
10082          UI     184     156     170     106      93      87      68      67      50      51
10083          UI      47      31      31      31      31      16       7       7       7       7
10084          UI       6       7       7       7       7       7       6       7       7       7
               *
```



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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
10085          KK   CPS77COMBINE
10086          HC       2   4.178
               *

10087          KK   SRS77STORAGE
10088          KM        Storage behind UPRR (WLB)
10089          KO
10090          RS       1     STOR
10091          SV                     0.09    5.76   14.59   29.99
10092          SQ                   640.00 1680.00 2001.00 2916.00
10093          SE  889.10  890.90  894.10  896.10  897.10  898.00
10094          ST
               *

10095          KK  S77S78ROUTE
10096          KM        Cross-section: Ag field, assumed 0.5% side slopes
10097          KM        V-ditch / Manning's N Value: avg value for cultivated
10098          KM        areas from Estimated Manning's Roughness Coefficient
10099          KM        for Stream Channels and Flood Plains in MC
10100          RS       6     FLOW
10101          RC   0.038   0.038   0.038    3113  0.0019    0.00
10102          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10103          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *

10104          KK     S78BASIN
10105          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
10106          KM        AND OVERTOPS BUCKEYE CANAL
10107          BA   0.176
10108          LG    0.48    0.25    4.70    0.46       4
10109          UI       0       8       8       9      15      19      32      42      52      45
10110          UI      67      59      69      70      70      69      66      58      58      63
10111          UI      52      43      49      38      32      30      25      23      26      17
10112          UI      16      13      13      10      10       9       7       8       7       5
10113          UI       5       5       5       5       4       1       1       1       1       1
               *

10114          KK  DS71SWRETRIEVE
10115          DR   DS71W
               *

10116          KK  S71S78ROUTE
10117          KM        Cross-section: Ag field, assumed 0.5% side slopes
10118          KM        V-ditch / Manning's N Value: avg value for cultivated
10119          KM        areas from Estimated Manning's Roughness Coefficient
10120          KM        for Stream Channels and Flood Plains in MC
10121          RS       1     FLOW
10122          RC   0.038   0.038   0.038    5360  0.0004    0.00
10123          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10124          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *
```



```
 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10125          KK   CPS78COMBINE
10126          HC       3   7.968
               *

10127          KK   SRS78STORAGE
10128          KM        Storage behind canal (WLB)
10129          KO
10130          RS       1     STOR
10131          SV            4.41   24.14   68.62
10132          SQ                   3900.00
10133          SE  886.80  888.00  889.00  890.00
10134          ST
               *

10135          KK  S78S79ROUTE
10136          KM        Cross-section: Ag field, assumed 0.5% side slopes
10137          KM        V-ditch / Manning's N Value: avg value for cultivated
10138          KM        areas from Estimated Manning's Roughness Coefficient
10139          KM        for Stream Channels and Flood Plains in MC
10140          RS       6     FLOW
10141          RC   0.038   0.038   0.038    4347  0.0059    0.00
10142          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10143          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *

10144          KK     S79BASIN
10145          KM        BASIN BOUNDARY FROM 1990 TOPO
10146          BA   0.918
10147          LG    0.49    0.15    7.30    0.16       0
10148          UI       0      42      43      42      73      93     158     220     260     227
10149          UI     313     321     358     353     362     353     354     299     295     320
10150          UI     294     223     234     232     167     162     136     121     128     111
10151          UI      81      71      69      58      53      53      39      39      39      35
10152          UI      24      25      24      24      24      17       5       6       5       5
               *

10153          KK   CPS79COMBINE
10154          HC       3  73.829
               *

10155          KK  S79S80ROUTE
10156          KM        Cross-section: Ag field, assumed 0.5% side slopes
10157          KM        V-ditch / Manning's N Value: avg value for cultivated
10158          KM        areas from Estimated Manning's Roughness Coefficient
10159          KM        for Stream Channels and Flood Plains in MC
10160          RS       7     FLOW
10161          RC   0.038   0.038   0.038    2679  0.0007    0.00
10162          RX  100.00  300.00  500.00  600.00  650.00  700.00  900.00 1100.00
10163          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *
```



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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10164          KK     S92BASIN
10165          KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
10166          BA   0.689
10167          LG    0.49    0.15    8.40    0.11       0
10168          UI       0      35      35      34      70      98     157     208     186     232
10169          UI     267     293     292     291     295     273     242     255     265     183
10170          UI     190     193     139     134     105      98     110      72      64      57
10171          UI      51      43      43      33      32      32      25      20      20      20
10172          UI      19      19       4       4       5       4       4       5       4       4
```

```
                *

10173           KK   DS741RETRIEVE
10174           DR  DS741W
                *

10175           KK  S74S92ROUTE
10176           KM        Cross-section: Ag field, assumed 0.5% side slopes
10177           KM        V-ditch / Manning's N Value: avg value for cultivated
10178           KM        areas from Estimated Manning's Roughness Coefficient
10179           KM        for Stream Channels and Flood Plains in MC
10180           RS       7    FLOW
10181           RC   0.038   0.038   0.038    1033  0.0010    0.00
10182           RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10183           RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *

10184           KK   CPS92COMBINE
10185           HC       2  69.635
                *

10186           KK  S92S80ROUTE
10187           KM        Cross-section: Ag field, assumed 0.5% side slopes
10188           KM        V-ditch / Manning's N Value: avg value for cultivated
10189           KM        areas from Estimated Manning's Roughness Coefficient
10190           KM        for Stream Channels and Flood Plains in MC
10191           RS      13    FLOW
10192           RC   0.038   0.038   0.038    5676  0.0014    0.00
10193           RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10194           RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *

10195           KK   DS742RETRIEVE
10196           DR  DS742W
                *

10197           KK  S74S80ROUTE
10198           KM        Cross-section: Ag field, assumed 0.5% side slopes
10199           KM        V-ditch / Manning's N Value: avg value for cultivated
10200           KM        areas from Estimated Manning's Roughness Coefficient
10201           KM        for Stream Channels and Flood Plains in MC
10202           RS      25    FLOW
10203           RC   0.038   0.038   0.038    5909  0.0010    0.00
10204           RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10205           RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                *
1                                    HEC-1 INPUT                                    PAGE258

 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10206           KK     S80BASIN
10207           KM        BASIN BOUNDARY FROM 1990 TOPO, PORTION OF SOUTHERN BOUNDARY
10208           KM        IS BOUNDED BY SUZY DEAN DITCH
10209           BA   0.435
10210           LG    0.43    0.25    5.00    0.39       5
10211           UI       0      22      23      22      47      66     106     135     120     167
10212           UI     168     190     187     189     191     165     156     170     151     117
10213           UI     130     107      85      78      65      66      60      43      37      36
10214           UI      28      28      24      20      21      18      12      13      13      13
10215           UI      12       3       3       3       2       3       3       3       3       3
                *

10216           KK   CPS80COMBINE
10217           HC       4  74.963
                *

10218           KK     S89BASIN
10219           KM        BASIN BOUNDARY FROM 1990 TOPO, EASTERN BOUNDARY
10220           KM        IS BOUNDED BY SUZY DEAN DITCH
10221           BA   0.197
10222           LG    0.46    0.15    8.80    0.09       1
10223           UI       0      16      15      34      67      89     105     119     130     129
10224           UI     116     111     105      82      78      57      45      46      30      25
10225           UI      20      18      14      14       9       8       9       5       2       2
10226           UI       2       2       2       2       2       2       2       1       2       2
10227           UI       2       2       2       0       0       0       0       0       0       0
                *

10228           KK     S90BASIN
10229           KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
10230           BA   0.093
10231           LG    0.50    0.15    8.00    0.13       0
10232           UI       0       9      13      29      51      63      72      74      72      65
10233           UI      55      50      35      27      24      16      13      11       7       7
10234           UI       6       5       3       1       1       1       1       1       1       1
10235           UI       1       1       2       1       1       0       0       0       0       0
10236           UI       0       0       0       0       0       0       0       0       0       0
                *

10237           KK  S90S91ROUTE
10238           KM        Cross-section: Estimated 12' deep, side slopes and width based on
10239           KM        aerial and topo / Manning's N Value: clean straight earth
10240           RS       2    FLOW
10241           RC   0.022   0.022   0.022    2156  0.0009    0.00
10242           RX  100.00  115.00  130.00  150.00  162.00  182.00  192.00  202.00
10243           RY  868.20  868.10  868.00  856.00  856.10  868.00  868.10  868.20
                *

10244           KK     S91BASIN
10245           KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
10246           KM        AND EXITS MODEL
10247           BA   0.215
10248           LG    0.43    0.14    8.40    0.10       5
10249           UI       0      15      16      32      57      92      91     119     131     132
1                                    HEC-1 INPUT                                    PAGE259

 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10250           UI     131     113     115     100      86      76      60      46      47      32
10251           UI      27      23      19      16      14      12       9       9       9       4
10252           UI       2       2       2       2       2       2       2       2       2       2
10253           UI       2       2       2       1       2       2       0       0       0       0
                *

10254           KK   CPS91COMBINE
10255           HC       2   0.308
                *

10256           KK     S88BASIN
```

```
10257          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10258          BA   0.071
10259          LG    0.43     0.17     6.80     0.19        5
10260          UI       0        9       17       44       57       70       72       61       57       44
10261          UI      30       25       15       12        9        7        5        5        1        1
10262          UI       1        1        1        1        2        1        1        1        0        0
10263          UI       0        0        0        0        0        0        0        0        0        0
10264          UI       0        0        0        0        0        0        0        0        0        0
               *

10265          KK     S87BASIN
10266          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10267          BA   0.121
10268          LG    0.48     0.15     8.00     0.12        1
10269          UI       0        9        9       16       30       51       49       64       74       72
10270          UI      73       64       62       60       47       46       33       28       26       21
10271          UI      15       14       11       10        8        8        5        4        5        4
10272          UI       1        1        1        2        1        1        1        1        1        1
10273          UI       1        1        1        2        1        1        1        0        0        0
               *

10274          KK     S86BASIN
10275          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10276          BA   0.202
10277          LG    0.49     0.15     7.30     0.16        0
10278          UI       0       17       22       45       91      102      133      146      148      135
10279          UI     126      113       97       74       61       50       40       30       23       20
10280          UI      17       14       10       10        9        2        3        2        2        2
10281          UI       2        2        2        3        2        2        2        2        2        0
10282          UI       0        0        0        0        0        0        0        0        0        0
               *

10283          KK     S85BASIN
10284          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
10285          BA   0.336
10286          LG    0.50     0.15     7.00     0.18        0
10287          UI       0       17       17       17       35       48       79      102       90      117
10288          UI     132      146      142      143      145      130      120      128      124       89
10289          UI      95       91       67       65       50       48       55       32       30       28
10290          UI      24       21       21       15       16       15       11       10       10       10
10291          UI       9        7        2        2        2        2        3        2        2        2
               *
```

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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10292          KK   DUMMYCOMBINE
10293          HC       5
               *

10294          KK   DUMMYCOMBINE
10295          HC       4
               *
10296          ZZ
```

1

```
          SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  33         N07
             .
             .
  44         .-------> DN07AS
  42       DN07A
             .
             .
  49         .-------> DN07BS
  47       DN07B
             .
             .
  54         .-------> DN07CS
  52       DN07C
             .
             .
  59         .-------> DN07DS
  57       DN07D
             V
             V
  62      N07N06
             .
             .
  69         .        N01
             .          .
             .          .
  79         .          .       N02A
             .          .          V
             .          .          V
  90         .          .     N2AN01
             .          .          .
             .          .          .
  97         .      CPN01............
             .          V
             .          V
  99         .     N01N02
             .          .
             .          .
 107         .          .        N02
             .          .          .
             .          .          .
 119         .          .          .-------> RN02
 117         .          .     DN02RE
             .          .          .
             .          .          .
 122         .          .          .       N03A
             .          .          .          V
             .          .          .          V
 133         .          .          .     N3AN02
             .          .          .          .
             .          .          .          .
 139         .      CPN02......................
             .          V
             .          V
 141         .     N02N3B
             .          .
             .          .
 148         .          .       N03B
             .          .          .
```

```
160          .           .           .
             .           .           .-------->  RN03B
158          .           .      DN3BRE
             .           .           .
             .           .           .
163          .      CPN03B............
             .           V
             .           V
165          .      N3BN04
             .           .
             .           .
172          .           .       N04
             .           .           .
             .           .           .
182          .           .           .        N03
             .           .           .          .
             .           .           .          .
194          .           .           .          .-------->   RN03
192          .           .           .     DN03RE
             .           .           .          V
             .           .           .          V
197          .           .           .     N03N04
             .           .           .          .
             .           .           .          .
203          .           .           .          .       N04A
             .           .           .          .          V
             .           .           .          .          V
214          .           .           .          .     N4AN04
             .           .           .          .          .
             .           .           .          .          .
221          .           .           .          .          .       N04B
             .           .           .          .          .          V
             .           .           .          .          .          V
230          .           .           .          .          .     N4BN04
             .           .           .          .          .          .
             .           .           .          .          .          .
237          .      CPN04.............................................
             .           .
             .           .
241          .           .-------->   RN04
239          .      DN04RE
             .           V
             .           V
244          .      N04N05
             .           .
             .           .
250          .           .       N05
             .           .           .
             .           .           .
263          .           .           .-------->   RN05
259          .           .      DN05RE
             .           .           .
             .           .           .
267          .           .           .          .<-------  DN07AS
266          .           .           .      DN07A
             .           .           .          V
             .           .           .          V
268          .           .           .     N7AN05
             .           .           .          .
             .           .           .          .
275          .           .           .          .          .<-------  DN07BS
274          .           .           .          .      DN07B
             .           .           .          .          V
             .           .           .          .          V
276          .           .           .          .     N7BN05
             .           .           .          .          .
             .           .           .          .          .
284          .           .           .          .          .          .<-------  DN07CS
283          .           .           .          .          .      DN07C
             .           .           .          .          .          V
             .           .           .          .          .          V
285          .           .           .          .          .     N7CN05
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292          .      CPN05.............................................
             .           V
             .           V
294          .      N05N06
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301          .           .       N06
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310     CPN06......................
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312          .        N08
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321          .           .       N10
             .           .         V
             .           .         V
331          .           .     N10N11
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337          .           .           .        N11
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347          .           .      CPN11............
             .           .         V
             .           .         V
349          .           .     N11N09
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356          .           .           .        N09
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365          .           .           .          .        N14
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379          .           .           .          .          .-------->   RN14
376          .           .           .          .     DN14RE
             .           .           .          .          .
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382          .           .      CPN09........................
             .           .         V
             .           .         V
384          .           .     N09N18
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390                                  N18
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400                            CPN18...........
                                   V
                                   V
402                            N18N15
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408                                  N12
                                      V
                                      V
418                                N12N13
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424                                                 N13
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434                                 CPN13...........
                                      V
                                      V
436                                N13N15
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442                                                 N16
                                                     V
                                                     V
452                                              N16N15
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458                                                          N15
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468                            CPN15...................................
                                   V
                                   V
470                            N15N17
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476                                  N17
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486                            CPN17...........
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488                                  N20
                                      V
                                      V
497                                N20N21
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                                      .
504                                                 N21
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513                                 CPN21...........
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518                                   .-------->   DN21S
515                                DN21SE
                                      V
                                      V
521                                N21N25
                                      .
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528                                                 N22
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538                                                          .<-------   DN21S
537                                                     DN21SE
                                                              V
                                                              V
539                                                     N21N22
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546                                              CPN22...........
                                                     V
                                                     V
548                                              N22N25
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555                                                          N25
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565                                 CPN25......................
                                      V
                                      V
567                                N25N26
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574                                                 N26
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583                                 CPN26...........
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585                                                 N19
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595                                                          N23
                                                              V
                                                              V
605                                                     N23N24
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612                                                                      N24
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622                                                     CPN24...........
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624                                                                      N27
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633                                 DUMMY...................................
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635                    DUMMY...................................
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637                          D03
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650             .          .-------->    RD03
646             .     DD03RE
                .          V
                .          V
653             .     D03D04
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660             .          .         D04
                .          .           .
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676             .          .           .-------->    RD04
671             .          .      DD04RE
                .          .           .
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679             .      CPD04............
                .          .
                .          .
683             .          .-------->   DD04S
681             .     DD04SE
                .          V
                .          V
686             .     D04D05
                .          .
                .          .
693             .          .         D05
                .          .           .
                .          .           .
705             .          .           .-------->    RD05
703             .          .      DD05RE
                .          .           .
                .          .           .
708             .      CPD05............
                .          V
                .          V
710             .     D05D14
                .          .
                .          .
721             .          .-------->  DD141S
717             .      DD141
                .          V
                .          V
724             .     D05D15
                .          .
                .          .
731             .          .         D11
                .          .           .
                .          .           .
746             .          .           .-------->    RD11
741             .          .      DD11RE
                .          .           .
                .          .           .
751             .          .           .-------->  DD111S
749             .          .       DD111
                .          .           .
                .          .           .
756             .          .           .-------->  DD112S
754             .          .       DD112
                .          .           V
                .          .           V
759             .          .      D11D12
                .          .           .
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766             .          .           .         D12
                .          .           .           .
                .          .           .           .
782             .          .           .           .-------->    RD12
776             .          .           .      DD12RE
                .          .           .           .
                .          .           .           .
785             .          .       CPD12............
                .          .           .
                .          .           .
789             .          .           .-------->  DD121S
787             .          .       DD121
                .          .           .
                .          .           .
794             .          .           .-------->  DD122S
792             .          .       DD122
                .          .           V
                .          .           V
797             .          .      D12D13
                .          .           .
                .          .           .
805             .          .           .         D13
                .          .           .           .
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819             .          .           .           .-------->    RD13
814             .          .           .      DD13RE
                .          .           .           .
                .          .           .           .
823             .          .           .           .           .<-------   DD04S
822             .          .           .           .     DD04SE
                .          .           .           .          V
                .          .           .           .          V
824             .          .           .           .     D04D13
                .          .           .           .           .
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831             .          .       CPD13........................
                .          .           .
                .          .           .
835             .          .           .-------->  DD131S
833             .          .       DD131
                .          .           .
                .          .           .
840             .          .           .-------->  DD132S
838             .          .       DD132
                .          .           V
                .          .           V
843             .          .      D13D14
                .          .           .
                .          .           .
850             .          .           .         D14
                .          .           .           .
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861             .          .           .           .-------->    RD14
859             .          .           .      DD14RE
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865                                                  .<-------  DD141S
864                                            DD141
                                                  V
                                                  V
866                                            D0514A
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874                        CPD14.......................
                              V
                              V
876                        SRD14
                              .
                              .
887                           .------->  DD142S
885                        DD142
                              V
                              V
890                       D14D15
                              .
                              .
897                              .         D15
                                 .           .
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906                 CPD15.......................
                        V
                        V
908                 D15D26
                        V
                        V
915                 D15D28
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922                        .         D28
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931                 CPD28............
                        V
                        V
933                 D28AFR
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941            DUMMY............
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943                L01
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954                .------->    RL01
952                DL01RE
                        V
                        V
957                L01L03
                        .
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965                        .         L03
                           .           .
                           .           .
976                        .           .------->    RL03
974                        .      DL03RE
                           .           .
                           .           .
979                        .           .         L20
                           .           .           .
                           .           .           .
991                        .           .           .------->    RL20
989                        .           .      DL20RE
                           .           .           V
                           .           .           V
994                        .           .      L20L03
                           .           .           .
                           .           .           .
1002                CPL03.......................
                        .
                        .
1007                    .------->   DL03S
1004                DL03SE
                        V
                        V
1010                L03L04
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1017                       .         L04
                           .           .
                           .           .
1028                       .           .------->    RL04
1026                       .      DL04RE
                           .           .
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1031                CPL04............
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1035                    .------->   DL04S
1033                DL04SE
                        V
                        V
1038                L04L05
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1045                       .         L05
                           .           .
                           .           .
1058                       .           .------->    RL05
1054                       .      DL05RE
                           .           .
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1061                CPL05............
                        .
                        .
1065                    .------->  DL051S
1063                DL051
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1070                    .------->  DL052S
1068                DL052
                        V
                        V
1073                L05D06
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1080                       .         L02
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1091            .          .          .-------->    RL02
1089            .          .     DL02RE
                .          .          V
                .          .          V
1094            .          .     L02D06
                .          .          .
                .          .          .
1102            .          .          .         D06
                .          .          .           .
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1113            .          .          .           .-------->    RD06
1111            .          .          .      DD06RE
                .          .          .           .
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1116            .      CPD06.......................
                .          .
                .          .
1121            .          .-------->   DD06S
1118            .     DD06SE
                .          V
                .          V
1124            .     D06D07
                .          .
                .          .
1132            .          .         D07
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                .          .          .
1143            .          .          .-------->    RD07
1141            .          .     DD07RE
                .          .          .
                .          .          .
1146            .      CPD07............
                .          V
                .          V
1148            .     D07D02
                .          .
                .          .
1155            .          .         D01
                .          .          .
                .          .          .
1166            .          .          .-------->    RD01
1164            .          .     DD01RE
                .          .          V
                .          .          V
1169            .          .     D01D02
                .          .          .
                .          .          .
1176            .          .          .         D02
                .          .          .           .
                .          .          .           .
1187            .          .          .           .-------->    RD02
1185            .          .          .      DD02RE
                .          .          .           .
                .          .          .           .
1190            .      CPD02.......................
                .          V
                .          V
1192            .     D02D10
                .          .
                .          .
1198            .          .         D09
                .          .          .
                .          .          .
1209            .          .          .-------->    RD09
1207            .          .     DD09RE
                .          .          V
                .          .          V
1212            .          .     D09D10
                .          .          .
                .          .          .
1220            .          .          .           .<--------   DD06S
1219            .          .          .      DD06SE
                .          .          .           V
                .          .          .           V
1221            .          .          .      D06D10
                .          .          .           .
                .          .          .           .
1227            .          .          .           .         D10
                .          .          .           .           .
                .          .          .           .           .
1242            .          .          .           .           .-------->    RD10
1237            .          .          .           .      DD10RE
                .          .          .           .           .
                .          .          .           .           .
1245            .      CPD10.................................
                .          V
                .          V
1247            .     D10D19
                .          .
                .          .
1254            .          .         L09
                .          .          .
                .          .          .
1268            .          .          .-------->    RL09
1263            .          .     DL09RE
                .          .          .
                .          .          .
1272            .          .          .           .<--------  DL051S
1271            .          .          .       DL051
                .          .          .           V
                .          .          .           V
1273            .          .          .      L05L09
                .          .          .           .
                .          .          .           .
1280            .          .      CPL09............
                .          .          .
                .          .          .
1284            .          .          .-------->  DL091S
1282            .          .      DL091
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1289            .          .          .-------->  DL092S
1287            .          .      DL092
                .          .          V
                .          .          V
1292            .          .     L09D08
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1299                                  D08
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1313                                   .-------->   RD08
1308                             DD08RE
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1317                                   .          .<-------  DL052S
1316                                   .     DL052
                                       .         V
                                       .         V
1318                                   .    L05D08
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1325                        CPD08.......................
                                 V
                                 V
1328                        D08D16
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                                 .
1335                                  L06
                                       .
                                       .
1363                                   .-------->   RL06
1344                             DL06RE
                                       .
                                       .
1368                                   .-------->   DL06S
1366                             DL06SE
                                       V
                                       V
1371                             L06L07
                                       .
                                       .
1378                                   .       L07
                                       .         .
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1400                                   .         .-------->   RL07
1387                                   .    DL07RE
                                       .         .
                                       .         .
1404                                   .         .          .<-------  DL03S
1403                                   .         .     DL03SE
                                       .         .         V
                                       .         .         V
1405                                   .         .     L0307A
                                       .         .         V
                                       .         .         V
1413                                   .         .     L0307B
                                       .         .          .
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1420                             CPL07.......................
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1424                                   .-------->   DL07S
1422                             DL07SE
                                       V
                                       V
1427                             L07L08
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1434                                   .       L08
                                       .         .
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1452                                   .         .-------->   RL08
1443                                   .    DL08RE
                                       .         .
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1456                                   .         .          .<-------  DL04S
1455                                   .         .     DL04SE
                                       .         .         V
                                       .         .         V
1457                                   .         .     L04L08
                                       .         .          .
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1464                             CPL08.......................
                                       V
                                       V
1466                             L08L12
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                                       .
1473                                   .       L10
                                       .         .
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1490                                   .         .-------->   RL10
1483                                   .    DL10RE
                                       .         V
                                       .         V
1493                                   .    L10L11
                                       .         .
                                       .         .
1501                                   .         .          .<-------  DL06S
1500                                   .         .     DL06SE
                                       .         .         V
                                       .         .         V
1502                                   .         .     L06L11
                                       .         .          .
                                       .         .          .
1509                                   .         .          .       L11
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1526                                   .         .          .         .-------->   RL11
1519                                   .         .          .    DL11RE
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1530                                   .         .          .         .          .<-------  DL07S
1529                                   .         .          .         .     DL07SE
                                       .         .          .         .         V
                                       .         .          .         .         V
1531                                   .         .          .         .     L07L11
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1539                                   .    CPL11.......................................
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1543                                   .         .-------->   DL11S
1541                                   .    DL11SE
                                       .         V
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1546                                   .    L11L12
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1553            .         .         .         .         .        L12
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1565            .         .         .         .         .         .-------->    RL12
1562            .         .         .         .         .     DL12RE
                .         .         .         .         .         .
                .         .         .         .         .         .
1568            .         .         .      CPL12.......................
                .         .         .         .
                .         .         .         .
1572            .         .         .         .-------->  DL121S
1570            .         .         .      DL121
                .         .         .         .
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1577            .         .         .         .-------->  DL122S
1575            .         .         .      DL122
                .         .         .         V
                .         .         .         V
1580            .         .         .     L12L13
                .         .         .         .
                .         .         .         .
1587            .         .         .         .        L13
                .         .         .         .         .
                .         .         .         .         .
1598            .         .         .         .         .         .<-------  DL091S
1597            .         .         .         .         .      DL091
                .         .         .         .         .         V
                .         .         .         .         .         V
1599            .         .         .         .         .     L09L13
                .         .         .         .         .         .
                .         .         .         .         .         .
1606            .         .         .      CPL13.......................
                .         .         .         .
                .         .         .         .
1611            .         .         .         .-------->  DL131S
1608            .         .         .      DL131
                .         .         .         .
                .         .         .         .
1617            .         .         .         .-------->  DL132S
1614            .         .         .      DL132
                .         .         .         V
                .         .         .         V
1620            .         .         .     L13D16
                .         .         .         .
                .         .         .         .
1627            .         .         .         .        D16
                .         .         .         .         .
                .         .         .         .         .
1637            .         .         .         .         .         .<-------  DL092S
1636            .         .         .         .         .      DL092
                .         .         .         .         .         V
                .         .         .         .         .         V
1638            .         .         .         .         .     L09D16
                .         .         .         .         .         .
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1645            .         .      CPD16.................................
                .         .         .
                .         .         .
1649            .         .         .-------->  DD161S
1647            .         .      DD161
                .         .         .
                .         .         .
1654            .         .         .-------->  DD162S
1652            .         .      DD162
                .         .         V
                .         .         V
1657            .         .     D16D18
                .         .         .
                .         .         .
1664            .         .         .        D18
                .         .         .         .
                .         .         .         .
1675            .         .         .         .-------->    RD18
1673            .         .         .     DD18RE
                .         .         .         .
                .         .         .         .
1678            .         .      CPD18...........
                .         .         V
                .         .         V
1680            .         .     D18D19
                .         .         .
                .         .         .
1687            .         .         .        D17
                .         .         .         .
                .         .         .         .
1699            .         .         .         .-------->    RD17
1696            .         .         .     DD17RE
                .         .         .         V
                .         .         .         V
1702            .         .         .     D17D19
                .         .         .         .
                .         .         .         .
1710            .         .         .         .        D19
                .         .         .         .         .
                .         .         .         .         .
1728            .         .         .         .         .-------->    RD19
1719            .         .         .         .     DD19RE
                .         .         .         .         .
                .         .         .         .         .
1731            .      CPD19.................................
                .         .
                .         .
1735            .         .-------->  DD191S
1733            .      DD191
                .         .
                .         .
1740            .         .-------->  DD192S
1738            .      DD192
                .         V
                .         V
1743            .     D19D20
                .         .
                .         .
1750            .         .        D20
                .         .         .
                .         .         .
1764            .         .         .-------->    RD20
1759            .         .     DD20RE
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                .          .          .
1768            .          .          .<-------  DD111S
1767            .          .      DD111
                .          .          V
                .          .          V
1769            .          .     D11D20
                .          .          .
                .          .          .
1776            .     CPD20.......................
                .         V
                .         V
1778            .    D20D21
                .         .
                .         .
1785            .         .        D21
                .         .          .
                .         .          .
1798            .         .          .------->    RD21
1794            .         .     DD21RE
                .         .          .
                .         .          .
1802            .         .          .<-------  DD112S
1801            .         .      DD112
                .         .          V
                .         .          V
1803            .         .     D11D21
                .         .          .
                .         .          .
1811            .         .          .           .<-------  DD121S
1810            .         .          .       DD121
                .         .          .           V
                .         .          .           V
1812            .         .          .      D12D21
                .         .          .           .
                .         .          .           .
1819            .     CPD21.................................
                .         .
                .         .
1823            .         .-------> DD211S
1821            .     DD211
                .         .
                .         .
1828            .         .-------> DD212S
1826            .     DD212
                .         V
                .         V
1831            .    D21D22
                .         .
                .         .
1839            .         .        D22
                .         .          .
                .         .          .
1853            .         .          .------->    RD22
1848            .         .     DD22RE
                .         .          .
                .         .          .
1857            .         .          .<-------  DD122S
1856            .         .      DD122
                .         .          V
                .         .          V
1858            .         .     D12D22
                .         .          .
                .         .          .
1865            .     CPD22.......................
                .         V
                .         V
1867            .    D22D23
                .         .
                .         .
1874            .         .        D23
                .         .          .
                .         .          .
1892            .         .          .------->    RD23
1883            .         .     DD23RE
                .         .          .
                .         .          .
1896            .         .          .<-------  DD131S
1895            .         .      DD131
                .         .          V
                .         .          V
1897            .         .     D13D23
                .         .          .
                .         .          .
1904            .     CPD23.......................
                .         .
                .         .
1908            .         .-------> DD231S
1906            .     DD231
                .         .
                .         .
1913            .         .-------> DD232S
1911            .     DD232
                .         V
                .         V
1916            .    D23D24
                .         .
                .         .
1922            .         .        D24
                .         .          .
                .         .          .
1933            .         .          .------->    RD24
1931            .         .     DD24RE
                .         .          .
                .         .          .
1937            .         .          .<-------  DD132S
1936            .         .      DD132
                .         .          V
                .         .          V
1938            .         .     D13D24
                .         .          .
                .         .          .
1945            .     CPD24.......................
                .         .
                .         .
1949            .         .------->   DD24S
1947            .    DD24SE
                .         V
                .         V
1952            .    D24D25
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1959                D25
                     .
1972                 .-------->   RD25
1968            DD25RE
                     .
                     .
1975          CPD25............
                 V
                 V
1977          SRD25
                 .
                 .
1987             .------->  DD251S
1985          DD251
                 .
                 .
1992             .------->  DD252S
1990          DD252
                 V
                 V
1995         D2542A
                 V
                 V
2003         D2542B
                 .
                 .
2011                D37
                     .
                     .
2021                 .<-------  DD232S
2020                 .      DD232
                     .         V
                     .         V
2022                 .     D23D37
                     .         .
                     .         .
2032                 .         .<-------  DD251S
2031                 .         .      DD251
                     .         .         V
                     .         .         V
2033                 .         .     D25D37
                     .         .         .
                     .         .         .
2041                 .         .         .<-------   DD24S
2040                 .         .     DD24SE
                     .         .         V
                     .         .         V
2042                 .         .     D24D37
                     .         .         .
                     .         .         .
2049            CPD37...................................
                     .
                     .
2053                 .-------->   DD37S
2051            DD37SE
                     V
                     V
2056            D37D39
                     .
                     .
2063                 .        D35
                     .         .
                     .         .
2073                 .         .<-------  DD231S
2072                 .         .      DD231
                     .         .         V
                     .         .         V
2074                 .         .     D23D35
                     .         .         .
                     .         .         .
2081                 .      CPD35............
                     .         .
                     .         .
2085                 .         .-------->   DD35S
2083                 .     DD35SE
                     .         V
                     .         V
2088                 .     D35D38
                     .         .
                     .         .
2095                 .         .        D38
                     .         .         .
                     .         .         .
2105                 .         .         .<-------   DD37S
2104                 .         .     DD37SE
                     .         .         V
                     .         .         V
2106                 .         .     D37D38
                     .         .         .
                     .         .         .
2113                 .      CPD38........................
                     .         .
                     .         .
2117                 .         .-------->  DD381S
2115                 .      DD381
                     .         .
                     .         .
2122                 .         .-------->  DD382S
2120                 .      DD382
                     .         V
                     .         V
2125                 .     D38D39
                     .         .
                     .         .
2132                 .         .        D39
                     .         .         .
                     .         .         .
2142                 .         .         .<-------  DD252S
2141                 .         .      DD252
                     .         .         V
                     .         .         V
2143                 .         .     D25D39
                     .         .         .
                     .         .         .
2150            CPD39...................................
                     V
                     V
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2152          .           .      D39D42
              .           .          .
              .           .          .
2159          .           .          .        D26
              .           .          .          .
              .           .          .          .
2171          .           .          .          .-------->    RD26
2169          .           .          .      DD26RE
              .           .          .          .
              .           .          .          .
2175          .           .          .          .           .<-------  DD142S
2174          .           .          .          .      DD142
              .           .          .          .          V
              .           .          .          .          V
2176          .           .          .          .      D14D26
              .           .          .          .          .
              .           .          .          .          .
2183          .           .          .       CPD26............
              .           .          .          V
              .           .          .          V
2185          .           .          .      D26D27
              .           .          .          .
              .           .          .          .
2192          .           .          .          .        D27
              .           .          .          .          .
              .           .          .          .          .
2204          .           .          .          .          .-------->    RD27
2202          .           .          .          .      DD27RE
              .           .          .          .          .
              .           .          .          .          .
2207          .           .          .       CPD27............
              .           .          .          V
              .           .          .          V
2209          .           .          .       SRD27
              .           .          .          V
              .           .          .          V
2217          .           .          .      D27D42
              .           .          .          .
              .           .          .          .
2224          .           .          .          .        D42
              .           .          .          .          .
              .           .          .          .          .
2237          .           .          .          .          .-------->    RD42
2234          .           .          .          .      DD42RE
              .           .          .          .          .
              .           .          .          .          .
2240          .       CPD42...................................
              .           V
              .           V
2242          .       SRD42
              .           V
              .           V
2250          .       D42D53
              .           .
              .           .
2258          .           .         D53
              .           .          .
              .           .          .
2269          .           .          .-------->    RD53
2267          .           .      DD53RE
              .           .          .
              .           .          .
2272          .       CPD53............
              .           V
              .           V
2274          .       SRD53
              .           V
              .           V
2283          .       D53D54
              .           .
              .           .
2290          .           .         D43
              .           .          .
              .           .          .
2301          .           .          .-------->    RD43
2299          .           .      DD43RE
              .           .          V
              .           .          V
2304          .           .      D43D54
              .           .          .
              .           .          .
2311          .           .          .        D54
              .           .          .          .
              .           .          .          .
2324          .           .          .          .-------->    RD54
2321          .           .          .      DD54RE
              .           .          .          .
              .           .          .          .
2327          .       CPD54........................
              .           .
              .           .
2329          .           .         D44
              .           .          .
              .           .          .
2342          .           .          .-------->    RD44
2340          .           .      DD44RE
              .           .          .
              .           .          .
2345          .           .          .        D55
              .           .          .          .
              .           .          .          .
2356          .           .          .          .-------->    RD55
2354          .           .          .      DD55RE
              .           .          .          .
              .           .          .          .
2359          .           .          .          .        D56
              .           .          .          .          .
              .           .          .          .          .
2371          .           .          .          .          .-------->    RD56
2368          .           .          .          .      DD56RE
              .           .          .          .          .
              .           .          .          .          .
2374          .           .      DUMMY........................
              .           .          .
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2376      DUMMY........................
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2378          .         L14
              .           V
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                 .          V
2387             .     L14L15
                 .          .
                 .          .
2394             .          .         L15
                 .          .           .
                 .          .           .
2403             .      CPL15............
                 .          V
                 .          V
2405             .     L15L16
                 .          .
                 .          .
2413             .          .         L16
                 .          .           .
                 .          .           .
2422             .      CPL16............
                 .          V
                 .          V
2424             .     L16L17
                 .          .
                 .          .
2431             .          .         L17
                 .          .           .
                 .          .           .
2442             .          .           .-------->    RL17
2440             .          .      DL17RE
                 .          .           .
                 .          .           .
2445             .      CPL17............
                 .          .
                 .          .
2449             .          .-------->   DL17S
2447             .     DL17SE
                 .          V
                 .          V
2452             .     L17L18
                 .          .
                 .          .
2459             .          .         L18
                 .          .           .
                 .          .           .
2469             .          .           .           .<-------   DL11S
2468             .          .           .     DL11SE
                 .          .           .          V
                 .          .           .          V
2470             .          .           .     L11L18
                 .          .           .           .
                 .          .           .           .
2478             .          .           .           .           .<-------  DL121S
2477             .          .           .           .      DL121
                 .          .           .           .          V
                 .          .           .           .          V
2479             .          .           .           .     L12L18
                 .          .           .           .           .
                 .          .           .           .           .
2486             .      CPL18...................................
                 .          .
                 .          .
2490             .          .-------->  DL181S
2488             .      DL181
                 .          .
                 .          .
2495             .          .-------->  DL182S
2493             .      DL182
                 .          V
                 .          V
2498             .     L18L19
                 .          .
                 .          .
2505             .          .         L19
                 .          .           .
                 .          .           .
2515             .          .           .           .<-------  DL122S
2514             .          .           .      DL122
                 .          .           .          V
                 .          .           .          V
2516             .          .           .     L12L19
                 .          .           .           .
                 .          .           .           .
2524             .          .           .           .           .<-------  DL131S
2523             .          .           .           .      DL131
                 .          .           .           .          V
                 .          .           .           .          V
2525             .          .           .           .     L13L19
                 .          .           .           .           .
                 .          .           .           .           .
2532             .      CPL19...................................
                 .          .
                 .          .
2537             .          .-------->  DL191S
2534             .      DL191
                 .          .
                 .          .
2543             .          .-------->  DL192S
2540             .      DL192
                 .          V
                 .          V
2546             .     L19D29
                 .          .
                 .          .
2553             .          .         D29
                 .          .           .
                 .          .           .
2564             .          .           .           .<-------  DL132S
2563             .          .           .      DL132
                 .          .           .          V
                 .          .           .          V
2565             .          .           .     L13D29
                 .          .           .           .
                 .          .           .           .
2573             .          .           .           .           .<-------  DD161S
2572             .          .           .           .      DD161
                 .          .           .           .          V
                 .          .           .           .          V
2574             .          .           .           .     D16D29
                 .          .           .           .           .
                 .          .           .           .           .
2581             .      CPD29...................................
                 .          V
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                 .          V
2583             .     D29D30
                 .          .
                 .          .
2590             .          .         D30
                 .          .           .
                 .          .           .
2602             .          .           .           .<-------  DD162S
2601             .          .           .       DD162
                 .          .           .           V
                 .          .           .           V
2603             .          .           .      D16D30
                 .          .           .           .
                 .          .           .           .
2611             .          .           .           .           .<-------  DD191S
2610             .          .           .           .       DD191
                 .          .           .           .           V
                 .          .           .           .           V
2612             .          .           .           .      D19D30
                 .          .           .           .           .
                 .          .           .           .           .
2619             .      CPD30.................................
                 .          .
                 .          .
2623             .          .------->   DD30S
2621             .     DD30SE
                 .          V
                 .          V
2626             .     D30D32
                 .          .
                 .          .
2633             .          .         D32
                 .          .           .
                 .          .           .
2646             .          .           .------->    RD32
2642             .          .      DD32RE
                 .          .           .
                 .          .           .
2649             .      CPD32............
                 .          .
                 .          .
2653             .          .------->   DD32S
2651             .     DD32SE
                 .          V
                 .          V
2656             .     D32D33
                 .          .
                 .          .
2663             .          .         D31
                 .          .           .
                 .          .           .
2677             .          .           .------->    RD31
2672             .          .      DD31RE
                 .          .           .
                 .          .           .
2681             .          .           .           .<-------  DD192S
2680             .          .           .       DD192
                 .          .           .           V
                 .          .           .           V
2682             .          .           .      D19D31
                 .          .           .           .
                 .          .           .           .
2690             .          .           .           .           .<-------  DD211S
2689             .          .           .           .       DD211
                 .          .           .           .           V
                 .          .           .           .           V
2691             .          .           .           .      D21D31
                 .          .           .           .           .
                 .          .           .           .           .
2699             .          .       CPD31........................
                 .          .           V
                 .          .           V
2701             .          .      D31D33
                 .          .           .
                 .          .           .
2708             .          .           .         D33
                 .          .           .           .
                 .          .           .           .
2719             .          .           .           .------->    RD33
2717             .          .           .      DD33RE
                 .          .           .           .
                 .          .           .           .
2722             .      CPD33........................
                 .          .
                 .          .
2726             .          .------->  DD331S
2724             .      DD331
                 .          .
                 .          .
2731             .          .------->  DD332S
2729             .      DD332
                 .          V
                 .          V
2734             .     D33D34
                 .          .
                 .          .
2741             .          .         D34
                 .          .           .
                 .          .           .
2753             .          .           .------->    RD34
2750             .          .      DD34RE
                 .          .           .
                 .          .           .
2757             .          .           .           .<-------  DD212S
2756             .          .           .       DD212
                 .          .           .           V
                 .          .           .           V
2758             .          .           .      D21D34
                 .          .           .           .
                 .          .           .           .
2765             .      CPD34........................
                 .          V
                 .          V
2767             .     D34D36
                 .          .
                 .          .
2775             .          .         D36
                 .          .           .
                 .          .           .
2787             .          .           .------->    RD36
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2784          .           .      DD36RE
              .           .          .
              .           .          .
2791          .           .          .          .<-------   DD35S
2790          .           .      DD35SE
              .           .          V
              .           .          V
2792          .           .      D35D36
              .           .          .
              .           .          .
2800          .      CPD36.......................
              .           .
              .           .
2804          .           .------->  DD361S
2802          .      DD361
              .           .
              .           .
2809          .           .------->  DD362S
2807          .      DD362
              .           V
              .           V
2812          .      D36D40
              .           .
              .           .
2819          .           .         D40
              .           .          .
              .           .          .
2829          .           .          .          .<-------  DD381S
2828          .           .      DD381
              .           .          V
              .           .          V
2830          .           .      D38D40
              .           .          .
              .           .          .
2837          .      CPD40.......................
              .           .
              .           .
2841          .           .------->   DD40S
2839          .      DD40SE
              .           V
              .           V
2844          .      D40D41
              .           .
              .           .
2851          .           .         D41
              .           .          .
              .           .          .
2861          .           .          .          .<-------  DD382S
2860          .           .      DD382
              .           .          V
              .           .          V
2862          .           .      D38D41
              .           .          .
              .           .          .
2869          .      CPD41.......................
              .           V
              .           V
2871          .      D41D50
              .           .
              .           .
2878          .           .         L23
              .           .          V
              .           .          V
2887          .           .      L23L24
              .           .          .
              .           .          .
2894          .           .          .        L24
              .           .          .          .
              .           .          .          .
2903          .           .      CPL24...........
              .           .          V
              .           .          V
2905          .           .      L24L26
              .           .          .
              .           .          .
2912          .           .          .        L25
              .           .          .          V
              .           .          .          V
2922          .           .          .      L25L26
              .           .          .          .
              .           .          .          .
2930          .           .          .          .          .<-------  DL181S
2929          .           .          .          .      DL181
              .           .          .          .          V
              .           .          .          .          V
2931          .           .          .          .     L18L26
              .           .          .          .          .
              .           .          .          .          .
2939          .           .          .          .          .          .<-------   DL17S
2938          .           .          .          .          .     DL17SE
              .           .          .          .          .          V
              .           .          .          .          .          V
2940          .           .          .          .          .     L17L26
              .           .          .          .          .          .
              .           .          .          .          .          .
2947          .           .          .          .          .          .         L26
              .           .          .          .          .          .          .
              .           .          .          .          .          .          .
2956          .           .      CPL26...............................................
              .           .          .
              .           .          .
2960          .           .          .------->   DL26S
2958          .           .      DL26SE
              .           .          V
              .           .          V
2963          .           .      L26L27
              .           .          .
              .           .          .
2970          .           .          .        L27
              .           .          .          .
              .           .          .          .
2981          .           .          .          .          .<-------  DL182S
2980          .           .          .          .      DL182
              .           .          .          .          V
              .           .          .          .          V
2982          .           .          .          .     L18L27
              .           .          .          .          .
              .           .          .          .          .
2990          .           .          .          .          .          .<-------  DL191S
2989          .           .          .          .          .     DL191
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                                                                  V
                                                                  V
2991                                                          L19L27
                                                                  .
                                                                  .
2998                                  CPL27.....................................
                                          .
                                          .
3002                                      .-------> DL271S
3000                                  DL271
                                          .
                                          .
3007                                      .-------> DL272S
3005                                  DL272
                                          V
                                          V
3010                                  L27D45
                                          .
                                          .
3017                                      .        D45
                                          .          .
                                          .          .
3030                                      .          .------->    RD45
3027                                      .      DD45RE
                                          .          .
                                          .          .
3034                                      .          .           .<-------  DL192S
3033                                      .          .       DL192
                                          .          .           V
                                          .          .           V
3035                                      .          .      L19D45
                                          .          .           .
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3042                                  CPD45.......................
                                          .
                                          .
3046                                      .-------> DD451S
3044                                  DD451
                                          .
                                          .
3051                                      .-------> DD452S
3049                                  DD452
                                          V
                                          V
3054                                  D45D46
                                          .
                                          .
3061                                      .        D46
                                          .          .
                                          .          .
3074                                      .          .------->    RD46
3071                                      .      DD46RE
                                          .          .
                                          .          .
3078                                      .          .           .<-------   DD30S
3077                                      .          .      DD30SE
                                          .          .           V
                                          .          .           V
3079                                      .          .      D30D46
                                          .          .           .
                                          .          .           .
3086                                  CPD46.......................
                                          .
                                          .
3090                                      .-------> DD461S
3088                                  DD461
                                          .
                                          .
3095                                      .-------> DD462S
3093                                  DD462
                                          V
                                          V
3098                                  D46D47
                                          .
                                          .
3105                                      .        D47
                                          .          .
                                          .          .
3118                                      .          .------->    RD47
3114                                      .      DD47RE
                                          .          .
                                          .          .
3122                                      .          .           .<-------   DD32S
3121                                      .          .      DD32SE
                                          .          .           V
                                          .          .           V
3123                                      .          .      D3247A
                                          .          .           V
                                          .          .           V
3130                                      .          .      D3247B
                                          .          .           .
                                          .          .           .
3138                                      .          .           .           .<-------  DD331S
3137                                      .          .           .       DD331
                                          .          .           .           V
                                          .          .           .           V
3139                                      .          .           .      D3347A
                                          .          .           .           V
                                          .          .           .           V
3146                                      .          .           .      D3347B
                                          .          .           .           .
                                          .          .           .           .
3153                                  CPD47.....................................
                                          .
                                          .
3157                                      .------->   DD47S
3155                                  DD47SE
                                          V
                                          V
3160                                  D47D48
                                          .
                                          .
3167                                      .        D48
                                          .          .
                                          .          .
3179                                      .          .------->    RD48
3176                                      .      DD48RE
                                          .          .
                                          .          .
3183                                      .          .           .<-------  DD332S
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3182                                                  DD332
                                                        V
                                                        V
3184                                                  D33D48
                                                        .
                                                        .
3192                                                    .<-------  DD361S
3191                                                  DD361
                                                        V
                                                        V
3193                                                  D3648A
                                                        V
                                                        V
3200                                                  D3648B
                                                        .
                                                        .
3207                                CPD48.................................
                                      .
                                      .
3211                                  .------->  DD481S
3209                                DD481
                                      .
                                      .
3216                                  .------->  DD482S
3214                                DD482
                                      V
                                      V
3219                                D48D49
                                      .
                                      .
3226                                      D49
                                          .
                                          .
3239                                      .------->    RD49
3235                                  DD49RE
                                          .
                                          .
3243                                      .<-------  DD362S
3242                                      DD362
                                          V
                                          V
3244                                      D36D49
                                          .
                                          .
3252                                      .<-------   DD40S
3251                                      DD40SE
                                          V
                                          V
3253                                      D40D49
                                          .
                                          .
3260                                CPD49.................................
                                      .
                                      .
3264                                  .------->  DD491S
3262                                DD491
                                      .
                                      .
3269                                  .------->  DD492S
3267                                DD492
                                      V
                                      V
3272                                D49D50
                                      .
                                      .
3279                                      D50
                                          .
                                          .
3288                          CPD50.......................
                                  V
                                  V
3290                          D50D64
                                  .
                                  .
3297                              D60
                                  .
                                  .
3308                                      .<-------  DD481S
3307                                  DD481
                                          V
                                          V
3309                                  D48D60
                                          .
                                          .
3317                                CPD60............
                                      .
                                      .
3321                                  .------->  DD601S
3319                                DD601
                                      .
                                      .
3326                                  .------->  DD602S
3324                                DD602
                                      V
                                      V
3329                                D60D63
                                      .
                                      .
3336                                      D63
                                          .
                                          .
3348                                      .<-------  DD482S
3347                                      DD482
                                          V
                                          V
3349                                      D48D63
                                          .
                                          .
3357                                      .<-------  DD491S
3356                                      DD491
                                          V
                                          V
3358                                      D49D63
                                          .
                                          .
3366                                CPD63.................................
                                      V
                                      V
3368                                SRD63
                                      V
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                 .          .          V
3376             .          .     D63D64
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3383             .          .          .        D62
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3394             .          .          .          .          .<-------  DD601S
3393             .          .          .          .      DD601
                 .          .          .          .          V
                 .          .          .          .          V
3395             .          .          .          .     D60D62
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3403             .          .          .      CPD62............
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3407             .          .          .          .------->  DD621S
3405             .          .          .      DD621
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3412             .          .          .          .------->  DD622S
3410             .          .          .      DD622
                 .          .          .          V
                 .          .          .          V
3415             .          .          .     D62D64
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3423             .          .          .          .          .<-------  DD602S
3422             .          .          .          .      DD602
                 .          .          .          .          V
                 .          .          .          .          V
3424             .          .          .          .     D60D64
                 .          .          .          .          .
                 .          .          .          .          .
3433             .          .          .          .          .          .<-------  DD492S
3432             .          .          .          .          .      DD492
                 .          .          .          .          .          V
                 .          .          .          .          .          V
3434             .          .          .          .          .     D49D64
                 .          .          .          .          .          .
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3442             .          .          .          .          .          .         D64
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3452             .          .     CPD64A.............................................
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3454             .     CPD64B............
                 .          V
                 .          V
3456             .     D64D74
                 .          .
                 .          .
3463             .          .         D74
                 .          .          .
                 .          .          .
3473             .          .          .          .<-------  DD622S
3472             .          .          .      DD622
                 .          .          .          V
                 .          .          .          V
3474             .          .          .     D62D74
                 .          .          .          .
                 .          .          .          .
3482             .      CPD74........................
                 .          .
                 .          .
3486             .          .-------> DD741S
3484             .      DD741
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3491             .          .-------> DD742S
3489             .      DD742
                 .          V
                 .          V
3494             .     D74D75
                 .          .
                 .          .
3501             .          .        D79A
                 .          .          .
                 .          .          .
3511             .          .          .          .<-------  DD742S
3510             .          .          .      DD742
                 .          .          .          V
                 .          .          .          V
3512             .          .          .     D7479A
                 .          .          .          .
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3520             .          .     CPD79A............
                 .          .          .
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3522             .          .          .        D51
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3533             .          .          .          .------->    RD51
3531             .          .          .     DD51RE
                 .          .          .          V
                 .          .          .          V
3536             .          .          .     D51D65
                 .          .          .          .
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3543             .          .          .          .        D65
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3552             .          .          .      CPD65............
                 .          .          .          V
                 .          .          .          V
3554             .          .          .     D65D75
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3562             .          .          .          .        D75
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3572             .      CPD75.................................
                 .          V
                 .          V
3574             .     D7579B
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                 .          .
3581             .          .         L33
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3592             .          .          .-------> DL33S
3590             .          .     DL33SE
                 .          .          V
                 .          .          V
3595             .          .     L33L34
                 .          .          .
                 .          .          .
3602             .          .          .        L34
                 .          .          .          .
                 .          .          .          .
3613             .          .          .          .          .<-------  DL26S
3612             .          .          .          .     DL26SE
                 .          .          .          .          V
                 .          .          .          .          V
3614             .          .          .          .     L26L34
                 .          .          .          .          .
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3622             .          .          .          .          .          .<-------  DL271S
3621             .          .          .          .          .       DL271
                 .          .          .          .          .          V
                 .          .          .          .          .          V
3623             .          .          .          .          .      L27L34
                 .          .          .          .          .          .
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3630             .          .      CPL34..................................
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3634             .          .          .-------> DL341S
3632             .          .      DL341
                 .          .          .
                 .          .          .
3639             .          .          .-------> DL342S
3637             .          .      DL342
                 .          .          V
                 .          .          V
3642             .          .     L34D57
                 .          .          .
                 .          .          .
3649             .          .          .        D57
                 .          .          .          .
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3660             .          .          .          .          .<-------  DL272S
3659             .          .          .          .      DL272
                 .          .          .          .          V
                 .          .          .          .          V
3661             .          .          .          .     L27D57
                 .          .          .          .          .
                 .          .          .          .          .
3669             .          .          .          .          .          .<-------  DD451S
3668             .          .          .          .          .      DD451
                 .          .          .          .          .          V
                 .          .          .          .          .          V
3670             .          .          .          .          .     D45D57
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3677             .          .      CPD57..................................
                 .          .          V
                 .          .          V
3679             .          .     D57D58
                 .          .          .
                 .          .          .
3687             .          .          .        D58
                 .          .          .          .
                 .          .          .          .
3698             .          .          .          .          .<-------  DD452S
3697             .          .          .          .      DD452
                 .          .          .          .          V
                 .          .          .          .          V
3699             .          .          .          .     D45D58
                 .          .          .          .          .
                 .          .          .          .          .
3707             .          .          .          .          .          .<-------  DD461S
3706             .          .          .          .          .      DD461
                 .          .          .          .          .          V
                 .          .          .          .          .          V
3708             .          .          .          .          .     D46D58
                 .          .          .          .          .          .
                 .          .          .          .          .          .
3717             .          .          .          .          .          .-------> SSPILL
3715             .          .          .          .          .     RMSBSN
                 .          .          .          .          .          .
                 .          .          .          .          .          .
3721             .          .          .          .          .          .          .<-------  SSPILL
3720             .          .          .          .          .          .     RMSBSN
                 .          .          .          .          .          .          V
                 .          .          .          .          .          .          V
3722             .          .          .          .          .          .      SRRMS
                 .          .          .          .          .          .          .
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3730             .          .          .          .          .      CPRMS............
                 .          .          .          .          .          V
                 .          .          .          .          .          V
3732             .          .          .          .          .       RRMS
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3738             .          .      CPD58..................................
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3742             .          .          .-------> DD581S
3740             .          .      DD581
                 .          .          .
                 .          .          .
3747             .          .          .-------> DD582S
3745             .          .      DD582
                 .          .          V
                 .          .          V
3750             .          .     D58D59
                 .          .          .
                 .          .          .
3757             .          .          .        D59
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3768             .          .          .          .          .<-------  DD462S
3767             .          .          .          .      DD462
                 .          .          .          .          V
                 .          .          .          .          V
3769             .          .          .          .     D46D59
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3777                                                  .<-------   DD47S
3776                                            DD47SE
                                                     V
                                                     V
3778                                            D47D59
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3785                  CPD59.................................
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3789                        .------->   DD59S
3787                  DD59SE
                           V
                           V
3792                  D59D61
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3799                        .        D61
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3809                  CPD61............
                           V
                           V
3811                  D61D72
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3818                        .        L30
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3829                        .          .------->    RL30
3827                        .     DL30RE
                            .          V
                            .          V
3832                        .     L30L31
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3839                        .          .        L31
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3850                        .          .          .------->    RL31
3848                        .          .     DL31RE
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3853                        .      CPL31............
                            .          V
                            .          V
3855                        .     L31L32
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3862                        .          .        L32
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3871                        .      CPL32............
                            .          V
                            .          V
3873                        .     L32L38
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3880                        .          .        L28
                            .          .          V
                            .          .          V
3889                        .          .     L28L29
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3896                        .          .          .        L29
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3907                        .          .      CPL29............
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3911                        .          .          .------->   DL29S
3909                        .          .     DL29SE
                            .          .          V
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3914                        .          .     L29L36
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3921                        .          .          .        L35
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3931                        .          .          .          .          .<-------   DL29S
3930                        .          .          .          .     DL29SE
                            .          .          .          .          V
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3932                        .          .          .          .     L29L35
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3939                        .          .          .       CPL35............
                            .          .          .          V
                            .          .          .          V
3941                        .          .          .      L35L37
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3948                        .          .          .          .         L37
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3958                        .          .          .          .          .         L36
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3970                        .          .          .          .          .          .------->    RL36
3968                        .          .          .          .          .     DL36RE
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3973                        .          .      CPL36.................................
                            .          .          V
                            .          .          V
3975                        .          .     L36L38
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3982                        .          .          .        L38
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3992                        .          .          .          .          .<-------   DL33S
3991                        .          .          .          .     DL33SE
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3993                        .          .          .          .     L33L38
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4000                    CPL38.................................
                            .
                            .-------> DL381S
4004
4002                    DL381
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                            .-------> DL382S
4009
4007                    DL382
                            V
                            V
4012                   L38L39
                            .
                            .
4019                        .         L39
                            .           .
                            .           .          .<-------  DL341S
4030                        .           .      DL341
4029                        .           .          V
                            .           .          V
4031                        .           .     L34L39
                            .           .          .
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4038                    CPL39......................
                            .
                            .-------> DL391S
4042
4040                    DL391
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                            .-------> DL392S
4047
4045                    DL392
                            V
                            V
4050                   L39D68
                            .
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4057                        .         D68
                            .           .
                            .           .          .<-------  DL342S
4068                        .           .      DL342
4067                        .           .          V
                            .           .          V
4069                        .           .     L34D68
                            .           .          .
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4076                    CPD68......................
                            .
                            .-------> DD681S
4080
4078                    DD681
                            .
                            .-------> DD682S
4085
4083                    DD682
                            V
                            V
4088                   D68D69
                            .
                            .
4095                        .         D69
                            .           .
                            .           .          .<-------  DD581S
4105                        .           .      DD581
4104                        .           .          V
                            .           .          V
4106                        .           .     D58D69
                            .           .          .
                            .           .          .
4113                    CPD69......................
                            .
                            .-------> DD691S
4117
4115                    DD691
                            .
                            .-------> DD692S
4122
4120                    DD692
                            V
                            V
4125                   D69D70
                            .
                            .
4132                        .         D70A
                            .           .
                            .           .          .<-------  DD582S
4142                        .           .      DD582
4141                        .           .          V
                            .           .          V
4143                        .           .     D5870A
                            .           .          .
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4150                        .      CPD70A...........
                            .           V
                            .           V
4152                        .      D70A70
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4159                        .           .         D70
                            .           .          .
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4168                    CPD70......................
                            V
                            V
4170                    SRD70
                            V
                            V
4178                   D70D71
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4187                        .         D71
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                            .           .          .<-------  DD59S
4197                        .           .     DD59SE
4196                        .           .          V
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                                                                  V
4198                                                          D59D71
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4205                                          CPD71.......................
                                                  V
                                                  V
4207                                          D71D72
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4216                                                    D72
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4227                                  CPD72.......................
                                          V
                                          V
4229                                  D72D73
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4238                                          D73
                                                .
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4248                                                    .<-------  DD621S
4247                                                DD621
                                                        V
                                                        V
4249                                                D62D73
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4256                                  CPD73.......................
                                          V
                                          V
4258                                  D73D78
                                          .
                                          .
4267                                          D78
                                                .
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4278                                                    .<-------  DD741S
4277                                                DD741
                                                        V
                                                        V
4279                                                D74D78
                                                        .
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4286                                  CPD78.......................
                                          V
                                          V
4288                                  D7879B
                                          .
                                          .
4297                                          D79B
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4307                          CPD79B.......................
                                  V
                                  V
4309                          D79B80
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4318                                  D80
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4327                           CPD80............
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4329                                  D52
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4341                                  .------->    RD52
4339                                  DD52RE
                                          V
                                          V
4344                                  D52D66
                                          .
                                          .
4352                                          D66
                                                .
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4361                                   CPD66............
                                          V
                                          V
4363                                  D66D67
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4370                                          D67
                                                .
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4380                                   CPD67............
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                                          .
4382                                          D76
                                                V
                                                V
4392                                          D76D77
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4400                                                    D77
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4409                                          CPD77............
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4411                                                    B01
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4421                  DUMMY.............................................
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4423                      B03
                          V
                          V
4433                  B03B05
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4439                      B05
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4449                   CPB05............
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                 .          V
4451             .     B05B06
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                 .          .
4458             .          .         B06
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4467             .      CPB06............
                 .          V
                 .          V
4469             .     B06B15
                 .          .
                 .          .
4476             .          .         B07
                 .          .          .
                 .          .          .
4489             .          .          .-------->    RB07
4486             .          .     DB07RE
                 .          .          V
                 .          .          V
4492             .          .     B07B09
                 .          .          .
                 .          .          .
4499             .          .          .         B08
                 .          .          .          V
                 .          .          .          V
4509             .          .          .     B08B09
                 .          .          .          .
                 .          .          .          .
4516             .          .          .          .         B09
                 .          .          .          .          .
                 .          .          .          .          .
4528             .          .          .          .          .-------->    RB09
4525             .          .          .          .     DB09RE
                 .          .          .          .          .
                 .          .          .          .          .
4531             .          .      CPB09........................
                 .          .          V
                 .          .          V
4533             .          .      SRB11
                 .          .          V
                 .          .          V
4542             .          .     B09B11
                 .          .          .
                 .          .          .
4549             .          .          .         B10
                 .          .          .          V
                 .          .          .          V
4558             .          .          .     B1011A
                 .          .          .          V
                 .          .          .          V
4565             .          .          .     B1011B
                 .          .          .          .
                 .          .          .          .
4572             .          .          .          .         B11
                 .          .          .          .          .
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4585             .          .          .          .          .-------->    RB11
4581             .          .          .          .     DB11RE
                 .          .          .          .          .
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4588             .          .      CPB11........................
                 .          .          V
                 .          .          V
4590             .          .     B11B12
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                 .          .          .
4597             .          .          .         B12
                 .          .          .          .
                 .          .          .          .
4609             .          .          .          .-------->    RB12
4607             .          .          .     DB12RE
                 .          .          .          .
                 .          .          .          .
4612             .          .      CPB12............
                 .          .          V
                 .          .          V
4614             .          .     B12B14
                 .          .          .
                 .          .          .
4621             .          .          .         B13
                 .          .          .          V
                 .          .          .          V
4631             .          .          .     B13B14
                 .          .          .          .
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4638             .          .          .          .         B14
                 .          .          .          .          .
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4651             .          .          .          .          .-------->    RB14
4647             .          .          .          .     DB14RE
                 .          .          .          .          .
                 .          .          .          .          .
4654             .          .      CPB14........................
                 .          .          V
                 .          .          V
4656             .          .     B14B15
                 .          .          .
                 .          .          .
4663             .          .          .         B15
                 .          .          .          .
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4672             .      CPB15........................
                 .          .
                 .          .
4674             .          .         B16
                 .          .          .
                 .          .          .
4685             .          .          .-------->    RB16
4683             .          .     DB16RE
                 .          .          V
                 .          .          V
4688             .          .     B16B17
                 .          .          .
                 .          .          .
4695             .          .          .         B17
                 .          .          .          .
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4707             .          .          .          .-------->    RB17
4705             .          .          .     DB17RE
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4710            .          .      CPB17...........
                .          .          V
                .          .          V
4712            .          .     B17B18
                .          .          .
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4719            .          .          .        B18
                .          .          .          .
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4731            .          .          .          .-------->    RB18
4729            .          .          .     DB18RE
                .          .          .          .
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4734            .          .      CPB18...........
                .          .          V
                .          .          V
4736            .          .     B18B19
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4743            .          .          .        B19
                .          .          .          .
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4752            .          .      CPB19...........
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4754            .          .          .        B20
                .          .          .          .
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4763       DUMMY...................................
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                .
4765            .        B21
                .          .
                .          .
4776            .          .-------->    RB21
4774            .      DB21RE
                .          V
                .          V
4779            .      B21B22
                .          .
                .          .
4786            .          .        B22
                .          .          .
                .          .          .
4795            .     CPB22............
                .          .
                .          .
4797            .          .        B23
                .          .          .
                .          .          .
4809            .          .          .-------->    RB23
4806            .          .     DB23RE
                .          .          V
                .          .          V
4812            .          .     B23B24
                .          .          .
                .          .          .
4819            .          .          .        B24
                .          .          .          .
                .          .          .          .
4831            .          .          .          .-------->    RB24
4828            .          .          .     DB24RE
                .          .          .          .
                .          .          .          .
4834            .          .      CPB24...........
                .          .          V
                .          .          V
4836            .          .     B24B25
                .          .          .
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4843            .          .          .        B25
                .          .          .          .
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4852            .          .      CPB25...........
                .          .          .
                .          .          .
4854            .          .          .        B26
                .          .          .          .
                .          .          .          .
4867            .          .          .          .-------->    RB26
4863            .          .          .     DB26RE
                .          .          .          V
                .          .          .          V
4870            .          .          .     B26B27
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4877            .          .          .          .        B27
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4886            .          .          .      CPB27...........
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4888       DUMMY...................................
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4890            .        B76
                .          .
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4901            .          .-------->    RB76
4899            .      DB76RE
                .          V
                .          V
4904            .      B7676A
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4911            .          .        B75
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4924            .          .          .-------->    RB75
4920            .          .     DB75RE
                .          .          V
                .          .          V
4927            .          .     B75A75
                .          .          .
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4934            .          .          .        B75A
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4943          .          .      CPB75A............
              .          .          V
              .          .          V
4945          .          .      B7576A
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4952          .          .          .        B76A
              .          .          .          .
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4961          .      CPB76A........................
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4963          .      B76B78
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4971          .          .         B77
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4983          .          .          .-------->    RB77
4980          .          .      DB77RE
              .          .          V
              .          .          V
4986          .          .      B77B78
              .          .          .
              .          .          .
4993          .          .          .         B78
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5004          .          .          .          .-------->    RB78
5002          .          .          .      DB78RE
              .          .          .          .
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5007          .          .      CPB78A............
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5012          .          .          .-------->  RB78BN
5009          .          .      DB78BN
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5015          .      CPB78B............
              .          V
              .          V
5017          .      B78B79
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5024          .          .         B79
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5036          .          .          .-------->    RB79
5034          .          .      DB79RE
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5039          .       CPB79............
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              .          V
5041          .      B79B80
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5048          .          .         B80
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5059          .          .          .-------->    RB80
5057          .          .      DB80RE
              .          .          .
              .          .          .
5062          .       CPB80............
              .          V
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5064          .       SRB80
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              .          V
5072          .      B80B81
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5079          .          .         B81
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              .          .          .
5090          .          .          .-------->    RB81
5088          .          .      DB81RE
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5093          .       CPB81............
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              .          V
5095          .       SRB81
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5103          .      B81B84
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5111          .          .         B82
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5122          .          .          .-------->    RB82
5120          .          .      DB82RE
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5125          .          .      B82B83
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5132          .          .          .         B83
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5143          .          .          .          .-------->    RB83
5141          .          .          .      DB83RE
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5146          .          .       CPB83............
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5148          .          .       SRB83
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5156          .          .      B83B84
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5163          .          .          .         B71
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5177          .          .          .          .-------->    RB71
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5173                    DB71RE
                           V
                           V
5180                    B71B72
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5187                          B72
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5198                          .-------->    RB72
5196                       DB72RE
                              .
                              .
5201                    CPB72............
                           V
                           V
5203                    B72B74
                           .
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5210                          B73
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5221                          .-------->    RB73
5219                       DB73RE
                              V
                              V
5224                       SRB73
                              V
                              V
5232                       B73B74
                              .
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5239                                  B74
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5250                                   .-------->    RB74
5248                                DB74RE
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                                       .
5253                    CPB74........................
                           V
                           V
5255                    SRB74
                           V
                           V
5263                    B74B84
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5270                          B84
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5281                          .-------->    RB84
5279                       DB84RE
                              .
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5284                 CPB84...................................
                        V
                        V
5286                 SRB84
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5295                       B28
                           .
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5306                       .-------->    RB28
5304                 DB28RE
                           .
                           .
5309                          B29
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5323                          .-------->    RB29
5319                    DB29RE
                              .
                              .
5326                          B30
                              .
                              .
5339                          .-------->    RB30
5335                       DB30RE
                              V
                              V
5342                       SRB30
                              .
                              .
5350                                  B31
                                       .
                                       .
5364                                   .-------->    RB31
5359                                DB31RE
                                       V
                                       V
5367                                SRB31
                                       .
                                       .
5375                       DUMMY............
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5377           DUMMY.............................................
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5379             B32
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5395              .-------->    RB32
5390          DB32RE
                  V
                  V
5398          SRB32
                  V
                  V
5406          B32B33
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5413               B33
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5425               .-------->    RB33
5422          DB33RE
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5428          .       CPB33...........
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5430          .           .         B34
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5439          .           .           B38
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              .           .           .
5450          .           .           .-------->    RB38
5448          .           .       DB38RE
              .           .           V
              .           .           V
5453          .           .       B38B39
              .           .           .
              .           .           .
5460          .           .           .         B37
              .           .           .           V
              .           .           .           V
5469          .           .           .       B37B39
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5476          .           .           .           .         B39
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5486          .           .       CPB39........................
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              .           .           V
5488          .           .       SRB39
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5496          .           .           .         B35
              .           .           .           .
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5506          .           .           .           .         B36
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5516          .           .       DUMMY...................................
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5518      DUMMY........................
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5520          .         L41
              .           .
              .           .
5531          .           .-------->   DL41S
5529          .       DL41SE
              .           V
              .           V
5534          .       L41L42
              .           .
              .           .
5541          .           .         L42
              .           .           .
              .           .           .
5550          .       CPL42...........
              .           .
              .           .
5554          .           .-------->  DL421S
5552          .       DL421
              .           .
              .           .
5559          .           .-------->  DL422S
5557          .       DL422
              .           V
              .           V
5562          .       L42L43
              .           .
              .           .
5570          .           .         L43
              .           .           .
              .           .           .
5580          .           .           .          .<-------  DL381S
5579          .           .       DL381
              .           .           V
              .           .           V
5581          .           .       L38L43
              .           .           .
              .           .           .
5588          .       CPL43........................
              .           .
              .           .
5592          .           .-------->  DL431S
5590          .       DL431
              .           .
              .           .
5597          .           .-------->  DL432S
5595          .       DL432
              .           V
              .           V
5600          .       L43L44
              .           .
              .           .
5607          .           .         L44
              .           .           .
              .           .           .
5618          .           .           .          .<-------  DL382S
5617          .           .       DL382
              .           .           V
              .           .           V
5619          .           .       L38L44
              .           .           .
              .           .           .
5627          .           .           .           .<-------  DL391S
5626          .           .           .       DL391
              .           .           .           V
              .           .           .           V
5628          .           .           .       L39L44
              .           .           .           .
              .           .           .           .
5635          .       CPL44...................................
              .           .
              .           .
5639          .           .-------->  DL441S
5637          .       DL441
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5644          .           .-------->  DL442S
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5642          .      DL442
              .        V
              .        V
5647          .     L44B40
              .        .
              .        .
5654          .        .        B40
              .        .          .
              .        .          .
5666          .        .          .          .<-------  DL392S
5665          .        .          .      DL392
              .        .          .          V
              .        .          .          V
5667          .        .          .     L39B40
              .        .          .          .
              .        .          .          .
5675          .        .          .          .          .<-------  DD681S
5674          .        .          .          .      DD681
              .        .          .          .          V
              .        .          .          .          V
5676          .        .          .          .     D68B40
              .        .          .          .          .
              .        .          .          .          .
5683          .      CPB40.................................
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5687          .        .------->  DB401S
5685          .      DB401
              .        .
              .        .
5692          .        .------->  DB402S
5690          .      DB402
              .        V
              .        V
5695          .     B40B41
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              .        .
5702          .        .        B41
              .        .          .
              .        .          .
5713          .        .          .          .<-------  DD682S
5712          .        .          .      DD682
              .        .          .          V
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5714          .        .          .     D68B41
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5722          .        .          .          .          .<-------  DD691S
5721          .        .          .          .      DD691
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              .        .          .          .          V
5723          .        .          .          .     D69B41
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5730          .      CPB41.................................
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              .        .
5734          .        .------->  DB41S
5732          .      DB41SE
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              .        V
5737          .     B41B43
              .        .
              .        .
5744          .        .        B43
              .        .          .
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5754          .        .          .          .<-------  DD692S
5753          .        .          .      DD692
              .        .          .          V
              .        .          .          V
5755          .        .          .     D69B43
              .        .          .          .
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5762          .      CPB43......................
              .        V
              .        V
5764          .     B43B45
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5771          .        .        L40
              .        .          V
              .        .          V
5781          .        .     L40L45
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              .        .          .
5788          .        .          .        L45
              .        .          .          .
              .        .          .          .
5798          .        .      CPL45...........
              .        .          V
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5800          .        .     L45L46
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              .        .          .
5807          .        .          .        L46
              .        .          .          .
              .        .          .          .
5817          .        .          .          .          .<-------  DL41S
5816          .        .          .          .      DL41SE
              .        .          .          .          V
              .        .          .          .          V
5818          .        .          .          .     L41L46
              .        .          .          .          .
              .        .          .          .          .
5825          .        .      CPL46.........................
              .        .          .
              .        .          .
5829          .        .          .------->  DL461S
5827          .        .      DL461
              .        .          .
              .        .          .
5834          .        .          .------->  DL462S
5832          .        .      DL462
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              .        .          V
5837          .        .     L46L47
              .        .          .
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5844          .        .          .        L47
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5854            .         .         .         .<-------  DL421S
5853            .         .         .      DL421
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5855            .         .         .     L42L47
                .         .         .         .
                .         .         .         .
5862            .         .      CPL47.......................
                .         .         .
                .         .         .
5866            .         .         .-------> DL471S
5864            .         .      DL471
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                .         .         .
5871            .         .         .-------> DL472S
5869            .         .      DL472
                .         .         V
                .         .         V
5874            .         .     L47L48
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                .         .         .
5881            .         .         .        L48
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                .         .         .         .
5891            .         .         .         .<-------  DL422S
5890            .         .         .      DL422
                .         .         .         V
                .         .         .         V
5892            .         .         .     L42L48
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5900            .         .         .         .          .<-------  DL431S
5899            .         .         .         .      DL431
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5901            .         .         .         .     L43L48
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5908            .         .      CPL48.................................
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5912            .         .         .-------> DL481S
5910            .         .      DL481
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5917            .         .         .-------> DL482S
5915            .         .      DL482
                .         .         V
                .         .         V
5920            .         .     L48L49
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5927            .         .         .        L49
                .         .         .         .
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5938            .         .         .         .<-------  DL432S
5937            .         .         .      DL432
                .         .         .         V
                .         .         .         V
5939            .         .         .     L43L49
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5947            .         .         .         .          .<-------  DL441S
5946            .         .         .         .      DL441
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                .         .         .         .         V
5948            .         .         .         .     L44L49
                .         .         .         .         .
                .         .         .         .         .
5955            .         .      CPL49.................................
                .         .         .
                .         .         .
5959            .         .         .-------> DL491S
5957            .         .      DL491
                .         .         .
                .         .         .
5964            .         .         .-------> DL492S
5962            .         .      DL492
                .         .         V
                .         .         V
5967            .         .     L49B44
                .         .         .
                .         .         .
5974            .         .         .        B44
                .         .         .         .
                .         .         .         .
5985            .         .         .         .<-------  DL442S
5984            .         .         .      DL442
                .         .         .         V
                .         .         .         V
5986            .         .         .     L44B44
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5994            .         .         .         .          .<-------  DB401S
5993            .         .         .         .      DB401
                .         .         .         .         V
                .         .         .         .         V
5995            .         .         .         .     B40B44
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6003            .         .      CPB44.................................
                .         .         .
                .         .         .
6007            .         .         .-------> DB441S
6005            .         .      DB441
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                .         .         .
6012            .         .         .-------> DB442S
6010            .         .      DB442
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                .         .         V
6015            .         .     B44B45
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6022            .         .         .        B45
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                .         .         .         .
6032            .         .         .         .<-------  DB402S
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6031                                                  DB402
                                                        V
                                                        V
6033                                                  B40B45
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6041                                                    .<-------  DB41S
6040                                                    .     DB41SE
                                                        .         V
                                                        .         V
6042                                                    .     B41B45
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6049                                  CPB45.............................................
                                        V
                                        V
6051                                  B45B47
                                        .
                                        .
6058                                      W21
                                          V
                                          V
6068                                    W21L50
                                          .
                                          .
6075                                          .       L50
                                              .         .
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6085                                      CPL50............
                                          V
                                          V
6087                                    L50L51
                                          .
                                          .
6094                                          .       L51
                                              .         .
                                              .         .
6105                                          .-------> RL51
6103                                          .   DL51RE
                                              .         .
                                              .         .
6109                                          .         .<-------  DL461S
6108                                          .       DL461
                                              .         V
                                              .         V
6110                                          .       L46L51
                                              .         .
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6117                                      CPL51........................
                                          V
                                          V
6119                                    L51L52
                                          .
                                          .
6126                                          .       L52
                                              .         .
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6137                                          .-------> RL52
6135                                          .   DL52RE
                                              .         .
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6141                                          .         .<-------  DL462S
6140                                          .       DL462
                                              .         V
                                              .         V
6142                                          .       L46L52
                                              .         .
                                              .         .
6150                                          .         .           .<-------  DL471S
6149                                          .         .       DL471
                                              .         .           V
                                              .         .           V
6151                                          .         .       L47L52
                                              .         .           .
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6158                                      CPL52...................................
                                          .
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6162                                      .-------> DL521S
6160                                    DL521
                                          .
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6167                                      .-------> DL522S
6165                                    DL522
                                          V
                                          V
6170                                    L52L53
                                          .
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6177                                          .       L53
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6187                                          .         .<-------  DL472S
6186                                          .       DL472
                                              .         V
                                              .         V
6188                                          .       L47L53
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                                              .         .
6196                                          .         .           .<-------  DL481S
6195                                          .         .       DL481
                                              .         .           V
                                              .         .           V
6197                                          .         .       L48L53
                                              .         .           .
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6204                                      CPL53...................................
                                          .
                                          .
6208                                      .-------> DL531S
6206                                    DL531
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6213                                      .-------> DL532S
6211                                    DL532
                                          V
                                          V
6216                                    L53L54
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6223          .           .           .        L54
              .           .           .          .
              .           .           .          .
6234          .           .           .          .<-------  DL482S
6233          .           .           .      DL482
              .           .           .          V
              .           .           .          V
6235          .           .           .     L48L54
              .           .           .          .
              .           .           .          .
6243          .           .           .          .          .<-------  DL491S
6242          .           .           .          .      DL491
              .           .           .          .          V
              .           .           .          .          V
6244          .           .           .          .     L49L54
              .           .           .          .          .
              .           .           .          .          .
6251          .           .      CPL54.....................................
              .           .           .
              .           .           .
6255          .           .           .-------> DL54S
6253          .           .     DL54SE
              .           .          V
              .           .          V
6258          .           .     L54B46
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              .           .           .
6265          .           .           .        B46
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6276          .           .           .          .<-------  DL492S
6275          .           .           .      DL492
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              .           .           .          V
6277          .           .           .     L49B46
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              .           .           .          .
6285          .           .           .          .          .<-------  DB441S
6284          .           .           .          .      DB441
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              .           .           .          .          V
6286          .           .           .          .     B44B46
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6293          .           .      CPB46.....................................
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6295          .           .     B46B47
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6302          .           .           .        B47
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              .           .           .          .
6312          .           .           .          .<-------  DB442S
6311          .           .           .      DB442
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              .           .           .          V
6313          .           .           .     B44B47
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6320          .      CPB47.....................................
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6322          .     B47B48
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6330          .           .        B48
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              .           .          .
6339          .      CPB48............
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6341          .     B48B54
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6348          .           .        B42
              .           .          V
              .           .          V
6357          .           .     B42B53
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              .           .           .
6364          .           .           .        B53
              .           .           .          .
              .           .           .          .
6373          .           .      CPB53............
              .           .          V
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6375          .           .     B53B54
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              .           .           .
6382          .           .           .        B49
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6391          .           .           .     B49B50
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              .           .           .          .
6398          .           .           .          .        B02
              .           .           .          .          .
              .           .           .          .          .
6409          .           .           .          .          .-------> RB02
6407          .           .           .          .     DB02RE
              .           .           .          .          .
              .           .           .          .          .
6412          .           .           .          .          .        B04
              .           .           .          .          .          .
              .           .           .          .          .          .
6426          .           .           .          .          .          .-------> RB04
6422          .           .           .          .          .     DB04RE
              .           .           .          .          .          V
              .           .           .          .          .          V
6429          .           .           .          .          .     B04B02
              .           .           .          .          .          .
              .           .           .          .          .          .
6436          .           .           .          .      CPB02............
              .           .           .          .          V
              .           .           .          .          V
6438          .           .           .          .     B02B50
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6446          .           .           .          .          .        B50
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6455                                                          CPB50.......................
                                                                  V
                                                                  V
6457                                                          B50B52
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6464                                                              .        B51
                                                                  .         V
                                                                  .         V
6473                                                              .      B51B52
                                                                  .           .
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6481                                                              .           .        B52
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6490                                                          CPB52.......................
                                                                  V
                                                                  V
6492                                                          B52B54
                                                                  .
                                                                  .
6499                                                              .        B54
                                                                  .           .
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6511                                                              .           .-------->    RB54
6509                                                              .      DB54RE
                                                                  .           .
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6514                                  CPB54.................................
                                          V
                                          V
6517                                  B54B57
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6525                                      .         L55
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6536                                      .           .-------->  DL551S
6534                                      .       DL551
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6541                                      .           .-------->  DL552S
6539                                      .       DL552
                                          .           V
                                          .           V
6544                                      .      L55L56
                                          .           .
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6552                                      .           .        L56
                                          .           .          .
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6563                                      .           .-------->    RL56
6561                                      .      DL56RE
                                          .           .
                                          .           .
6567                                      .           .           .<-------  DL521S
6566                                      .           .      DL521
                                          .           .          V
                                          .           .          V
6568                                      .           .      L52L56
                                          .           .          .
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6575                                      .       CPL56.......................
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6579                                      .           .-------->  DL561S
6577                                      .       DL561
                                          .           .
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6584                                      .           .-------->  DL562S
6582                                      .       DL562
                                          .           V
                                          .           V
6587                                      .      L56L57
                                          .           .
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6594                                      .           .        L57
                                          .           .          .
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6604                                      .           .           .<-------  DL522S
6603                                      .           .      DL522
                                          .           .          V
                                          .           .          V
6605                                      .           .      L52L57
                                          .           .          .
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6613                                      .           .          .           .<-------  DL531S
6612                                      .           .          .       DL531
                                          .           .          .           V
                                          .           .          .           V
6614                                      .           .          .      L53L57
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6621                                      .       CPL57.................................
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6625                                      .           .-------->  DL571S
6623                                      .       DL571
                                          .           .
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6630                                      .           .-------->  DL572S
6628                                      .       DL572
                                          .           V
                                          .           V
6633                                      .      L57L58
                                          .           .
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6640                                      .           .        L58
                                          .           .          .
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6650                                      .           .          .           .<-------  DL532S
6649                                      .           .      DL532
                                          .           .          V
                                          .           .          V
6651                                      .           .      L53L58
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6661                                      .           .          .           .<-------   DL54S
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6660                                                  DL54SE
                                                         V
                                                         V
6662                                                  L54L58
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6671                    CPL58.................................
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6675                            .-------> DL581S
6673                    DL581
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6680                            .-------> DL582S
6678                    DL582
                                V
                                V
6683                  L58B55
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                                .
6690                            .        B55
                                .          .
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6699                    CPB55............
                                V
                                V
6701                  B55B56
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6708                            .        B56
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6719                            .          .-------> RB56
6717                            .     DB56RE
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6722                    CPB56............
                                V
                                V
6724                  B56B57
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6731                            .        B57
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6742                            .          .-------> RB57
6740                            .     DB57RE
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6745            CPB57........................
                    V
                    V
6747            B57B58
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6755                    B58
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6767                    .-------> RB58
6764                DB58RE
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6770            CPB58............
                    V
                    V
6772            B58B59
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6780                    B59
                        .
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6793                    .-------> RB59
6789                DB59RE
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6796            CPB59............
                    V
                    V
6798            B59B65
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6805                    B61
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6817                    .-------> RB61
6815                DB61RE
                        V
                        V
6820                B61B62
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6828                    .        B62
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6840                    .          .-------> RB62
6838                    .     DB62RE
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6843                    CPB62............
                        V
                        V
6845                B62B63
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6854                    .        B63
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6863                    CPB63............
                        V
                        V
6865                    SRB63
                        V
                        V
6873                B63B65
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6880                    .        B64
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6892                    .          .-------> RB64
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6889                                  DB64RE
                                         V
                                         V
6895                                  B64B65
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6900                                     .          B65
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6909                        CPB65.....................................
                                V
                                V
6911                        B65B66
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6918                            .        S01
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6938                            .          .-------->    RS01
6930                            .     DS01RE
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6943                            .          .-------->  DS011S
6941                            .      DS011
                                .          .
                                .          .
6948                            .          .-------->  DS012S
6946                            .      DS012
                                .          V
                                .          V
6951                            .     S01B66
                                .          .
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6958                            .          .        B66
                                .          .          .
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6973                            .          .          .-------->    RB66
6969                            .          .     DB66RE
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6976                        CPB66.......................
                                V
                                V
6978                        B66B68
                                .
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6987                            .          .<--------  DS011S
6986                            .      DS011
                                .          V
                                .          V
6988                            .     S01S02
                                .          .
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6996                            .          .        S02
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7010                            .          .          .-------->    RS02
7007                            .          .     DS02RE
                                .          .          .
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7013                            .      CPS02............
                                .          .
                                .          .
7017                            .          .-------->  DS021S
7015                            .      DS021
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7022                            .          .-------->  DS022S
7020                            .      DS022
                                .          V
                                .          V
7025                            .     S02B67
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7033                            .          .        B67
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7045                            .          .          .-------->    RB67
7043                            .          .     DB67RE
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7049                            .          .          .          .<--------  DS012S
7048                            .          .          .      DS012
                                .          .          .          V
                                .          .          .          V
7050                            .          .          .     S01B67
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7059                            .      CPB67.......................
                                .          V
                                .          V
7061                            .     B67B68
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7068                            .          .        B68
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7080                            .          .          .-------->    RB68
7078                            .          .     DB68RE
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7083                        CPB68.......................
                                V
                                V
7085                        B68B69
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7092                            .        B69
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7102                            .          .          .<--------  DS022S
7101                            .          .      DS022
                                .          .          V
                                .          .          V
7103                            .          .     S02B69
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7112                        CPB69.......................
                                V
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7114          .     B69B70
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7122          .       .       B85
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7136          .       .        .-------->   RB85
7131          .       .    DB85RE
              .       .        V
              .       .        V
7139          .       .    B85B86
              .       .        .
              .       .        .
7146          .       .        .       B86
              .       .        .        .
              .       .        .        .
7157          .       .        .        .-------->   RB86
7155          .       .        .    DB86RE
              .       .        .        .
              .       .        .        .
7160          .       .     CPB86............
              .       .        V
              .       .        V
7162          .       .    B86B89
              .       .        .
              .       .        .
7169          .       .        .       B87
              .       .        .        .
              .       .        .        .
7180          .       .        .        .-------->   RB87
7178          .       .        .    DB87RE
              .       .        .        V
              .       .        .        V
7183          .       .        .    B87B88
              .       .        .        .
              .       .        .        .
7190          .       .        .        .       B88
              .       .        .        .        .
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7201          .       .        .        .        .-------->   RB88
7199          .       .        .        .    DB88RE
              .       .        .        .        .
              .       .        .        .        .
7204          .       .        .     CPB88............
              .       .        .        V
              .       .        .        V
7206          .       .        .    B88B89
              .       .        .        .
              .       .        .        .
7213          .       .        .        .       B89
              .       .        .        .        .
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7225          .       .        .        .        .-------->   RB89
7223          .       .        .        .    DB89RE
              .       .        .        .        .
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7228          .       .     CPB89........................
              .       .        V
              .       .        V
7230          .       .     SRB89
              .       .        .
              .       .        .
7240          .       .        .-------->  DB89SD
7238          .       .    DB89SW
              .       .        V
              .       .        V
7243          .       .    B89B92
              .       .        .
              .       .        .
7250          .       .        .       B90
              .       .        .        .
              .       .        .        .
7261          .       .        .        .-------->   RB90
7259          .       .        .    DB90RE
              .       .        .        V
              .       .        .        V
7264          .       .        .    B90B91
              .       .        .        .
              .       .        .        .
7273          .       .        .        .       B91
              .       .        .        .        .
              .       .        .        .        .
7286          .       .        .        .        .-------->   RB91
7283          .       .        .        .    DB91RE
              .       .        .        .        .
              .       .        .        .        .
7289          .       .        .     CPB91............
              .       .        .        V
              .       .        .        V
7291          .       .        .    B91B92
              .       .        .        .
              .       .        .        .
7298          .       .        .        .       B92
              .       .        .        .        .
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7308          .       .     CPB92........................
              .       .        V
              .       .        V
7310          .       .    B92B70
              .       .        .
              .       .        .
7317          .       .        .       B70
              .       .        .        .
              .       .        .        .
7326          .    CPB70........................
              .       V
              .       V
7328          .    B70B93
              .       .
              .       .
7336          .       .       B93
              .       .        .
              .       .        .
7347          .       .        .-------->   RB93
7345          .       .    DB93RE
              .       .        .
              .       .        .
7350          .    CPB93............
              .       V
              .       V
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7352          .     B93B94
              .       .
7360          .       .        B94
              .       .         .
              .       .         .
7370          .   CPB94............
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              .       .
7372          .       .        L63
              .       .         .
              .       .         .
7382          .       .         .          .<-------  DL572S
7381          .       .         .      DL572
              .       .         .          V
              .       .         .          V
7383          .       .         .     L57L63
              .       .         .         .
              .       .         .         .
7393          .       .         .         .          .<-------  DL581S
7392          .       .         .         .      DL581
              .       .         .         .          V
              .       .         .         .          V
7394          .       .         .         .     L58L63
              .       .         .         .         .
              .       .         .         .         .
7403          .       .     CPL63......................
              .       .         .
              .       .         .
7407          .       .         .-------->   DL63S
7405          .       .    DL63SE
              .       .        V
              .       .        V
7410          .       .    L63B95
              .       .         .
              .       .         .
7415          .       .         .        B95
              .       .         .         .
              .       .         .         .
7425          .       .         .         .          .<-------  DL582S
7424          .       .         .         .      DL582
              .       .         .         .          V
              .       .         .         .          V
7426          .       .         .         .     L58B95
              .       .         .         .         .
              .       .         .         .         .
7435          .       .     CPB95......................
              .       .        V
              .       .        V
7437          .       .    B95B96
              .       .         .
              .       .         .
7446          .       .         .        B96
              .       .         .         .
              .       .         .         .
7458          .       .         .         .-------->    RB96
7456          .       .         .     DB96RE
              .       .         .         .
              .       .         .         .
7461          .       .     CPB96............
              .       .        V
              .       .        V
7463          .       .    B96B97
              .       .         .
              .       .         .
7470          .       .         .        B97
              .       .         .         .
              .       .         .         .
7480          .       .     CPB97............
              .       .         .
              .       .         .
7484          .       .         .-------->    RB97
7482          .       .    DB97RE
              .       .        V
              .       .        V
7487          .       .     SRB97
              .       .         .
              .       .         .
7498          .       .         .-------->   DD97S
7495          .       .    DB97SE
              .       .        V
              .       .        V
7501          .       .    B97B99
              .       .         .
              .       .         .
7508          .       .         .        L60
              .       .         .         .
              .       .         .         .
7518          .       .         .         .          .<-------  DL552S
7517          .       .         .         .      DL552
              .       .         .         .          V
              .       .         .         .          V
7519          .       .         .         .     L55L60
              .       .         .         .         .
              .       .         .         .         .
7529          .       .         .         .         .          .<-------  DL561S
7528          .       .         .         .         .      DL561
              .       .         .         .         .          V
              .       .         .         .         .          V
7530          .       .         .         .         .     L56L60
              .       .         .         .         .         .
              .       .         .         .         .         .
7539          .       .         .     CPL60......................
              .       .         .         .
              .       .         .         .
7543          .       .         .         .-------->  DL601S
7541          .       .         .     DL601
              .       .         .         .
              .       .         .         .
7548          .       .         .         .-------->  DL602S
7546          .       .         .     DL602
              .       .         .         V
              .       .         .         V
7551          .       .         .     L60L61
              .       .         .         .
              .       .         .         .
7560          .       .         .         .        L61
              .       .         .         .         .
              .       .         .         .         .
7570          .       .         .         .         .          .<-------  DL562S
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7569                                                  DL562
                                                        V
                                                        V
7571                                                L56L61
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7580                                  CPL61.......................
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7584                                          .-------> DL61S
7582                                  DL61SE
                                          V
                                          V
7587                                  L61L62
                                                        .
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7596                                          L62
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7606                                                    .<-------  DL571S
7605                                                DL571
                                                        V
                                                        V
7607                                                L57L62
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7615                                  CPL62.......................
                                          V
                                          V
7617                                  L62L68
                                                        .
                                                        .
7625                                          L64
                                                        .
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7635                                                    .<-------  DL63S
7634                                                DL63SE
                                                        V
                                                        V
7636                                                L63L64
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7643                                      CPL64............
                                              V
                                              V
7645                                      L64L67
                                                        .
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7654                                                L67
                                                        .
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7663                                      CPL67............
                                              V
                                              V
7665                                      L67L68
                                                        .
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7673                                                    .<-------  DL602S
7672                                                DL602
                                                        V
                                                        V
7674                                                L60L68
                                                        .
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7684                                                    .<-------  DL61S
7683                                                    .     DL61SE
                                                        .         V
                                                        .         V
7685                                                    .     L61L68
                                                        .         .
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7692                                                    .         .     L68
                                                        .         .       .
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7702                                  CPL68.............................................
                                          V
                                          V
7704                                  L68L72
                                                        .
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7711                                          L72
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                                                        .
7723                                                    .-------> RL72
7721                                      DL72RE
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7726                                  CPL72............
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7730                                          .-------> DL72S
7728                                  DL72SE
                                          V
                                          V
7733                                  L72B99
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7742                                          B99
                                                        .
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7751                              CPB99........................
                                      V
                                      V
7753                              B99S11
                                          .
                                          .
7761                                  S11
                                          .
                                          .
7770                              CPS11............
                                      V
                                      V
7772                              SRS11
                                      V
                                      V
7780                              S11S14
                                          .
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7787                                  S12
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7797                                                  .<-------   DL72S
7796                                          DL72SE
                                                 V
                                                 V
7798                                          L72S12
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7805                                     CPS12............
                                            V
                                            V
7807                                     SRS12
                                            V
                                            V
7815                                    S12S13
                                                 .
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7822                                                 S13
                                                 .
                                                 .
7834                                                 .------->    RS13
7832                                          DS13RE
                                                 .
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7837                                     CPS13............
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                                                 .
7841                                                 .------->   DS13S
7839                                     DS13SE
                                            V
                                            V
7844                                    S13S14
                                                 .
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7851                                                 S14
                                                 .
                                                 .
7867                                                 .------->    RS14
7863                                          DS14RE
                                                 .
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7870                                CPS14........................
                                       V
                                       V
7872                                S14S16
                                                 .
                                                 .
7879                                        B98
                                                 .
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7891                                                 .------->    RB98
7889                                     DB98RE
                                            V
                                            V
7894                                    B98100
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                                                 .
7901                                                B100
                                                 .
                                                 .
7911                                                 .                .<-------   DD97S
7910                                                 .          DB97SE
                                                 .                .
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7912                                     CPB100........................
                                            V
                                            V
7914                                      B100S
                                                 .
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7921                                                 S15
                                                 .
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7937                                                 .------->    RS15
7933                                          DS15RE
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7940                                      CPS15............
                                            V
                                            V
7942                                     S15S16
                                                 .
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7949                                                 S16
                                                 .
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7963                                                 .------->    RS16
7959                                          DS16RE
                                                 .
                                                 .
7966                                CPS16........................
                                       V
                                       V
7968                                S16S18
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7975                                        S17
                                            V
                                            V
7985                                     S17S18
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7992                                                 S18
                                                 .
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8013                                                 .------->    RS18
8006                                          DS18RE
                                                 .
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8016                                CPS18........................
                                       V
                                       V
8018                                S18S21
                                                 .
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8025                                        S19
                                                 .
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8041                                                 .------->    RS19
8036                                     DS19RE
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8045            .         .         .         .<-------   DS13S
8044            .         .         .     DS13SE
                .         .         .         V
                .         .         .         V
8046            .         .         .     S13S19
                .         .         .         .
                .         .         .         .
8055            .         .         .   CPS19............
                .         .         .       V
                .         .         .       V
8057            .         .         .   S19S20
                .         .         .         .
                .         .         .         .
8064            .         .         .       S20
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                .         .         .         .
8077            .         .         .         .------->   RS20
8074            .         .         .     DS20RE
                .         .         .         .
                .         .         .         .
8080            .         .         .   CPS20............
                .         .         .       V
                .         .         .       V
8082            .         .         .   S20S21
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8091            .         .         .       S21
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8100            .         .   CPS21........................
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8104            .         .         .------->   DS21S
8102            .         .   DS21SE
                .         .       V
                .         .       V
8107            .         .   S21S23
                .         .         .
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8116            .         .         .    B101
                .         .         .       V
                .         .         .       V
8126            .         .         .  SRB101
                .         .         .       V
                .         .         .       V
8134            .         .         .   B101S
                .         .         .         .
                .         .         .         .
8141            .         .         .       S06
                .         .         .         .
                .         .         .         .
8160            .         .         .         .------->   RS06
8153            .         .         .     DS06RE
                .         .         .         .
                .         .         .         .
8163            .         .         .   CPS06............
                .         .         .       V
                .         .         .       V
8165            .         .         .   S06S07
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8173            .         .         .       S07
                .         .         .         .
                .         .         .         .
8185            .         .         .         .------->   RS07
8183            .         .         .     DS07RE
                .         .         .         .
                .         .         .         .
8188            .         .         .   CPS07............
                .         .         .       V
                .         .         .       V
8190            .         .         .   S07S08
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                .         .         .         .
8198            .         .         .       S08
                .         .         .         .
                .         .         .         .
8213            .         .         .         .------->   RS08
8210            .         .         .     DS08RE
                .         .         .         .
                .         .         .         .
8216            .         .         .   CPS08............
                .         .         .       V
                .         .         .       V
8218            .         .         .   S08S09
                .         .         .         .
                .         .         .         .
8225            .         .         .       S09
                .         .         .         .
                .         .         .         .
8241            .         .         .         .------->   RS09
8235            .         .         .     DS09RE
                .         .         .         .
                .         .         .         .
8244            .         .         .   CPS09............
                .         .         .       V
                .         .         .       V
8246            .         .         .   SRS09
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                .         .         .         .
8256            .         .         .         .------->  DS091W
8254            .         .         .   DS091
                .         .         .         .
                .         .         .         .
8261            .         .         .         .------->  DS092W
8259            .         .         .   DS092
                .         .         .       V
                .         .         .       V
8264            .         .         .   S09S23
                .         .         .         .
                .         .         .         .
8273            .         .         .       S22
                .         .         .         .
                .         .         .         .
8285            .         .         .         .------->   RS22
8283            .         .         .     DS22RE
                .         .         .         V
                .         .         .         V
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8288                                  S22S23
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8297                                    .          S23
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8310                                    .            .-------->   RS23
8308                                    .      DS23RE
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8313                          CPS23.....................................
                                  V
                                  V
8315                          SRS23
                                  V
                                  V
8323                          S23S24
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8332                                  .        S03
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8351                                  .-------->   RS03
8345                                  .     DS03RE
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8355                                  .          .<-------  DS021S
8354                                  .      DS021
                                      .          V
                                      .          V
8356                                  .      S02S03
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8363                                  .     CPS03............
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                                      .          V
8365                                  .     S03S04
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8373                                  .          .        S04
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8388                                  .          .-------->   RS04
8384                                  .      DS04RE
                                      .          .
8391                                  .     CPS04............
                                      .          V
                                      .          V
8393                                  .     SRS04
                                      .          V
                                      .          V
8401                                  .     S04S10
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8411                                  .          .<-------  DS091W
8410                                  .      DS091
                                      .          V
                                      .          V
8412                                  .      S09S10
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8421                                  .          .        S05
                                      .          .          V
                                      .          .          V
8431                                  .          .     S05S10
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8440                                  .          .          .        S10
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8450                                  .     CPS10.....................................
                                      .          V
                                      .          V
8452                                  .     S10S24
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8462                                  .          .<-------  DS092W
8461                                  .      DS092
                                      .          V
                                      .          V
8463                                  .      S09S24
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8472                                  .          .        S24
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8482                          CPS24.....................................
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                                  V
8484                          S24S25
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8493                                  .        S25
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8502                          CPS25............
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8504                                  .        S81
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8513                                  .          .        S82
                                      .          .          V
                                      .          .          V
8523                                  .          .     S82S83
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8532                                  .          .          .        S83
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8542                                  .          .      CPS83............
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8544                                  .          .          .        S84
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8553                          DUMMY.....................................
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8555      DUMMY.......................
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8557           .        W28
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8570           .          .-------->    RW28
8566           .     DW28RE
               .          V
               .          V
8573           .     W28W29
               .          .
               .          .
8581           .          .         W29
               .          .           .
               .          .           .
8594           .          .           .-------->    RW29
8590           .          .     DW29RE
               .          .           .
               .          .           .
8597           .      CPW29............
               .          V
               .          V
8599           .     W29W30
               .          .
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8606           .          .         W30
               .          .           .
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8615           .      CPW30............
               .          V
               .          V
8617           .     W30L59
               .          .
               .          .
8624           .          .         L59
               .          .           .
               .          .           .
8635           .          .           .-------->    RL59
8633           .          .     DL59RE
               .          .           .
               .          .           .
8639           .          .           .           .<-------  DL551S
8638           .          .           .       DL551
               .          .           .           V
               .          .           .           V
8640           .          .           .      L55L59
               .          .           .           .
               .          .           .           .
8648           .      CPL59........................
               .          V
               .          V
8650           .     L59L65
               .          .
               .          .
8657           .          .         W31
               .          .           V
               .          .           V
8666           .          .     W31W32
               .          .           .
               .          .           .
8674           .          .           .         W32
               .          .           .           .
               .          .           .           .
8683           .          .           .           .       OW37
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8696           .          .      CPW32........................
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8700           .          .           .-------->   DW32S
8698           .          .     DW32SE
               .          .           V
               .          .           V
8703           .          .     W32L65
               .          .           .
               .          .           .
8709           .          .           .         L65
               .          .           .           .
               .          .           .           .
8718           .      CPL65........................
               .          V
               .          V
8720           .     L65S34
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8729           .          .           .<--------   DW32S
8728           .          .     DW32SE
               .          .           V
               .          .           V
8730           .          .     W32S34
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8737           .          .           .         S34
               .          .           .           .
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8746           .      CPS34........................
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8750           .          .-------->   DS34S
8748           .     DS34SE
               .          V
               .          V
8753           .     S34S44
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8762           .          .         L66
               .          .           .
               .          .           .
8772           .          .           .           .<-------  DL601S
8771           .          .           .       DL601
               .          .           .           V
               .          .           .           V
8773           .          .           .      L60L66
               .          .           .           .
               .          .           .           .
8782           .          .      CPL66............
               .          .           V
               .          .           V
8784           .          .     L66L71
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8791                L71
                     .
8802                 .-------->   RL71
8800            DL71RE
                     .
8805        CPL71............
                 V
                 V
8807        L71S35
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8816                L69
                     V
                     V
8825            SRL69
                     V
                     V
8833            L69S35
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                     .
8842                 .        L70
                     .          V
                     .          V
8851                 .      SRL70
                     .          V
                     .          V
8859                 .      L70S35
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8868                 .          .        S35
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8877        CPS35.................................
                 V
                 V
8879        S35S44
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8885                S44
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8894    CPS44........................
            V
            V
8896    SRS44
            V
            V
8904    S44S45
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8913                 .<-------   DS34S
8912        DS34SE
                 V
                 V
8914        S34S45
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8922                S45
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8933                 .-------->   RS45
8931            DS45RE
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8936    CPS45........................
            V
            V
8938    S45S46
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8946            S46
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8958                 .-------->   RS46
8955        DS46RE
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8961    CPS46............
            V
            V
8963    SRS46
            V
            V
8971    S46S47
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8980            S47
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8989    CPS47............
            V
            V
8991    S47S48
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8999            S48
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9008    CPS48............
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9012        .-------->   DS48S
9010    DS48S
            V
            V
9015    S48S50
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9024            S49
                     V
                     V
9033        S49S50
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9042                S50
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9051          .      CPS50.......................
              .          V
              .          V
9053          .      SRS50
              .          V
              .          V
9061          .     S50S51
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              .          .
9069          .          .        S36
              .          .          .
              .          .          .
9081          .          .          .-------->    RS36
9079          .          .     DS36RE
              .          .          V
              .          .          V
9084          .          .      SRS36
              .          .          V
              .          .          V
9092          .          .     S36S37
              .          .          .
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9101          .          .          .         S37
              .          .          .           .
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9110          .          .      CPS37............
              .          .          V
              .          .          V
9112          .          .     S37S38
              .          .          .
              .          .          .
9121          .          .          .         S38
              .          .          .           .
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9130          .          .      CPS38............
              .          .          V
              .          .          V
9132          .          .     S38S39
              .          .          .
              .          .          .
9141          .          .          .         S39
              .          .          .           .
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9150          .          .      CPS39............
              .          .          V
              .          .          V
9152          .          .     S39S43
              .          .          .
              .          .          .
9161          .          .          .         S40
              .          .          .           V
              .          .          .           V
9170          .          .          .     S40S41
              .          .          .           .
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9179          .          .          .           .         S41
              .          .          .           .           .
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9189          .          .          .      CPS41............
              .          .          .           V
              .          .          .           V
9191          .          .          .     S41S42
              .          .          .           .
              .          .          .           .
9200          .          .          .           .         S42
              .          .          .           .           .
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9209          .          .          .      CPS42............
              .          .          .           V
              .          .          .           V
9211          .          .          .     S42S43
              .          .          .           .
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9220          .          .          .           .         S43
              .          .          .           .           .
              .          .          .           .           .
9229          .          .      CPS43........................
              .          .          V
              .          .          V
9231          .          .      SRS43
              .          .          V
              .          .          V
9239          .          .     S43S51
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9248          .          .          .         S28
              .          .          .           .
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9261          .          .          .           .-------->    RS28
9259          .          .          .     DS28RE
              .          .          .           V
              .          .          .           V
9264          .          .          .     S28S29
              .          .          .           .
              .          .          .           .
9271          .          .          .           .         S29
              .          .          .           .           .
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9280          .          .          .      CPS29............
              .          .          .           V
              .          .          .           V
9282          .          .          .     S29S30
              .          .          .           .
              .          .          .           .
9290          .          .          .           .         S30
              .          .          .           .           .
              .          .          .           .           .
9299          .          .          .      CPS30............
              .          .          .           V
              .          .          .           V
9301          .          .          .     S30S32
              .          .          .           .
              .          .          .           .
9310          .          .          .           .         S31
              .          .          .           .           V
              .          .          .           .           V
9319          .          .          .           .      S31S32
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9328                                                                S32
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9338                                  CPS32........................
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9340                                                        S26
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9351                                                        .------->    RS26
9349                                                  DS26RE
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9355                                                                 .<-------   DS21S
9354                                                            DS21SE
                                                                     V
                                                                     V
9356                                                            S21S26
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9364                                                   CPS26............
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9368                                                        .------->   DS26S
9366                                                  DS26SE
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                                                                     V
9371                                                  S26S27
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9379                                                                 .        S27
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9389                                                   CPS27............
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9391                                  CP3227............
                                                                     V
                                                                     V
9393                                  SR3227
                                                                     V
                                                                     V
9401                                  S32S33
                                                                     .
9410                                                        S33
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9421                                                                 .<-------   DS26S
9420                                                            DS26SE
                                                                     V
                                                                     V
9422                                                            S26S33
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9431                                   CPS33........................
                                                                     V
                                                                     V
9433                                  S33S51
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9442                                                        S51
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9451                        CPS51..................................
                                 V
                                 V
9453                        SRS51
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                                 V
9461                        S51S54
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9470                                 S52
                                     V
                                     V
9480                                S52S54
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9488                                         S54
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9497                        CPS54........................
                                 V
                                 V
9499                        S54S55
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9508                                 S53
                                     V
                                     V
9517                                S53S55
                                     .
9526                                         S55
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9535                        CPS55........................
                                 V
                                 V
9537                        S55S74
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9546                                 W59
                                     V
                                     V
9556                                W59W60
                                     .
9564                                         W61
                                             .
9574                                         .------->   DW61S
9572                                   DW61SE
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9577                                         .        W60
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9587                                CPW60........................
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                 .         .         V
                 .         .         V
9589             .         .      SRW60
                 .         .         V
                 .         .         V
9597             .         .     W60S61
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                 .         .         .
9605             .         .         .        S61
                 .         .         .          .
                 .         .         .          .
9614             .         .      CPS61............
                 .         .         V
                 .         .         V
9616             .         .     S61S62
                 .         .         .
                 .         .         .
9624             .         .         .        S62
                 .         .         .          .
                 .         .         .          .
9633             .         .      CPS62............
                 .         .         V
                 .         .         V
9635             .         .     S62S64
                 .         .         .
                 .         .         .
9643             .         .         .        S63
                 .         .         .          V
                 .         .         .          V
9652             .         .         .     S63S64
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9660             .         .         .          .        S64
                 .         .         .          .          .
                 .         .         .          .          .
9669             .         .      CPS64........................
                 .         .         V
                 .         .         V
9671             .         .     S64S67
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9679             .         .         .        S67
                 .         .         .          .
                 .         .         .          .
9688             .         .      CPS67............
                 .         .         V
                 .         .         V
9690             .         .      SRS67
                 .         .         V
                 .         .         V
9698             .         .     S67S68
                 .         .         .
                 .         .         .
9707             .         .         .        S68
                 .         .         .          .
                 .         .         .          .
9716             .         .      CPS68............
                 .         .         V
                 .         .         V
9718             .         .     S68S69
                 .         .         .
                 .         .         .
9727             .         .         .        S69
                 .         .         .          .
                 .         .         .          .
9736             .         .      CPS69............
                 .         .         V
                 .         .         V
9738             .         .     S69S70
                 .         .         .
                 .         .         .
9747             .         .         .        S70
                 .         .         .          .
                 .         .         .          .
9757             .         .      CPS70............
                 .         .         V
                 .         .         V
9759             .         .     S70S71
                 .         .         .
                 .         .         .
9767             .         .         .        S71
                 .         .         .          .
                 .         .         .          .
9777             .         .      CPS71............
                 .         .         V
                 .         .         V
9779             .         .      SRS71
                 .         .         .
                 .         .         .
9789             .         .  .-------->   DS71W
9787             .         .     DS71SW
                 .         .         V
                 .         .         V
9792             .         .     S71S74
                 .         .         .
                 .         .         .
9801             .         .         .        S56
                 .         .         .          V
                 .         .         .          V
9810             .         .         .     S56S57
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9819             .         .         .          .        S57
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9828             .         .         .      CPS57............
                 .         .         .          V
                 .         .         .          V
9830             .         .         .     S57S58
                 .         .         .          .
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9840             .         .         .          .          .<-------   DS48S
9839             .         .         .          .      DS48S
                 .         .         .          .          V
                 .         .         .          .          V
9841             .         .         .          .     S48S58
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9850             .         .         .          .          .        S58
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9859                CPS58.......................
                        V
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9861                SRS58
                        V
                        V
9869               S58S59
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9878                    .          S59
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9888                CPS59............
                        V
                        V
9890                SRS59
                        V
                        V
9898               S59S74
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9907                    .          S72
                        .            V
                        .            V
9916                    .       S72S73
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9925                    .            .          S73
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9934                    .        CPS73............
                        .            V
                        .            V
9936                    .       S73S74
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9945                    .            .          S74
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9954            CPS74...............................................
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9958                .-------> DS741W
9956            DS741
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9963                .-------> DS742W
9961            DS742
                    V
                    V
9966           S74S79
                    .
                    .
9976                    .<-------   DW61S
9975                .DW61SE
                        V
                        V
9977                W61S65
                        .
                        .
9985                    .        S65
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9994                 CPS65............
                        V
                        V
9996                S65S66
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                        .
10004                   .        S66
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10015                   .          .------->    RS66
10013                   .      DS66RE
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10018                CPS66............
                        V
                        V
10020                SRS66
                        V
                        V
10028               S66S75
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                        .
10037                   .        S75
                        .          .
                        .          .
10046                CPS75............
                        V
                        V
10048               S75S76
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10057                   .        S76
                        .          .
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10066                CPS76............
                        V
                        V
10068               S76S77
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                        .
10076                   .        S77
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10085                CPS77............
                        V
                        V
10087                SRS77
                        V
                        V
10095               S77S78
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10104                   .        S78
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10115                   .          .           .<-------   DS71W
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10114          .          .          .          .     DS71SW
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               .          .          .          .          V
10116          .          .          .          .     S71S78
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10125          .          .      CPS78.......................
               .          .          V
               .          .          V
10127          .          .      SRS78
               .          .          V
               .          .          V
10135          .          .     S78S79
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10144          .          .          .        S79
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10153          .      CPS79.......................
               .          V
               .          V
10155          .     S79S80
               .          .
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10164          .          .        S92
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10174          .          .          .          .<-------  DS741W
10173          .          .          .      DS741
               .          .          .          V
               .          .          .          V
10175          .          .          .     S74S92
               .          .          .          .
               .          .          .          .
10184          .          .      CPS92............
               .          .          V
               .          .          V
10186          .          .     S92S80
               .          .          .
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10196          .          .          .          .<-------  DS742W
10195          .          .          .      DS742
               .          .          .          V
               .          .          .          V
10197          .          .          .     S74S80
               .          .          .          .
               .          .          .          .
10206          .          .          .          .        S80
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10216          .      CPS80.................................
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               .          .
10218          .          .        S89
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10228          .          .          .        S90
               .          .          .          V
               .          .          .          V
10237          .          .          .     S90S91
               .          .          .          .
               .          .          .          .
10244          .          .          .          .        S91
               .          .          .          .          .
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10254          .          .          .      CPS91............
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               .          .          .          .
10256          .          .          .          .        S88
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10265          .          .          .          .          .        S87
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10274          .          .          .          .          .          .        S86
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10283          .          .          .          .          .          .          .        S85
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10292          .          .          .      DUMMY.............................................
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10294     DUMMY...................................
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1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	N07	602.	12.25	54.	14.	5.	.57		
+	DIVERSION TO	DN07AS	116.	12.08	16.	4.	1.	.57		
+	HYDROGRAPH AT	DN07A	486.	12.25	38.	10.	3.	.57		
+	DIVERSION TO	DN07BS	128.	12.17	13.	3.	1.	.57		
+	HYDROGRAPH AT	DN07B	358.	12.25	26.	6.	2.	.57		
+	DIVERSION TO	DN07CS	80.	12.25	4.	1.	0.	.57		
+	HYDROGRAPH AT	DN07C	278.	12.25	22.	5.	2.	.57		
+	DIVERSION TO	DN07DS	244.	12.25	20.	5.	2.	.57		
	HYDROGRAPH AT									

+	DN07D	34.	12.25	1.	0.	0.	.57
+ ROUTED TO	N07N06	11.	13.00	1.	0.	0.	.57
+ HYDROGRAPH AT	N01	479.	12.17	31.	8.	3.	.34
+ HYDROGRAPH AT	N02A	74.	12.33	8.	2.	1.	.08
+ ROUTED TO	N2AN01	57.	12.75	8.	2.	1.	.08
+ 2 COMBINED AT	CPN01	479.	12.17	39.	10.	3.	.43
+ ROUTED TO	N01N02	421.	12.25	39.	10.	3.	.43
+ HYDROGRAPH AT	N02	743.	12.25	67.	20.	7.	.51
+ DIVERSION TO	RN02	743.	12.25	67.	19.	6.	.51
+ HYDROGRAPH AT	DN02RE	3.	23.25	1.	0.	0.	.51
+ HYDROGRAPH AT	N03A	74.	12.25	6.	2.	1.	.06
+ ROUTED TO	N3AN02	42.	13.08	6.	2.	1.	.06
+ 3 COMBINED AT	CPN02	421.	12.25	45.	12.	4.	1.00
+ ROUTED TO	N02N3B	305.	12.50	45.	12.	4.	1.00
+ HYDROGRAPH AT	N03B	451.	12.17	41.	13.	4.	.28
+ DIVERSION TO	RN03B	227.	12.00	14.	4.	1.	.28
+ HYDROGRAPH AT	DN3BRE	451.	12.17	32.	9.	3.	.28
+ 2 COMBINED AT	CPN03B	482.	12.25	77.	20.	7.	1.29
+ ROUTED TO	N3BN04	373.	12.83	75.	20.	7.	1.29
+ HYDROGRAPH AT	N04	1067.	12.42	141.	42.	14.	.99
+ HYDROGRAPH AT	N03	518.	12.25	49.	15.	5.	.36
+ DIVERSION TO	RN03	274.	12.08	17.	5.	2.	.36
+ HYDROGRAPH AT	DN03RE	518.	12.25	36.	10.	3.	.36
+ ROUTED TO	N03N04	238.	12.83	35.	10.	3.	.36
+ HYDROGRAPH AT	N04A	257.	12.17	19.	5.	2.	.20
+ ROUTED TO	N4AN04	128.	13.00	19.	5.	2.	.20
+ HYDROGRAPH AT	N04B	229.	12.08	12.	3.	1.	.13
+ ROUTED TO	N4BN04	88.	12.75	12.	3.	1.	.13
+ 5 COMBINED AT	CPN04	1123.	12.83	276.	79.	27.	2.97
+ DIVERSION TO	RN04	1123.	12.83	185.	48.	16.	2.97
+ HYDROGRAPH AT	DN04RE	649.	13.17	110.	31.	10.	2.97
+ ROUTED TO	N04N05	446.	13.67	106.	31.	10.	2.97
+ HYDROGRAPH AT	N05	1065.	12.50	157.	46.	16.	1.00
+ DIVERSION TO	RN05	226.	12.00	25.	8.	3.	1.00
+ HYDROGRAPH AT	DN05RE	1065.	12.50	145.	39.	13.	1.00
+ HYDROGRAPH AT	DN07A	116.	12.08	16.	4.	1.	.57
+ ROUTED TO	N7AN05	109.	12.92	16.	4.	1.	.57
+ HYDROGRAPH AT	DN07B	128.	12.17	13.	3.	1.	.57
+ ROUTED TO	N7BN05	90.	13.08	13.	3.	1.	.57
+ HYDROGRAPH AT	DN07C	80.	12.25	4.	1.	0.	.57
ROUTED TO							

+	N7CN05	42.	12.75	4.	1.	0.	.57
+ 5 COMBINED AT	CPN05	1084.	12.58	277.	78.	26.	4.53
+ ROUTED TO	N05N06	970.	12.67	275.	78.	26.	4.53
+ HYDROGRAPH AT	N06	227.	12.25	19.	5.	2.	.22
+ 3 COMBINED AT	CPN06	1016.	12.67	294.	83.	28.	4.75
+ HYDROGRAPH AT	N08	1557.	12.67	259.	77.	26.	1.72
+ HYDROGRAPH AT	N10	692.	12.33	83.	25.	8.	.64
+ ROUTED TO	N10N11	556.	12.75	82.	25.	8.	.64
+ HYDROGRAPH AT	N11	844.	12.33	96.	29.	10.	.70
+ 2 COMBINED AT	CPN11	962.	12.42	177.	53.	18.	1.34
+ ROUTED TO	N11N09	898.	12.67	177.	53.	18.	1.34
+ HYDROGRAPH AT	N09	880.	12.50	128.	39.	13.	.88
+ HYDROGRAPH AT	N14	708.	12.25	66.	19.	6.	.51
+ DIVERSION TO	RN14	708.	12.25	66.	19.	6.	.51
+ HYDROGRAPH AT	DN14RE	0.	.00	0.	0.	0.	.51
+ 3 COMBINED AT	CPN09	1689.	12.58	303.	91.	31.	2.72
+ ROUTED TO	N09N18	1674.	12.58	303.	91.	31.	2.72
+ HYDROGRAPH AT	N18	682.	12.25	71.	22.	7.	.44
+ 2 COMBINED AT	CPN18	1797.	12.58	373.	113.	38.	3.16
+ ROUTED TO	N18N15	1732.	12.67	373.	113.	38.	3.16
+ HYDROGRAPH AT	N12	835.	12.58	138.	40.	13.	.78
+ ROUTED TO	N12N13	833.	12.58	138.	40.	13.	.78
+ HYDROGRAPH AT	N13	701.	12.58	123.	38.	13.	.72
+ 2 COMBINED AT	CPN13	1531.	12.58	260.	78.	26.	1.51
+ ROUTED TO	N13N15	1459.	12.75	260.	78.	26.	1.51
+ HYDROGRAPH AT	N16	434.	12.25	43.	13.	4.	.28
+ ROUTED TO	N16N15	430.	12.25	43.	13.	4.	.28
+ HYDROGRAPH AT	N15	1027.	12.33	137.	43.	14.	.85
+ 4 COMBINED AT	CPN15	3749.	12.58	804.	244.	82.	5.81
+ ROUTED TO	N15N17	3744.	12.58	804.	244.	82.	5.81
+ HYDROGRAPH AT	N17	1298.	12.50	190.	57.	19.	1.29
+ 2 COMBINED AT	CPN17	4912.	12.58	982.	298.	100.	7.10
+ HYDROGRAPH AT	N20	165.	12.17	15.	5.	2.	.09
+ ROUTED TO	N20N21	98.	12.42	14.	5.	2.	.09
+ HYDROGRAPH AT	N21	323.	12.25	33.	10.	3.	.19
+ 2 COMBINED AT	CPN21	381.	12.25	47.	15.	5.	.28
+ DIVERSION TO	DN21S	141.	12.25	18.	5.	2.	.28
+ HYDROGRAPH AT	DN21SE	239.	12.25	30.	9.	3.	.28
+ ROUTED TO	N21N25	171.	12.58	30.	9.	3.	.28
+ HYDROGRAPH AT	N22	203.	12.17	17.	5.	2.	.11
HYDROGRAPH AT							

+	DN21SE	141.	12.25	18.	5.	2.	.28
+ ROUTED TO	N21N22	134.	12.33	18.	5.	2.	.28
+ 2 COMBINED AT	CPN22	311.	12.17	34.	10.	4.	.39
+ ROUTED TO	N22N25	236.	12.50	34.	10.	4.	.39
+ HYDROGRAPH AT	N25	573.	12.33	60.	18.	6.	.49
+ 3 COMBINED AT	CPN25	832.	12.33	124.	38.	13.	.88
+ ROUTED TO	N25N26	770.	12.50	123.	38.	13.	.88
+ HYDROGRAPH AT	N26	173.	12.42	17.	4.	1.	.26
+ 2 COMBINED AT	CPN26	932.	12.50	140.	42.	14.	1.14
+ HYDROGRAPH AT	N19	372.	12.08	35.	11.	4.	.18
+ HYDROGRAPH AT	N23	811.	12.25	82.	25.	8.	.52
+ ROUTED TO	N23N24	605.	12.33	82.	25.	8.	.52
+ HYDROGRAPH AT	N24	357.	12.25	30.	9.	3.	.25
+ 2 COMBINED AT	CPN24	887.	12.25	112.	34.	11.	.77
+ HYDROGRAPH AT	N27	112.	12.25	7.	2.	1.	.13
+ 4 COMBINED AT	DUMMY	1777.	12.33	293.	88.	30.	2.21
+ 4 COMBINED AT	DUMMY	8345.	12.50	1709.	515.	173.	15.78
+ HYDROGRAPH AT	D03	960.	12.25	110.	34.	11.	.72
+ DIVERSION TO	RD03	960.	12.25	96.	26.	9.	.72
+ HYDROGRAPH AT	DD03RE	177.	12.67	25.	8.	3.	.72
+ ROUTED TO	D03D04	110.	12.92	24.	8.	3.	.72
+ HYDROGRAPH AT	D04	1149.	12.33	142.	44.	15.	.89
+ DIVERSION TO	RD04	1118.	12.33	85.	24.	8.	.89
+ HYDROGRAPH AT	DD04RE	1065.	12.42	72.	20.	7.	.89
+ 2 COMBINED AT	CPD04	1062.	12.42	95.	28.	9.	1.61
+ DIVERSION TO	DD04S	647.	12.42	30.	7.	2.	1.61
+ HYDROGRAPH AT	DD04SE	414.	12.42	65.	21.	7.	1.61
+ ROUTED TO	D04D05	308.	12.67	64.	21.	7.	1.61
+ HYDROGRAPH AT	D05	325.	12.17	35.	12.	4.	.16
+ DIVERSION TO	RD05	137.	11.92	13.	4.	1.	.16
+ HYDROGRAPH AT	DD05RE	325.	12.17	27.	8.	3.	.16
+ 2 COMBINED AT	CPD05	337.	12.67	89.	28.	9.	1.78
+ ROUTED TO	D05D14	272.	12.83	88.	28.	9.	1.78
+ DIVERSION TO	DD141S	150.	12.83	17.	4.	1.	1.78
+ HYDROGRAPH AT	DD141	122.	12.17	71.	24.	8.	1.78
+ ROUTED TO	D05D15	122.	12.92	70.	24.	8.	1.78
+ HYDROGRAPH AT	D11	780.	12.42	107.	33.	11.	.66
+ DIVERSION TO	RD11	750.	12.33	58.	16.	5.	.66
+ HYDROGRAPH AT	DD11RE	719.	12.50	60.	17.	6.	.66
+ DIVERSION TO	DD111S	591.	12.50	49.	14.	5.	.66
HYDROGRAPH AT							

+	DD111	128.	12.50	12.	3.	1.	.66
+ DIVERSION TO	DD112S	46.	12.50	6.	2.	1.	.66
+ HYDROGRAPH AT	DD112	82.	12.50	6.	2.	1.	.66
+ ROUTED TO	D11D12	52.	12.67	6.	2.	1.	.66
+ HYDROGRAPH AT	D12	241.	12.58	53.	16.	5.	.35
+ DIVERSION TO	RD12	241.	12.58	28.	8.	3.	.35
+ HYDROGRAPH AT	DD12RE	225.	12.75	31.	9.	3.	.35
+ 2 COMBINED AT	CPD12	272.	12.75	36.	10.	3.	1.01
+ DIVERSION TO	DD121S	118.	12.75	13.	4.	1.	1.01
+ HYDROGRAPH AT	DD121	154.	12.75	23.	7.	2.	1.01
+ DIVERSION TO	DD122S	63.	12.75	11.	3.	1.	1.01
+ HYDROGRAPH AT	DD122	91.	12.75	13.	4.	1.	1.01
+ ROUTED TO	D12D13	52.	13.67	12.	4.	1.	1.01
+ HYDROGRAPH AT	D13	1138.	12.25	124.	36.	12.	1.03
+ DIVERSION TO	RD13	431.	12.00	30.	9.	3.	1.03
+ HYDROGRAPH AT	DD13RE	1138.	12.25	103.	27.	9.	1.03
+ HYDROGRAPH AT	DD04SE	647.	12.42	30.	7.	2.	1.61
+ ROUTED TO	D04D13	189.	13.50	30.	7.	2.	1.61
+ 3 COMBINED AT	CPD13	1138.	12.25	144.	38.	13.	3.65
+ DIVERSION TO	DD131S	210.	12.25	13.	3.	1.	3.65
+ HYDROGRAPH AT	DD131	923.	12.25	130.	34.	11.	3.65
+ DIVERSION TO	DD132S	396.	12.25	39.	10.	3.	3.65
+ HYDROGRAPH AT	DD132	527.	12.25	91.	24.	8.	3.65
+ ROUTED TO	D13D14	449.	12.67	89.	24.	8.	3.65
+ HYDROGRAPH AT	D14	1097.	12.42	148.	46.	15.	.94
+ DIVERSION TO	RD14	1097.	12.42	117.	32.	11.	.94
+ HYDROGRAPH AT	DD14RE	490.	12.67	47.	14.	5.	.94
+ HYDROGRAPH AT	DD141	150.	12.83	17.	4.	1.	1.78
+ ROUTED TO	D0514A	122.	13.08	17.	4.	1.	1.78
+ 3 COMBINED AT	CPD14	980.	12.67	151.	42.	14.	4.76
+ ROUTED TO	SRD14	333.	13.17	149.	42.	14.	4.76
+ DIVERSION TO	DD142S	287.	13.17	135.	38.	13.	4.76
+ HYDROGRAPH AT	DD142	46.	13.17	14.	4.	1.	4.76
+ ROUTED TO	D14D15	42.	13.42	14.	4.	1.	4.76
+ HYDROGRAPH AT	D15	420.	12.17	44.	14.	5.	.22
+ 3 COMBINED AT	CPD15	422.	12.17	121.	42.	14.	4.98
+ ROUTED TO	D15D26	410.	12.25	121.	42.	14.	4.98
+ ROUTED TO	D15D28	372.	12.33	120.	42.	14.	4.98
+ HYDROGRAPH AT	D28	425.	12.17	38.	12.	4.	.25
+ 2 COMBINED AT	CPD28	714.	12.25	155.	53.	18.	5.23
ROUTED TO							

+		D28AFR	681.	12.25	155.	53.	18.	5.23
+	2 COMBINED AT	DUMMY	8592.	12.50	1813.	554.	186.	21.02
+	HYDROGRAPH AT	L01	269.	12.17	25.	8.	3.	.16
+	DIVERSION TO	RL01	269.	12.17	18.	5.	2.	.16
+	HYDROGRAPH AT	DL01RE	159.	12.33	9.	3.	1.	.16
+	ROUTED TO	L01L03	58.	12.75	8.	3.	1.	.16
+	HYDROGRAPH AT	L03	958.	12.33	116.	35.	12.	.79
+	DIVERSION TO	RL03	958.	12.33	116.	34.	11.	.79
+	HYDROGRAPH AT	DL03RE	1.	19.83	1.	0.	0.	.79
+	HYDROGRAPH AT	L20	390.	12.42	47.	14.	5.	.35
+	DIVERSION TO	RL20	390.	12.42	41.	11.	4.	.35
+	HYDROGRAPH AT	DL20RE	88.	12.83	9.	3.	1.	.35
+	ROUTED TO	L20L03	46.	13.25	9.	3.	1.	.35
+	3 COMBINED AT	CPL03	60.	13.25	17.	5.	2.	1.29
+	DIVERSION TO	DL03S	37.	12.67	15.	5.	2.	1.29
+	HYDROGRAPH AT	DL03SE	23.	13.25	2.	0.	0.	1.29
+	ROUTED TO	L03L04	18.	13.58	2.	0.	0.	1.29
+	HYDROGRAPH AT	L04	663.	12.42	82.	24.	8.	.63
+	DIVERSION TO	RL04	663.	12.42	81.	22.	7.	.63
+	HYDROGRAPH AT	DL04RE	8.	15.67	6.	2.	1.	.63
+	2 COMBINED AT	CPL04	17.	13.58	6.	2.	1.	1.93
+	DIVERSION TO	DL04S	0.	.00	0.	0.	0.	1.93
+	HYDROGRAPH AT	DL04SE	17.	13.58	6.	2.	1.	1.93
+	ROUTED TO	L04L05	6.	17.25	5.	2.	1.	1.93
+	HYDROGRAPH AT	L05	659.	12.33	84.	27.	9.	.49
+	DIVERSION TO	RL05	659.	12.33	61.	17.	6.	.49
+	HYDROGRAPH AT	DL05RE	399.	12.50	33.	10.	3.	.49
+	2 COMBINED AT	CPL05	386.	12.50	37.	12.	4.	2.41
+	DIVERSION TO	DL051S	10.	12.50	0.	0.	0.	2.41
+	HYDROGRAPH AT	DL051	375.	12.50	36.	12.	4.	2.41
+	DIVERSION TO	DL052S	9.	12.50	1.	0.	0.	2.41
+	HYDROGRAPH AT	DL052	366.	12.50	35.	12.	4.	2.41
+	ROUTED TO	L05D06	251.	12.67	35.	12.	4.	2.41
+	HYDROGRAPH AT	L02	1727.	12.58	279.	85.	28.	1.88
+	DIVERSION TO	RL02	1727.	12.58	219.	59.	20.	1.88
+	HYDROGRAPH AT	DL02RE	906.	12.92	88.	26.	9.	1.88
+	ROUTED TO	L02D06	454.	13.42	83.	26.	9.	1.88
+	HYDROGRAPH AT	D06	616.	12.33	77.	23.	8.	.46
+	DIVERSION TO	RD06	616.	12.33	60.	16.	5.	.46
+	HYDROGRAPH AT	DD06RE	252.	12.67	24.	7.	2.	.46
	3 COMBINED AT							

+	CPD06	513.	13.42	137.	44.	15.	4.76
+ DIVERSION TO	DD06S	143.	13.42	8.	2.	1.	4.76
+ HYDROGRAPH AT	DD06SE	370.	12.58	129.	42.	14.	4.76
+ ROUTED TO	D06D07	370.	13.58	127.	42.	14.	4.76
+ HYDROGRAPH AT	D07	919.	12.50	134.	40.	13.	.89
+ DIVERSION TO	RD07	919.	12.50	116.	31.	10.	.89
+ HYDROGRAPH AT	DD07RE	250.	13.00	29.	9.	3.	.89
+ 2 COMBINED AT	CPD07	425.	13.00	152.	50.	17.	5.64
+ ROUTED TO	D07D02	409.	13.67	150.	50.	17.	5.64
+ HYDROGRAPH AT	D01	1347.	12.58	212.	63.	21.	1.56
+ DIVERSION TO	RD01	1347.	12.58	184.	49.	16.	1.56
+ HYDROGRAPH AT	DD01RE	334.	13.17	46.	14.	5.	1.56
+ ROUTED TO	D01D02	147.	14.33	42.	14.	5.	1.56
+ HYDROGRAPH AT	D02	1750.	12.50	266.	80.	27.	1.84
+ DIVERSION TO	RD02	1750.	12.50	237.	63.	21.	1.84
+ HYDROGRAPH AT	DD02RE	378.	13.08	53.	17.	6.	1.84
+ 3 COMBINED AT	CPD02	524.	13.25	212.	73.	24.	9.05
+ ROUTED TO	D02D10	480.	13.83	211.	73.	24.	9.05
+ HYDROGRAPH AT	D09	360.	12.33	42.	13.	4.	.26
+ DIVERSION TO	RD09	360.	12.33	29.	8.	3.	.26
+ HYDROGRAPH AT	DD09RE	225.	12.50	18.	5.	2.	.26
+ ROUTED TO	D09D10	172.	12.58	17.	5.	2.	.26
+ HYDROGRAPH AT	DD06SE	143.	13.42	8.	2.	1.	4.76
+ ROUTED TO	D06D10	77.	13.92	8.	2.	1.	4.76
+ HYDROGRAPH AT	D10	774.	12.33	100.	31.	10.	.63
+ DIVERSION TO	RD10	774.	12.33	70.	19.	6.	.63
+ HYDROGRAPH AT	DD10RE	479.	12.58	40.	12.	4.	.63
+ 4 COMBINED AT	CPD10	605.	12.58	249.	87.	29.	9.95
+ ROUTED TO	D10D19	586.	12.83	247.	87.	29.	9.95
+ HYDROGRAPH AT	L09	574.	12.42	74.	23.	8.	.49
+ DIVERSION TO	RL09	574.	12.42	74.	20.	7.	.49
+ HYDROGRAPH AT	DL09RE	10.	15.25	6.	2.	1.	.49
+ HYDROGRAPH AT	DL051	10.	12.50	0.	0.	0.	2.41
+ ROUTED TO	L05L09	2.	13.75	0.	0.	0.	2.41
+ 2 COMBINED AT	CPL09	10.	15.25	6.	2.	1.	2.90
+ DIVERSION TO	DL091S	1.	15.25	1.	0.	0.	2.90
+ HYDROGRAPH AT	DL091	9.	15.25	6.	2.	1.	2.90
+ DIVERSION TO	DL092S	0.	.00	0.	0.	0.	2.90
+ HYDROGRAPH AT	DL092	9.	15.25	6.	2.	1.	2.90
+ ROUTED TO	L09D08	7.	16.92	5.	2.	1.	2.90
HYDROGRAPH AT							

+	D08	467.	12.58	75.	23.	8.	.51
+ DIVERSION TO	RD08	467.	12.58	48.	13.	4.	.51
+ HYDROGRAPH AT	DD08RE	367.	12.75	35.	10.	3.	.51
+ HYDROGRAPH AT	DL052	9.	12.50	1.	0.	0.	2.41
+ ROUTED TO	L05D08	3.	14.08	1.	0.	0.	2.41
+ 3 COMBINED AT	CPD08	367.	12.75	40.	12.	4.	3.41
+ ROUTED TO	D08D16	176.	13.58	36.	12.	4.	3.41
+ HYDROGRAPH AT	L06	876.	12.33	94.	28.	9.	.70
+ DIVERSION TO	RL06	876.	12.33	94.	28.	9.	.70
+ HYDROGRAPH AT	DL06RE	0.	.00	0.	0.	0.	.70
+ DIVERSION TO	DL06S	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+ ROUTED TO	L06L07	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	L07	775.	12.33	88.	26.	9.	.63
+ DIVERSION TO	RL07	775.	12.33	87.	23.	8.	.63
+ HYDROGRAPH AT	DL07RE	17.	14.08	9.	3.	1.	.63
+ HYDROGRAPH AT	DL03SE	37.	12.67	15.	5.	2.	1.29
+ ROUTED TO	L0307A	37.	13.58	14.	5.	2.	1.29
+ ROUTED TO	L0307B	37.	13.83	14.	5.	2.	1.29
+ 3 COMBINED AT	CPL07	50.	14.08	22.	8.	3.	2.62
+ DIVERSION TO	DL07S	10.	14.08	5.	2.	1.	2.62
+ HYDROGRAPH AT	DL07SE	40.	14.08	18.	6.	2.	2.62
+ ROUTED TO	L07L08	35.	14.25	17.	6.	2.	2.62
+ HYDROGRAPH AT	L08	612.	12.42	83.	25.	8.	.49
+ DIVERSION TO	RL08	612.	12.42	75.	20.	7.	.49
+ HYDROGRAPH AT	DL08RE	110.	13.00	16.	5.	2.	.49
+ HYDROGRAPH AT	DL04SE	0.	.00	0.	0.	0.	1.93
+ ROUTED TO	L04L08	0.	.00	0.	0.	0.	1.93
+ 3 COMBINED AT	CPL08	110.	13.00	32.	11.	4.	3.74
+ ROUTED TO	L08L12	60.	14.08	31.	11.	4.	3.74
+ HYDROGRAPH AT	L10	845.	12.42	103.	30.	10.	.84
+ DIVERSION TO	RL10	845.	12.42	65.	17.	6.	.84
+ HYDROGRAPH AT	DL10RE	647.	12.58	46.	13.	4.	.84
+ ROUTED TO	L10L11	442.	12.83	45.	13.	4.	.84
+ HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+ ROUTED TO	L06L11	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	L11	744.	12.33	94.	29.	10.	.62
+ DIVERSION TO	RL11	744.	12.33	89.	24.	8.	.62
+ HYDROGRAPH AT	DL11RE	56.	13.17	15.	5.	2.	.62
+ HYDROGRAPH AT	DL07SE	10.	14.08	5.	2.	1.	2.62
ROUTED TO							

+	L07L11	8.	15.42	4.	2.	1.	2.62
+ 4 COMBINED AT	CPL11	440.	12.83	62.	19.	6.	4.09
+ DIVERSION TO	DL11S	3.	12.83	0.	0.	0.	4.09
+ HYDROGRAPH AT	DL11SE	435.	12.83	62.	19.	6.	4.09
+ ROUTED TO	L11L12	356.	13.00	61.	19.	6.	4.09
+ HYDROGRAPH AT	L12	304.	12.58	43.	12.	4.	.36
+ DIVERSION TO	RL12	243.	12.42	17.	5.	2.	.36
+ HYDROGRAPH AT	DL12RE	304.	12.58	27.	7.	2.	.36
+ 3 COMBINED AT	CPL12	492.	12.92	113.	36.	12.	5.56
+ DIVERSION TO	DL121S	86.	12.92	20.	6.	2.	5.56
+ HYDROGRAPH AT	DL121	405.	12.92	93.	30.	10.	5.56
+ DIVERSION TO	DL122S	5.	12.92	1.	0.	0.	5.56
+ HYDROGRAPH AT	DL122	400.	12.92	92.	30.	10.	5.56
+ ROUTED TO	L12L13	320.	13.25	89.	30.	10.	5.56
+ HYDROGRAPH AT	L13	183.	12.83	40.	10.	3.	.48
+ HYDROGRAPH AT	DL091	1.	15.25	1.	0.	0.	2.90
+ ROUTED TO	L09L13	1.	19.75	1.	0.	0.	2.90
+ 3 COMBINED AT	CPL13	443.	13.17	120.	38.	13.	7.02
+ DIVERSION TO	DL131S	425.	13.17	117.	38.	13.	7.02
+ HYDROGRAPH AT	DL131	19.	13.17	3.	1.	0.	7.02
+ DIVERSION TO	DL132S	13.	13.17	2.	1.	0.	7.02
+ HYDROGRAPH AT	DL132	6.	13.17	1.	0.	0.	7.02
+ ROUTED TO	L13D16	4.	14.50	1.	0.	0.	7.02
+ HYDROGRAPH AT	D16	207.	12.75	45.	12.	4.	.52
+ HYDROGRAPH AT	DL092	0.	.00	0.	0.	0.	2.90
+ ROUTED TO	L09D16	0.	.00	0.	0.	0.	2.90
+ 4 COMBINED AT	CPD16	234.	13.58	73.	22.	8.	8.05
+ DIVERSION TO	DD161S	190.	13.58	58.	17.	6.	8.05
+ HYDROGRAPH AT	DD161	45.	13.58	16.	5.	2.	8.05
+ DIVERSION TO	DD162S	18.	13.58	7.	2.	1.	8.05
+ HYDROGRAPH AT	DD162	27.	13.58	9.	3.	1.	8.05
+ ROUTED TO	D16D18	25.	13.83	9.	3.	1.	8.05
+ HYDROGRAPH AT	D18	321.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD18	321.	12.17	28.	9.	3.	.20
+ HYDROGRAPH AT	DD18RE	0.	21.42	0.	0.	0.	.20
+ 2 COMBINED AT	CPD18	25.	13.83	9.	3.	1.	8.25
+ ROUTED TO	D18D19	23.	14.00	9.	3.	1.	8.25
+ HYDROGRAPH AT	D17	324.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD17	324.	12.17	28.	8.	3.	.20
+ HYDROGRAPH AT	DD17RE	2.	20.17	1.	0.	0.	.20
ROUTED TO							

+	D17D19	2.	21.67	1.	0.	0.	.20
+ HYDROGRAPH AT	D19	509.	12.33	69.	21.	7.	.51
+ DIVERSION TO	RD19	509.	12.33	64.	17.	6.	.51
+ HYDROGRAPH AT	DD19RE	52.	13.17	11.	4.	1.	.51
+ 4 COMBINED AT	CPD19	583.	12.83	258.	91.	30.	16.49
+ DIVERSION TO	DD191S	289.	12.83	133.	47.	16.	16.49
+ HYDROGRAPH AT	DD191	189.	12.83	96.	36.	12.	16.49
+ DIVERSION TO	DD192S	74.	12.83	44.	18.	6.	16.49
+ HYDROGRAPH AT	DD192	115.	12.83	52.	18.	6.	16.49
+ ROUTED TO	D19D20	107.	14.25	51.	18.	6.	16.49
+ HYDROGRAPH AT	D20	587.	12.33	70.	22.	7.	.50
+ DIVERSION TO	RD20	587.	12.33	70.	19.	6.	.50
+ HYDROGRAPH AT	DD20RE	10.	15.00	6.	2.	1.	.50
+ HYDROGRAPH AT	DD111	591.	12.50	49.	14.	5.	.66
+ ROUTED TO	D11D20	335.	12.92	46.	14.	5.	.66
+ 3 COMBINED AT	CPD20	326.	13.00	89.	30.	10.	17.65
+ ROUTED TO	D20D21	246.	13.42	86.	30.	10.	17.65
+ HYDROGRAPH AT	D21	565.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD21	565.	12.33	72.	20.	7.	.50
+ HYDROGRAPH AT	DD21RE	9.	15.92	6.	2.	1.	.50
+ HYDROGRAPH AT	DD112	46.	12.50	6.	2.	1.	.66
+ ROUTED TO	D11D21	22.	13.33	5.	2.	1.	.66
+ HYDROGRAPH AT	DD121	118.	12.75	13.	4.	1.	1.01
+ ROUTED TO	D12D21	90.	13.00	13.	4.	1.	1.01
+ 4 COMBINED AT	CPD21	306.	13.42	99.	35.	12.	18.49
+ DIVERSION TO	DD211S	206.	13.42	73.	26.	9.	18.49
+ HYDROGRAPH AT	DD211	100.	13.42	26.	9.	3.	18.49
+ DIVERSION TO	DD212S	52.	13.42	19.	7.	2.	18.49
+ HYDROGRAPH AT	DD212	48.	13.42	7.	2.	1.	18.49
+ ROUTED TO	D21D22	35.	13.75	7.	2.	1.	18.49
+ HYDROGRAPH AT	D22	562.	12.33	67.	21.	7.	.45
+ DIVERSION TO	RD22	562.	12.33	67.	19.	6.	.45
+ HYDROGRAPH AT	DD22RE	8.	16.75	5.	2.	1.	.45
+ HYDROGRAPH AT	DD122	63.	12.75	11.	3.	1.	1.01
+ ROUTED TO	D12D22	45.	13.42	10.	3.	1.	1.01
+ 3 COMBINED AT	CPD22	67.	13.67	16.	5.	2.	18.94
+ ROUTED TO	D22D23	61.	13.83	15.	5.	2.	18.94
+ HYDROGRAPH AT	D23	556.	12.42	75.	22.	7.	.54
+ DIVERSION TO	RD23	556.	12.42	69.	18.	6.	.54
+ HYDROGRAPH AT	DD23RE	75.	13.08	13.	4.	1.	.54
HYDROGRAPH AT							

+	DD131	210.	12.25	13.	3.	1.	3.65
+ ROUTED TO	D13D23	133.	12.50	13.	3.	1.	3.65
+ 3 COMBINED AT	CPD23	98.	12.50	29.	10.	3.	22.13
+ DIVERSION TO	DD231S	10.	12.50	3.	1.	0.	22.13
+ HYDROGRAPH AT	DD231	89.	12.50	26.	9.	3.	22.13
+ DIVERSION TO	DD232S	11.	12.50	3.	1.	0.	22.13
+ HYDROGRAPH AT	DD232	78.	12.50	23.	8.	3.	22.13
+ ROUTED TO	D23D24	60.	12.75	23.	8.	3.	22.13
+ HYDROGRAPH AT	D24	538.	12.42	71.	21.	7.	.49
+ DIVERSION TO	RD24	538.	12.42	71.	21.	7.	.49
+ HYDROGRAPH AT	DD24RE	4.	21.08	2.	1.	0.	.49
+ HYDROGRAPH AT	DD132	396.	12.25	39.	10.	3.	3.65
+ ROUTED TO	D13D24	301.	12.50	39.	10.	3.	3.65
+ 3 COMBINED AT	CPD24	291.	12.58	54.	16.	5.	22.62
+ DIVERSION TO	DD24S	62.	12.58	5.	1.	0.	22.62
+ HYDROGRAPH AT	DD24SE	229.	12.58	49.	15.	5.	22.62
+ ROUTED TO	D24D25	204.	12.75	48.	15.	5.	22.62
+ HYDROGRAPH AT	D25	574.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD25	574.	12.33	69.	19.	6.	.50
+ HYDROGRAPH AT	DD25RE	21.	13.58	9.	3.	1.	.50
+ 2 COMBINED AT	CPD25	204.	12.75	50.	16.	5.	23.12
+ ROUTED TO	SRD25	18.	16.50	15.	6.	2.	23.12
+ DIVERSION TO	DD251S	18.	16.50	15.	6.	2.	23.12
+ HYDROGRAPH AT	DD251	0.	.00	0.	0.	0.	23.12
+ DIVERSION TO	DD252S	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	DD252	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D2542A	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D2542B	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	D37	119.	12.50	17.	4.	1.	.20
+ HYDROGRAPH AT	DD232	11.	12.50	3.	1.	0.	22.13
+ ROUTED TO	D23D37	6.	15.50	3.	1.	0.	22.13
+ HYDROGRAPH AT	DD251	18.	16.50	15.	6.	2.	23.12
+ ROUTED TO	D25D37	18.	17.00	15.	6.	2.	23.12
+ HYDROGRAPH AT	DD24SE	62.	12.58	5.	1.	0.	22.62
+ ROUTED TO	D24D37	44.	13.00	5.	1.	0.	22.62
+ 4 COMBINED AT	CPD37	119.	12.83	36.	15.	5.	23.32
+ DIVERSION TO	DD37S	0.	.00	0.	0.	0.	23.32
+ HYDROGRAPH AT	DD37SE	107.	12.83	27.	12.	4.	23.32
+ ROUTED TO	D37D39	74.	13.08	25.	12.	4.	23.32
+ HYDROGRAPH AT	D35	119.	12.58	18.	5.	2.	.25
HYDROGRAPH AT							

+	DD231	10.	12.50	3.	1.	0.	22.13
+ ROUTED TO	D23D35	5.	15.00	3.	1.	0.	22.13
+ 2 COMBINED AT	CPD35	119.	12.58	22.	6.	2.	22.38
+ DIVERSION TO	DD35S	17.	12.58	3.	1.	0.	22.38
+ HYDROGRAPH AT	DD35SE	87.	12.58	15.	4.	1.	22.38
+ ROUTED TO	D35D38	80.	12.83	15.	4.	1.	22.38
+ HYDROGRAPH AT	D38	61.	12.50	9.	2.	1.	.12
+ HYDROGRAPH AT	DD37SE	0.	.00	0.	0.	0.	23.32
+ ROUTED TO	D37D38	0.	.00	0.	0.	0.	23.32
+ 3 COMBINED AT	CPD38	122.	12.67	22.	6.	2.	23.69
+ DIVERSION TO	DD381S	107.	12.67	20.	5.	2.	23.69
+ HYDROGRAPH AT	DD381	15.	12.67	3.	1.	0.	23.69
+ DIVERSION TO	DD382S	10.	12.67	2.	1.	0.	23.69
+ HYDROGRAPH AT	DD382	4.	12.67	1.	0.	0.	23.69
+ ROUTED TO	D38D39	3.	14.33	1.	0.	0.	23.69
+ HYDROGRAPH AT	D39	113.	12.50	16.	4.	1.	.18
+ HYDROGRAPH AT	DD252	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D25D39	0.	.00	0.	0.	0.	23.12
+ 4 COMBINED AT	CPD39	132.	12.58	38.	15.	5.	23.88
+ ROUTED TO	D39D42	126.	13.00	38.	15.	5.	23.88
+ HYDROGRAPH AT	D26	982.	12.25	101.	31.	10.	.64
+ DIVERSION TO	RD26	982.	12.25	98.	26.	9.	.64
+ HYDROGRAPH AT	DD26RE	31.	13.42	13.	5.	2.	.64
+ HYDROGRAPH AT	DD142	287.	13.17	135.	38.	13.	4.76
+ ROUTED TO	D14D26	279.	13.50	134.	38.	13.	4.76
+ 2 COMBINED AT	CPD26	303.	13.42	144.	42.	14.	5.40
+ ROUTED TO	D26D27	301.	13.58	143.	42.	14.	5.40
+ HYDROGRAPH AT	D27	498.	12.17	52.	17.	6.	.32
+ DIVERSION TO	RD27	100.	11.92	13.	4.	1.	.32
+ HYDROGRAPH AT	DD27RE	498.	12.17	45.	12.	4.	.32
+ 2 COMBINED AT	CPD27	491.	12.17	178.	54.	18.	5.72
+ ROUTED TO	SRD27	491.	12.17	178.	54.	18.	5.72
+ ROUTED TO	D27D42	370.	12.42	173.	54.	18.	5.72
+ HYDROGRAPH AT	D42	1317.	12.33	151.	46.	15.	.99
+ DIVERSION TO	RD42	1317.	12.33	135.	36.	12.	.99
+ HYDROGRAPH AT	DD42RE	215.	12.75	31.	10.	3.	.99
+ 4 COMBINED AT	CPD42	402.	13.75	230.	80.	27.	26.93
+ ROUTED TO	SRD42	241.	14.42	175.	62.	21.	26.93
+ ROUTED TO	D42D53	240.	14.50	174.	62.	21.	26.93
+ HYDROGRAPH AT	D53	180.	12.17	13.	4.	1.	.12
DIVERSION TO							

+	RD53	180.	12.17	13.	4.	1.	.12
HYDROGRAPH AT +	DD53RE	0.	.00	0.	0.	0.	.12
2 COMBINED AT +	CPD53	240.	14.50	174.	62.	21.	27.05
ROUTED TO +	SRD53	188.	15.83	124.	45.	15.	27.05
ROUTED TO +	D53D54	187.	16.25	123.	45.	15.	27.05
HYDROGRAPH AT +	D43	643.	12.33	74.	23.	8.	.50
DIVERSION TO +	RD43	643.	12.33	66.	18.	6.	.50
HYDROGRAPH AT +	DD43RE	105.	12.75	16.	5.	2.	.50
ROUTED TO +	D43D54	44.	13.67	15.	5.	2.	.50
HYDROGRAPH AT +	D54	338.	12.25	29.	8.	3.	.27
DIVERSION TO +	RD54	67.	12.00	5.	2.	1.	.27
HYDROGRAPH AT +	DD54RE	338.	12.25	26.	7.	2.	.27
3 COMBINED AT +	CPD54	297.	12.25	130.	53.	18.	27.82
HYDROGRAPH AT +	D44	588.	12.33	68.	20.	7.	.54
DIVERSION TO +	RD44	524.	12.25	36.	10.	3.	.54
HYDROGRAPH AT +	DD44RE	578.	12.42	39.	11.	4.	.54
HYDROGRAPH AT +	D55	242.	12.25	23.	7.	2.	.19
DIVERSION TO +	RD55	242.	12.25	18.	5.	2.	.19
HYDROGRAPH AT +	DD55RE	89.	12.50	7.	2.	1.	.19
HYDROGRAPH AT +	D56	267.	12.33	28.	8.	3.	.22
DIVERSION TO +	RD56	37.	11.92	5.	2.	1.	.22
HYDROGRAPH AT +	DD56RE	267.	12.33	26.	7.	2.	.22
3 COMBINED AT +	DUMMY	843.	12.42	70.	19.	6.	.95
3 COMBINED AT +	DUMMY	8704.	12.50	1813.	576.	195.	49.78
HYDROGRAPH AT +	L14	250.	12.25	18.	4.	1.	.23
ROUTED TO +	L14L15	172.	12.33	18.	4.	1.	.23
HYDROGRAPH AT +	L15	412.	12.25	31.	8.	3.	.37
2 COMBINED AT +	CPL15	554.	12.25	48.	12.	4.	.60
ROUTED TO +	L15L16	444.	12.42	48.	12.	4.	.60
HYDROGRAPH AT +	L16	181.	12.75	34.	9.	3.	.50
2 COMBINED AT +	CPL16	584.	12.50	82.	21.	7.	1.10
ROUTED TO +	L16L17	559.	12.58	82.	21.	7.	1.10
HYDROGRAPH AT +	L17	586.	12.33	72.	23.	8.	.50
DIVERSION TO +	RL17	586.	12.33	72.	23.	8.	.50
HYDROGRAPH AT +	DL17RE	0.	.00	0.	0.	0.	.50
2 COMBINED AT +	CPL17	559.	12.58	82.	21.	7.	1.61
DIVERSION TO +	DL17S	21.	12.58	2.	0.	0.	1.61
HYDROGRAPH AT +	DL17SE	538.	12.58	81.	20.	7.	1.61
ROUTED TO +	L17L18	474.	12.92	80.	20.	7.	1.61
HYDROGRAPH AT +	L18	175.	12.83	37.	9.	3.	.50
HYDROGRAPH AT							

+		DL11SE	3.	12.83	0.	0.	0.	4.09
+	ROUTED TO	L11L18	0.	16.25	0.	0.	0.	4.09
+	HYDROGRAPH AT	DL121	86.	12.92	20.	6.	2.	5.56
+	ROUTED TO	L12L18	60.	13.58	19.	6.	2.	5.56
+	4 COMBINED AT	CPL18	618.	12.92	129.	34.	11.	7.67
+	DIVERSION TO	DL181S	9.	12.92	1.	0.	0.	7.67
+	HYDROGRAPH AT	DL181	609.	12.92	128.	34.	11.	7.67
+	DIVERSION TO	DL182S	24.	12.92	6.	1.	0.	7.67
+	HYDROGRAPH AT	DL182	585.	12.92	122.	32.	11.	7.67
+	ROUTED TO	L18L19	540.	13.25	121.	32.	11.	7.67
+	HYDROGRAPH AT	L19	172.	12.83	37.	10.	3.	.49
+	HYDROGRAPH AT	DL122	5.	12.92	1.	0.	0.	5.56
+	ROUTED TO	L12L19	2.	15.67	1.	0.	0.	5.56
+	HYDROGRAPH AT	DL131	425.	13.17	117.	38.	13.	7.02
+	ROUTED TO	L13L19	361.	13.75	114.	38.	13.	7.02
+	4 COMBINED AT	CPL19	804.	13.42	256.	77.	26.	9.61
+	DIVERSION TO	DL191S	783.	13.42	253.	76.	26.	9.61
+	HYDROGRAPH AT	DL191	21.	13.42	3.	1.	0.	9.61
+	DIVERSION TO	DL192S	13.	13.42	2.	0.	0.	9.61
+	HYDROGRAPH AT	DL192	8.	13.42	1.	0.	0.	9.61
+	ROUTED TO	L19D29	5.	14.50	1.	0.	0.	9.61
+	HYDROGRAPH AT	D29	193.	12.75	41.	11.	4.	.51
+	HYDROGRAPH AT	DL132	13.	13.17	2.	1.	0.	7.02
+	ROUTED TO	L13D29	7.	15.00	2.	1.	0.	7.02
+	HYDROGRAPH AT	DD161	190.	13.58	58.	17.	6.	8.05
+	ROUTED TO	D16D29	152.	14.33	57.	17.	6.	8.05
+	4 COMBINED AT	CPD29	199.	13.42	93.	27.	9.	11.15
+	ROUTED TO	D29D30	194.	13.75	93.	27.	9.	11.15
+	HYDROGRAPH AT	D30	292.	12.92	69.	17.	6.	.91
+	HYDROGRAPH AT	DD162	18.	13.58	7.	2.	1.	8.05
+	ROUTED TO	D16D30	14.	15.17	7.	2.	1.	8.05
+	HYDROGRAPH AT	DD191	289.	12.83	133.	47.	16.	16.49
+	ROUTED TO	D19D30	260.	14.33	131.	47.	16.	16.49
+	4 COMBINED AT	CPD30	549.	13.08	266.	87.	29.	20.50
+	DIVERSION TO	DD30S	535.	13.08	259.	85.	28.	20.50
+	HYDROGRAPH AT	DD30SE	14.	13.08	7.	2.	1.	20.50
+	ROUTED TO	D30D32	13.	13.75	7.	2.	1.	20.50
+	HYDROGRAPH AT	D32	361.	12.25	38.	12.	4.	.25
+	DIVERSION TO	RD32	361.	12.25	38.	12.	4.	.25
+	HYDROGRAPH AT	DD32RE	0.	.00	0.	0.	0.	.25
	2 COMBINED AT							

+	CPD32	13.	13.75	7.	2.	1.	20.75
+ DIVERSION TO	DD32S	0.	13.75	0.	0.	0.	20.75
+ HYDROGRAPH AT	DD32SE	12.	13.75	7.	2.	1.	20.75
+ ROUTED TO	D32D33	12.	14.00	7.	2.	1.	20.75
+ HYDROGRAPH AT	D31	573.	12.33	58.	17.	6.	.50
+ DIVERSION TO	RD31	573.	12.33	58.	17.	6.	.50
+ HYDROGRAPH AT	DD31RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DD192	74.	12.83	44.	18.	6.	16.49
+ ROUTED TO	D19D31	70.	14.42	43.	18.	6.	16.49
+ HYDROGRAPH AT	DD211	206.	13.42	73.	26.	9.	18.49
+ ROUTED TO	D21D31	197.	13.50	73.	26.	9.	18.49
+ 3 COMBINED AT	CPD31	234.	13.50	115.	43.	14.	18.99
+ ROUTED TO	D31D33	230.	13.67	114.	43.	14.	18.99
+ HYDROGRAPH AT	D33	377.	12.25	38.	12.	4.	.25
+ DIVERSION TO	RD33	377.	12.25	35.	9.	3.	.25
+ HYDROGRAPH AT	DD33RE	31.	12.75	8.	2.	1.	.25
+ 3 COMBINED AT	CPD33	229.	13.67	116.	44.	15.	23.50
+ DIVERSION TO	DD331S	126.	13.67	63.	24.	8.	23.50
+ HYDROGRAPH AT	DD331	103.	13.67	53.	20.	7.	23.50
+ DIVERSION TO	DD332S	42.	13.67	25.	10.	3.	23.50
+ HYDROGRAPH AT	DD332	62.	13.67	28.	10.	3.	23.50
+ ROUTED TO	D33D34	56.	14.08	27.	10.	3.	23.50
+ HYDROGRAPH AT	D34	166.	12.83	37.	9.	3.	.50
+ DIVERSION TO	RD34	100.	12.42	5.	1.	0.	.50
+ HYDROGRAPH AT	DD34RE	166.	12.83	32.	8.	3.	.50
+ HYDROGRAPH AT	DD212	52.	13.42	19.	7.	2.	18.49
+ ROUTED TO	D21D34	40.	14.33	18.	7.	2.	18.49
+ 3 COMBINED AT	CPD34	179.	14.08	96.	33.	11.	24.00
+ ROUTED TO	D34D36	135.	13.17	65.	23.	8.	24.00
+ HYDROGRAPH AT	D36	277.	12.33	33.	10.	3.	.25
+ DIVERSION TO	RD36	277.	12.33	21.	6.	2.	.25
+ HYDROGRAPH AT	DD36RE	219.	12.50	15.	4.	1.	.25
+ HYDROGRAPH AT	DD35SE	17.	12.58	3.	1.	0.	22.38
+ ROUTED TO	D35D36	15.	12.83	3.	1.	0.	22.38
+ 3 COMBINED AT	CPD36	553.	12.50	145.	48.	16.	28.14
+ DIVERSION TO	DD361S	147.	13.17	67.	24.	8.	28.14
+ HYDROGRAPH AT	DD361	13.	13.17	6.	2.	1.	28.14
+ DIVERSION TO	DD362S	9.	13.17	5.	2.	1.	28.14
+ HYDROGRAPH AT	DD362	4.	13.17	1.	0.	0.	28.14
+ ROUTED TO	D36D40	3.	13.75	1.	0.	0.	28.14
HYDROGRAPH AT							

+	D40	136.	12.50	21.	5.	2.	.24
+ HYDROGRAPH AT	DD381	107.	12.67	20.	5.	2.	23.69
+ ROUTED TO	D38D40	95.	13.25	19.	5.	2.	23.69
+ 3 COMBINED AT	CPD40	136.	13.17	38.	10.	3.	29.69
+ DIVERSION TO	DD40S	46.	13.17	14.	4.	1.	29.69
+ HYDROGRAPH AT	DD40SE	83.	13.17	23.	6.	2.	29.69
+ ROUTED TO	D40D41	81.	13.25	23.	6.	2.	29.69
+ HYDROGRAPH AT	D41	235.	12.42	31.	8.	3.	.25
+ HYDROGRAPH AT	DD382	10.	12.67	2.	1.	0.	23.69
+ ROUTED TO	D38D41	9.	13.25	2.	1.	0.	23.69
+ 3 COMBINED AT	CPD41	256.	12.50	51.	13.	4.	29.94
+ ROUTED TO	D41D50	184.	13.67	50.	13.	4.	29.94
+ HYDROGRAPH AT	L23	899.	12.33	72.	18.	6.	.90
+ ROUTED TO	L23L24	820.	12.42	72.	18.	6.	.90
+ HYDROGRAPH AT	L24	179.	12.75	35.	9.	3.	.50
+ 2 COMBINED AT	CPL24	943.	12.42	106.	27.	9.	1.40
+ ROUTED TO	L24L26	792.	12.67	106.	27.	9.	1.40
+ HYDROGRAPH AT	L25	70.	13.00	18.	4.	1.	.24
+ ROUTED TO	L25L26	67.	13.17	18.	4.	1.	.24
+ HYDROGRAPH AT	DL181	9.	12.92	1.	0.	0.	7.67
+ ROUTED TO	L18L26	7.	13.50	1.	0.	0.	7.67
+ HYDROGRAPH AT	DL17SE	21.	12.58	2.	0.	0.	1.61
+ ROUTED TO	L17L26	6.	14.83	2.	0.	0.	1.61
+ HYDROGRAPH AT	L26	252.	12.83	54.	13.	4.	.76
+ 5 COMBINED AT	CPL26	998.	12.67	169.	42.	14.	10.07
+ DIVERSION TO	DL26S	6.	12.67	1.	0.	0.	10.07
+ HYDROGRAPH AT	DL26SE	992.	12.67	168.	42.	14.	10.07
+ ROUTED TO	L26L27	946.	12.83	168.	42.	14.	10.07
+ HYDROGRAPH AT	L27	200.	12.75	43.	11.	4.	.51
+ HYDROGRAPH AT	DL182	24.	12.92	6.	1.	0.	7.67
+ ROUTED TO	L18L27	18.	14.58	5.	1.	0.	7.67
+ HYDROGRAPH AT	DL191	783.	13.42	253.	76.	26.	9.61
+ ROUTED TO	L19L27	753.	14.00	250.	76.	26.	9.61
+ 4 COMBINED AT	CPL27	1118.	12.83	442.	127.	43.	12.53
+ DIVERSION TO	DL271S	665.	12.83	277.	78.	26.	12.53
+ HYDROGRAPH AT	DL271	453.	12.83	165.	49.	16.	12.53
+ DIVERSION TO	DL272S	133.	12.83	61.	18.	6.	12.53
+ HYDROGRAPH AT	DL272	320.	12.83	103.	31.	10.	12.53
+ ROUTED TO	L27D45	271.	13.17	102.	31.	10.	12.53
+ HYDROGRAPH AT	D45	384.	12.58	59.	17.	6.	.49
DIVERSION TO							

+		RD45	384.	12.58	33.	9.	3.	.49
+	HYDROGRAPH AT	DD45RE	315.	12.75	30.	8.	3.	.49
+	HYDROGRAPH AT	DL192	13.	13.42	2.	0.	0.	9.61
+	ROUTED TO	L19D45	11.	14.25	2.	0.	0.	9.61
+	3 COMBINED AT	CPD45	402.	13.00	129.	38.	13.	13.02
+	DIVERSION TO	DD451S	68.	13.00	20.	6.	2.	13.02
+	HYDROGRAPH AT	DD451	334.	13.00	109.	32.	11.	13.02
+	DIVERSION TO	DD452S	126.	13.00	47.	14.	5.	13.02
+	HYDROGRAPH AT	DD452	208.	13.00	62.	18.	6.	13.02
+	ROUTED TO	D45D46	175.	13.33	60.	18.	6.	13.02
+	HYDROGRAPH AT	D46	861.	12.50	130.	40.	13.	.92
+	DIVERSION TO	RD46	861.	12.50	130.	38.	13.	.92
+	HYDROGRAPH AT	DD46RE	8.	20.50	5.	1.	0.	.92
+	HYDROGRAPH AT	DD30SE	535.	13.08	259.	85.	28.	20.50
+	ROUTED TO	D30D46	499.	13.25	257.	85.	28.	20.50
+	3 COMBINED AT	CPD46	624.	13.33	290.	95.	32.	24.82
+	DIVERSION TO	DD461S	620.	13.33	288.	94.	32.	24.82
+	HYDROGRAPH AT	DD461	4.	13.33	2.	1.	0.	24.82
+	DIVERSION TO	DD462S	4.	13.33	2.	1.	0.	24.82
+	HYDROGRAPH AT	DD462	0.	.00	0.	0.	0.	24.82
+	ROUTED TO	D46D47	0.	.00	0.	0.	0.	24.82
+	HYDROGRAPH AT	D47	546.	13.00	117.	34.	11.	1.00
+	DIVERSION TO	RD47	546.	13.00	117.	34.	11.	1.00
+	HYDROGRAPH AT	DD47RE	0.	.00	0.	0.	0.	1.00
+	HYDROGRAPH AT	DD32SE	0.	13.75	0.	0.	0.	20.75
+	ROUTED TO	D3247A	0.	16.25	0.	0.	0.	20.75
+	ROUTED TO	D3247B	0.	20.42	0.	0.	0.	20.75
+	HYDROGRAPH AT	DD331	126.	13.67	63.	24.	8.	23.50
+	ROUTED TO	D3347A	117.	14.08	63.	24.	8.	23.50
+	ROUTED TO	D3347B	107.	14.67	61.	24.	8.	23.50
+	4 COMBINED AT	CPD47	96.	14.75	55.	22.	7.	28.82
+	DIVERSION TO	DD47S	85.	14.75	49.	19.	7.	28.82
+	HYDROGRAPH AT	DD47SE	11.	14.75	7.	3.	1.	28.82
+	ROUTED TO	D47D48	10.	15.92	6.	3.	1.	28.82
+	HYDROGRAPH AT	D48	663.	12.75	116.	33.	11.	1.00
+	DIVERSION TO	RD48	663.	12.75	105.	27.	9.	1.00
+	HYDROGRAPH AT	DD48RE	147.	13.50	18.	5.	2.	1.00
+	HYDROGRAPH AT	DD332	42.	13.67	25.	10.	3.	23.50
+	ROUTED TO	D33D48	37.	15.00	24.	10.	3.	23.50
+	HYDROGRAPH AT	DD361	147.	13.17	67.	24.	8.	28.14
	ROUTED TO							

+		D3648A	133.	13.58	66.	24.	8.	28.14
+	ROUTED TO	D3648B	130.	13.67	65.	24.	8.	28.14
+	4 COMBINED AT	CPD48	176.	14.83	121.	48.	16.	34.45
+	DIVERSION TO	DD481S	108.	13.67	72.	30.	10.	34.45
+	HYDROGRAPH AT	DD481	19.	13.67	13.	5.	2.	34.45
+	DIVERSION TO	DD482S	5.	13.67	3.	1.	0.	34.45
+	HYDROGRAPH AT	DD482	14.	13.67	9.	4.	1.	34.45
+	ROUTED TO	D48D49	14.	14.00	9.	4.	1.	34.45
+	HYDROGRAPH AT	D49	724.	12.25	75.	24.	8.	.49
+	DIVERSION TO	RD49	25.	11.08	11.	4.	1.	.49
+	HYDROGRAPH AT	DD49RE	724.	12.25	73.	20.	7.	.49
+	HYDROGRAPH AT	DD362	9.	13.17	5.	2.	1.	28.14
+	ROUTED TO	D36D49	7.	15.83	5.	2.	1.	28.14
+	HYDROGRAPH AT	DD40SE	46.	13.17	14.	4.	1.	29.69
+	ROUTED TO	D40D49	40.	13.92	14.	4.	1.	29.69
+	4 COMBINED AT	CPD49	724.	12.25	103.	33.	11.	36.49
+	DIVERSION TO	DD491S	347.	12.25	42.	13.	4.	36.49
+	HYDROGRAPH AT	DD491	294.	12.25	43.	14.	5.	36.49
+	DIVERSION TO	DD492S	7.	12.25	1.	0.	0.	36.49
+	HYDROGRAPH AT	DD492	287.	12.25	43.	13.	4.	36.49
+	ROUTED TO	D49D50	264.	12.33	42.	13.	4.	36.49
+	HYDROGRAPH AT	D50	216.	13.00	61.	16.	5.	.50
+	3 COMBINED AT	CPD50	348.	13.58	142.	39.	13.	37.25
+	ROUTED TO	D50D64	311.	14.33	138.	39.	13.	37.25
+	HYDROGRAPH AT	D60	155.	12.75	32.	8.	3.	.40
+	HYDROGRAPH AT	DD481	108.	13.67	72.	30.	10.	34.45
+	ROUTED TO	D48D60	104.	13.83	72.	30.	10.	34.45
+	2 COMBINED AT	CPD60	159.	13.67	116.	47.	16.	34.86
+	DIVERSION TO	DD601S	87.	13.67	59.	24.	8.	34.86
+	HYDROGRAPH AT	DD601	45.	13.67	31.	13.	4.	34.86
+	DIVERSION TO	DD602S	5.	13.67	4.	2.	1.	34.86
+	HYDROGRAPH AT	DD602	40.	13.67	26.	11.	4.	34.86
+	ROUTED TO	D60D63	39.	13.83	26.	11.	4.	34.86
+	HYDROGRAPH AT	D63	107.	12.50	15.	4.	1.	.22
+	HYDROGRAPH AT	DD482	5.	13.67	3.	1.	0.	34.45
+	ROUTED TO	D48D63	4.	14.83	3.	1.	0.	34.45
+	HYDROGRAPH AT	DD491	347.	12.25	42.	13.	4.	36.49
+	ROUTED TO	D49D63	215.	12.75	42.	13.	4.	36.49
+	4 COMBINED AT	CPD63	319.	12.75	81.	28.	9.	37.12
+	ROUTED TO	SRD63	30.	17.67	30.	22.	9.	37.12
	ROUTED TO							

+	D63D64	30.	18.75	30.	22.	9.	37.12
+ HYDROGRAPH AT	D62	116.	12.58	18.	5.	2.	.25
+ HYDROGRAPH AT	DD601	87.	13.67	59.	24.	8.	34.86
+ ROUTED TO	D60D62	85.	13.92	58.	24.	8.	34.86
+ 2 COMBINED AT	CPD62	149.	12.83	71.	28.	9.	35.11
+ DIVERSION TO	DD621S	102.	12.83	52.	21.	7.	35.11
+ HYDROGRAPH AT	DD621	48.	12.83	19.	7.	2.	35.11
+ DIVERSION TO	DD622S	13.	12.83	8.	3.	1.	35.11
+ HYDROGRAPH AT	DD622	35.	12.83	11.	4.	1.	35.11
+ ROUTED TO	D62D64	30.	13.25	11.	4.	1.	35.11
+ HYDROGRAPH AT	DD602	5.	13.67	4.	2.	1.	34.86
+ ROUTED TO	D60D64	5.	16.08	4.	2.	1.	34.86
+ HYDROGRAPH AT	DD492	7.	12.25	1.	0.	0.	36.49
+ ROUTED TO	D49D64	2.	15.25	1.	0.	0.	36.49
+ HYDROGRAPH AT	D64	243.	12.92	57.	15.	5.	.77
+ 5 COMBINED AT	CPD64A	217.	13.00	77.	39.	15.	38.14
+ 2 COMBINED AT	CPD64B	444.	13.25	212.	78.	28.	38.90
+ ROUTED TO	D64D74	406.	13.75	212.	78.	28.	38.90
+ HYDROGRAPH AT	D74	310.	13.00	85.	23.	8.	.99
+ HYDROGRAPH AT	DD622	13.	12.83	8.	3.	1.	35.11
+ ROUTED TO	D62D74	10.	15.75	7.	3.	1.	35.11
+ 3 COMBINED AT	CPD74	563.	13.58	281.	99.	36.	39.89
+ DIVERSION TO	DD741S	482.	13.58	240.	84.	31.	39.89
+ HYDROGRAPH AT	DD741	82.	13.58	41.	14.	5.	39.89
+ DIVERSION TO	DD742S	28.	13.58	14.	5.	2.	39.89
+ HYDROGRAPH AT	DD742	54.	13.58	27.	9.	3.	39.89
+ ROUTED TO	D74D75	52.	13.92	27.	9.	3.	39.89
+ HYDROGRAPH AT	D79A	101.	12.58	15.	4.	1.	.17
+ HYDROGRAPH AT	DD742	28.	13.58	14.	5.	2.	39.89
+ ROUTED TO	D7479A	26.	14.33	14.	5.	2.	39.89
+ 2 COMBINED AT	CPD79A	101.	12.58	30.	10.	3.	40.06
+ HYDROGRAPH AT	D51	474.	12.25	46.	13.	4.	.29
+ DIVERSION TO	RD51	197.	12.00	10.	3.	1.	.29
+ HYDROGRAPH AT	DD51RE	474.	12.25	38.	10.	3.	.29
+ ROUTED TO	D51D65	243.	13.08	37.	10.	3.	.29
+ HYDROGRAPH AT	D65	240.	12.83	55.	14.	5.	.69
+ 2 COMBINED AT	CPD65	467.	13.00	91.	24.	8.	.98
+ ROUTED TO	D65D75	363.	14.00	89.	24.	8.	.98
+ HYDROGRAPH AT	D75	402.	12.75	95.	27.	9.	.88
+ 4 COMBINED AT	CPD75	425.	14.08	199.	58.	20.	41.93
ROUTED TO							

+		D7579B	402.	14.50	196.	58.	20.	41.93
+	HYDROGRAPH AT	L33	491.	12.58	60.	16.	5.	.65
+	DIVERSION TO	DL33S	1.	12.58	0.	0.	0.	.65
+	HYDROGRAPH AT	DL33SE	490.	12.58	60.	16.	5.	.65
+	ROUTED TO	L33L34	441.	12.67	60.	16.	5.	.65
+	HYDROGRAPH AT	L34	176.	12.83	38.	10.	3.	.51
+	HYDROGRAPH AT	DL26SE	6.	12.67	1.	0.	0.	10.07
+	ROUTED TO	L26L34	3.	15.08	1.	0.	0.	10.07
+	HYDROGRAPH AT	DL271	665.	12.83	277.	78.	26.	12.53
+	ROUTED TO	L27L34	608.	14.17	277.	78.	26.	12.53
+	4 COMBINED AT	CPL34	876.	12.75	363.	101.	34.	13.69
+	DIVERSION TO	DL341S	197.	12.75	69.	18.	6.	13.69
+	HYDROGRAPH AT	DL341	678.	12.75	294.	83.	28.	13.69
+	DIVERSION TO	DL342S	141.	12.75	59.	16.	5.	13.69
+	HYDROGRAPH AT	DL342	538.	12.75	235.	67.	23.	13.69
+	ROUTED TO	L34D57	526.	12.92	235.	67.	23.	13.69
+	HYDROGRAPH AT	D57	173.	12.75	37.	10.	3.	.48
+	HYDROGRAPH AT	DL272	133.	12.83	61.	18.	6.	12.53
+	ROUTED TO	L27D57	123.	14.42	60.	18.	6.	12.53
+	HYDROGRAPH AT	DD451	68.	13.00	20.	6.	2.	13.02
+	ROUTED TO	D45D57	58.	13.42	20.	6.	2.	13.02
+	4 COMBINED AT	CPD57	696.	13.42	342.	99.	33.	14.66
+	ROUTED TO	D57D58	682.	13.75	341.	99.	33.	14.66
+	HYDROGRAPH AT	D58	361.	12.83	80.	21.	7.	.92
+	HYDROGRAPH AT	DD452	126.	13.00	47.	14.	5.	13.02
+	ROUTED TO	D45D58	99.	14.33	45.	14.	5.	13.02
+	HYDROGRAPH AT	DD461	620.	13.33	288.	94.	32.	24.82
+	ROUTED TO	D46D58	605.	13.50	287.	94.	32.	24.82
+	DIVERSION TO	SSPILL	199.	13.50	86.	31.	10.	24.82
+	HYDROGRAPH AT	RMSBSN	459.	13.83	201.	63.	21.	24.82
+	HYDROGRAPH AT	RMSBSN	199.	13.50	86.	31.	10.	24.82
+	ROUTED TO	SRRMS	26.	20.75	26.	22.	10.	24.82
+	2 COMBINED AT	CPRMS	470.	13.83	219.	85.	31.	24.82
+	ROUTED TO	RRMS	457.	13.92	218.	85.	31.	24.82
+	4 COMBINED AT	CPD58	1187.	13.83	617.	202.	71.	27.39
+	DIVERSION TO	DD581S	693.	13.83	364.	119.	42.	27.39
+	HYDROGRAPH AT	DD581	494.	13.83	252.	83.	30.	27.39
+	DIVERSION TO	DD582S	43.	13.83	26.	11.	4.	27.39
+	HYDROGRAPH AT	DD582	451.	13.83	227.	73.	26.	27.39
+	ROUTED TO	D58D59	439.	14.50	226.	73.	26.	27.39
	HYDROGRAPH AT							

+	D59	286.	13.08	77.	19.	6.	.99
+ HYDROGRAPH AT	DD462	4.	13.33	2.	1.	0.	24.82
+ ROUTED TO	D46D59	3.	17.08	2.	1.	0.	24.82
+ HYDROGRAPH AT	DD47SE	85.	14.75	49.	19.	7.	28.82
+ ROUTED TO	D47D59	81.	15.08	48.	19.	7.	28.82
+ 4 COMBINED AT	CPD59	493.	15.00	312.	105.	37.	32.37
+ DIVERSION TO	DD59S	468.	15.00	296.	100.	35.	32.37
+ HYDROGRAPH AT	DD59SE	25.	15.00	16.	5.	2.	32.37
+ ROUTED TO	D59D61	25.	15.17	16.	5.	2.	32.37
+ HYDROGRAPH AT	D61	97.	13.00	25.	6.	2.	.35
+ 2 COMBINED AT	CPD61	95.	13.08	36.	10.	4.	32.72
+ ROUTED TO	D61D72	89.	13.58	35.	10.	4.	32.72
+ HYDROGRAPH AT	L30	718.	12.25	79.	24.	8.	.54
+ DIVERSION TO	RL30	718.	12.25	69.	19.	6.	.54
+ HYDROGRAPH AT	DL30RE	131.	12.67	18.	6.	2.	.54
+ ROUTED TO	L30L31	82.	12.92	17.	6.	2.	.54
+ HYDROGRAPH AT	L31	709.	12.17	64.	20.	7.	.42
+ DIVERSION TO	RL31	709.	12.17	59.	16.	5.	.42
+ HYDROGRAPH AT	DL31RE	50.	12.67	13.	4.	1.	.42
+ 2 COMBINED AT	CPL31	114.	12.92	30.	10.	3.	.96
+ ROUTED TO	L31L32	103.	13.08	29.	10.	3.	.96
+ HYDROGRAPH AT	L32	380.	12.25	27.	7.	2.	.35
+ 2 COMBINED AT	CPL32	378.	12.25	54.	17.	6.	1.31
+ ROUTED TO	L32L38	195.	12.83	52.	17.	6.	1.31
+ HYDROGRAPH AT	L28	343.	12.25	27.	7.	2.	.31
+ ROUTED TO	L28L29	260.	12.42	27.	7.	2.	.31
+ HYDROGRAPH AT	L29	245.	12.25	21.	5.	2.	.25
+ 2 COMBINED AT	CPL29	460.	12.33	47.	12.	4.	.56
+ DIVERSION TO	DL29S	230.	12.33	24.	6.	2.	.56
+ HYDROGRAPH AT	DL29SE	230.	12.33	24.	6.	2.	.56
+ ROUTED TO	L29L36	189.	12.67	24.	6.	2.	.56
+ HYDROGRAPH AT	L35	554.	12.25	43.	11.	4.	.52
+ HYDROGRAPH AT	DL29SE	230.	12.33	24.	6.	2.	.56
+ ROUTED TO	L29L35	162.	12.83	23.	6.	2.	.56
+ 2 COMBINED AT	CPL35	554.	12.25	67.	17.	6.	1.07
+ ROUTED TO	L35L37	326.	13.00	66.	17.	6.	1.07
+ HYDROGRAPH AT	L37	408.	12.25	31.	8.	3.	.40
+ HYDROGRAPH AT	L36	470.	12.33	35.	9.	3.	.47
+ DIVERSION TO	RL36	470.	12.33	35.	9.	3.	.47
+ HYDROGRAPH AT	DL36RE	0.	.00	0.	0.	0.	.47
4 COMBINED AT							

+	CPL36	460.	12.92	119.	30.	10.	1.94
+ ROUTED TO	L36L38	413.	13.25	119.	30.	10.	1.94
+ HYDROGRAPH AT	L38	384.	12.75	81.	21.	7.	1.00
+ HYDROGRAPH AT	DL33SE	1.	12.58	0.	0.	0.	.65
+ ROUTED TO	L33L38	0.	13.58	0.	0.	0.	.65
+ 4 COMBINED AT	CPL38	888.	12.83	247.	67.	22.	4.90
+ DIVERSION TO	DL381S	211.	12.83	38.	10.	3.	4.90
+ HYDROGRAPH AT	DL381	678.	12.83	209.	57.	19.	4.90
+ DIVERSION TO	DL382S	122.	12.83	45.	13.	4.	4.90
+ HYDROGRAPH AT	DL382	556.	12.83	164.	45.	15.	4.90
+ ROUTED TO	L38L39	541.	13.17	164.	45.	15.	4.90
+ HYDROGRAPH AT	L39	158.	12.92	38.	10.	3.	.51
+ HYDROGRAPH AT	DL341	197.	12.75	69.	18.	6.	13.69
+ ROUTED TO	L34L39	182.	13.08	69.	18.	6.	13.69
+ 3 COMBINED AT	CPL39	777.	13.17	244.	66.	22.	18.45
+ DIVERSION TO	DL391S	689.	13.17	215.	58.	19.	18.45
+ HYDROGRAPH AT	DL391	88.	13.17	29.	8.	3.	18.45
+ DIVERSION TO	DL392S	43.	13.17	15.	4.	1.	18.45
+ HYDROGRAPH AT	DL392	45.	13.17	13.	4.	1.	18.45
+ ROUTED TO	L39D68	44.	13.33	13.	4.	1.	18.45
+ HYDROGRAPH AT	D68	175.	12.75	36.	10.	3.	.49
+ HYDROGRAPH AT	DL342	141.	12.75	59.	16.	5.	13.69
+ ROUTED TO	L34D68	132.	13.75	58.	16.	5.	13.69
+ 3 COMBINED AT	CPD68	223.	13.50	100.	28.	9.	18.95
+ DIVERSION TO	DD681S	176.	13.50	79.	22.	7.	18.95
+ HYDROGRAPH AT	DD681	47.	13.50	21.	6.	2.	18.95
+ DIVERSION TO	DD682S	16.	13.50	7.	2.	1.	18.95
+ HYDROGRAPH AT	DD682	31.	13.50	14.	4.	1.	18.95
+ ROUTED TO	D68D69	29.	13.83	14.	4.	1.	18.95
+ HYDROGRAPH AT	D69	267.	12.92	66.	16.	5.	.93
+ HYDROGRAPH AT	DD581	693.	13.83	364.	119.	42.	27.39
+ ROUTED TO	D58D69	682.	14.33	358.	119.	42.	27.39
+ 3 COMBINED AT	CPD69	747.	14.08	399.	131.	46.	33.56
+ DIVERSION TO	DD691S	62.	14.08	33.	11.	4.	33.56
+ HYDROGRAPH AT	DD691	685.	14.08	365.	120.	42.	33.56
+ DIVERSION TO	DD692S	50.	14.08	27.	9.	3.	33.56
+ HYDROGRAPH AT	DD692	635.	14.08	339.	111.	39.	33.56
+ ROUTED TO	D69D70	623.	14.50	338.	111.	39.	33.56
+ HYDROGRAPH AT	D70A	178.	12.42	21.	6.	2.	.27
+ HYDROGRAPH AT	DD582	43.	13.83	26.	11.	4.	27.39
ROUTED TO							

+	D5870A	42.	14.58	25.	11.	4.	27.39
+ 2 COMBINED AT	CPD70A	178.	12.42	50.	18.	7.	27.65
+ ROUTED TO	D70A70	122.	12.92	40.	15.	6.	27.65
+ HYDROGRAPH AT	D70	309.	12.17	25.	7.	2.	.26
+ 3 COMBINED AT	CPD70	655.	14.58	385.	131.	46.	34.09
+ ROUTED TO	SRD70	262.	17.08	233.	120.	43.	34.09
+ ROUTED TO	D70D71	262.	17.17	233.	120.	43.	34.09
+ HYDROGRAPH AT	D71	177.	12.83	38.	10.	3.	.48
+ HYDROGRAPH AT	DD59SE	468.	15.00	296.	100.	35.	32.37
+ ROUTED TO	D59D71	468.	15.00	296.	100.	35.	32.37
+ 3 COMBINED AT	CPD71	632.	15.08	479.	220.	78.	39.55
+ ROUTED TO	D71D72	629.	15.17	479.	220.	78.	39.55
+ HYDROGRAPH AT	D72	179.	12.83	40.	10.	3.	.52
+ 3 COMBINED AT	CPD72	724.	13.25	537.	238.	84.	40.42
+ ROUTED TO	D72D73	724.	13.25	537.	238.	84.	40.42
+ HYDROGRAPH AT	D73	239.	13.00	44.	11.	4.	.52
+ HYDROGRAPH AT	DD621	102.	12.83	52.	21.	7.	35.11
+ ROUTED TO	D62D73	95.	13.08	51.	21.	7.	35.11
+ 3 COMBINED AT	CPD73	961.	13.08	602.	260.	92.	47.23
+ ROUTED TO	D73D78	945.	13.25	599.	259.	92.	47.23
+ HYDROGRAPH AT	D78	104.	13.42	38.	10.	3.	.53
+ HYDROGRAPH AT	DD741	482.	13.58	240.	84.	31.	39.89
+ ROUTED TO	D74D78	469.	13.92	237.	84.	31.	39.89
+ 3 COMBINED AT	CPD78	1385.	13.42	847.	343.	122.	52.54
+ ROUTED TO	D7879B	1379.	13.50	845.	343.	122.	52.54
+ HYDROGRAPH AT	D79B	370.	12.25	28.	7.	2.	.32
+ 3 COMBINED AT	CPD79B	1709.	13.42	1030.	402.	143.	54.90
+ ROUTED TO	D79B80	1707.	13.42	1029.	402.	143.	54.90
+ HYDROGRAPH AT	D80	199.	12.17	14.	4.	1.	.13
+ 2 COMBINED AT	CPD80	1708.	13.42	1030.	405.	144.	55.03
+ HYDROGRAPH AT	D52	658.	12.42	82.	24.	8.	.59
+ DIVERSION TO	RD52	12.	10.58	7.	2.	1.	.59
+ HYDROGRAPH AT	DD52RE	658.	12.42	81.	22.	7.	.59
+ ROUTED TO	D52D66	441.	13.08	81.	22.	7.	.59
+ HYDROGRAPH AT	D66	89.	13.00	23.	6.	2.	.30
+ 2 COMBINED AT	CPD66	529.	13.08	103.	27.	9.	.89
+ ROUTED TO	D66D67	522.	13.17	103.	27.	9.	.89
+ HYDROGRAPH AT	D67	271.	12.58	42.	13.	4.	.32
+ 2 COMBINED AT	CPD67	650.	12.67	144.	40.	13.	1.20
+ HYDROGRAPH AT	D76	76.	12.50	15.	5.	2.	.11
ROUTED TO							

+	D76D77	75.	12.58	15.	5.	2.	.11
+ HYDROGRAPH AT	D77	602.	12.17	65.	22.	7.	.36
+ 2 COMBINED AT	CPD77	629.	12.17	80.	26.	9.	.47
+ HYDROGRAPH AT	B01	193.	12.08	16.	5.	2.	.10
+ 5 COMBINED AT	DUMMY	8977.	12.50	2742.	924.	327.	106.59
+ HYDROGRAPH AT	B03	255.	12.50	30.	8.	3.	.34
+ ROUTED TO	B03B05	232.	12.67	30.	8.	3.	.34
+ HYDROGRAPH AT	B05	468.	12.25	44.	12.	4.	.40
+ 2 COMBINED AT	CPB05	521.	12.25	74.	20.	7.	.73
+ ROUTED TO	B05B06	468.	12.50	74.	20.	7.	.73
+ HYDROGRAPH AT	B06	598.	12.17	60.	18.	6.	.40
+ 2 COMBINED AT	CPB06	796.	12.25	133.	39.	13.	1.13
+ ROUTED TO	B06B15	678.	12.67	133.	38.	13.	1.13
+ HYDROGRAPH AT	B07	299.	12.25	26.	7.	2.	.25
+ DIVERSION TO	RB07	299.	12.25	15.	4.	1.	.25
+ HYDROGRAPH AT	DB07RE	229.	12.33	12.	3.	1.	.25
+ ROUTED TO	B07B09	114.	12.75	12.	3.	1.	.25
+ HYDROGRAPH AT	B08	449.	12.08	26.	7.	2.	.27
+ ROUTED TO	B08B09	328.	12.17	26.	7.	2.	.27
+ HYDROGRAPH AT	B09	769.	12.17	65.	20.	7.	.43
+ DIVERSION TO	RB09	699.	12.08	36.	10.	3.	.43
+ HYDROGRAPH AT	DB09RE	616.	12.25	35.	10.	3.	.43
+ 3 COMBINED AT	CPB09	936.	12.25	72.	20.	7.	.95
+ ROUTED TO	SRB11	39.	13.42	34.	19.	7.	.95
+ ROUTED TO	B09B11	39.	14.17	34.	19.	7.	.95
+ HYDROGRAPH AT	B10	251.	12.08	15.	4.	1.	.16
+ ROUTED TO	B1011A	215.	12.25	15.	4.	1.	.16
+ ROUTED TO	B1011B	152.	12.42	15.	4.	1.	.16
+ HYDROGRAPH AT	B11	1121.	12.25	113.	34.	11.	.82
+ DIVERSION TO	RB11	12.	8.75	8.	3.	1.	.82
+ HYDROGRAPH AT	DB11RE	1121.	12.25	113.	31.	10.	.82
+ 3 COMBINED AT	CPB11	1191.	12.25	150.	53.	18.	1.93
+ ROUTED TO	B11B12	1103.	12.42	149.	53.	18.	1.93
+ HYDROGRAPH AT	B12	415.	12.33	45.	13.	4.	.38
+ DIVERSION TO	RB12	4.	9.58	3.	1.	0.	.38
+ HYDROGRAPH AT	DB12RE	415.	12.33	45.	12.	4.	.38
+ 2 COMBINED AT	CPB12	1502.	12.42	192.	64.	22.	2.31
+ ROUTED TO	B12B14	1462.	12.42	192.	64.	22.	2.31
+ HYDROGRAPH AT	B13	615.	12.25	47.	12.	4.	.49
+ ROUTED TO	B13B14	480.	12.42	47.	12.	4.	.49
HYDROGRAPH AT							

+	B14	453.	12.25	48.	15.	5.	.33
+ DIVERSION TO	RB14	453.	12.25	45.	12.	4.	.33
+ HYDROGRAPH AT	DB14RE	30.	12.83	9.	3.	1.	.33
+ 3 COMBINED AT	CPB14	1936.	12.42	246.	79.	27.	3.13
+ ROUTED TO	B14B15	1702.	12.50	245.	79.	27.	3.13
+ HYDROGRAPH AT	B15	527.	12.25	66.	22.	7.	.38
+ 3 COMBINED AT	CPB15	2450.	12.58	437.	135.	47.	4.64
+ HYDROGRAPH AT	B16	197.	12.08	15.	5.	2.	.11
+ DIVERSION TO	RB16	139.	12.00	6.	2.	1.	.11
+ HYDROGRAPH AT	DB16RE	187.	12.17	10.	3.	1.	.11
+ ROUTED TO	B16B17	89.	12.25	10.	3.	1.	.11
+ HYDROGRAPH AT	B17	475.	12.25	47.	15.	5.	.33
+ DIVERSION TO	RB17	261.	12.08	17.	5.	2.	.33
+ HYDROGRAPH AT	DB17RE	475.	12.25	36.	10.	3.	.33
+ 2 COMBINED AT	CPB17	563.	12.25	45.	12.	4.	.45
+ ROUTED TO	B17B18	465.	12.33	45.	12.	4.	.45
+ HYDROGRAPH AT	B18	221.	12.58	30.	9.	3.	.28
+ DIVERSION TO	RB18	94.	12.17	7.	2.	1.	.28
+ HYDROGRAPH AT	DB18RE	221.	12.58	26.	7.	2.	.28
+ 2 COMBINED AT	CPB18	628.	12.42	70.	19.	6.	.73
+ ROUTED TO	B18B19	544.	12.58	69.	19.	6.	.73
+ HYDROGRAPH AT	B19	230.	12.08	21.	7.	2.	.12
+ 2 COMBINED AT	CPB19	561.	12.58	88.	26.	9.	.85
+ HYDROGRAPH AT	B20	397.	12.17	41.	13.	4.	.23
+ 4 COMBINED AT	DUMMY	11030.	12.50	3161.	1053.	372.	112.30
+ HYDROGRAPH AT	B21	289.	12.25	29.	9.	3.	.24
+ DIVERSION TO	RB21	289.	12.25	23.	6.	2.	.24
+ HYDROGRAPH AT	DB21RE	98.	12.50	8.	2.	1.	.24
+ ROUTED TO	B21B22	61.	12.67	8.	2.	1.	.24
+ HYDROGRAPH AT	B22	390.	12.17	37.	12.	4.	.22
+ 2 COMBINED AT	CPB22	389.	12.17	43.	14.	5.	.46
+ HYDROGRAPH AT	B23	362.	12.33	44.	13.	4.	.27
+ DIVERSION TO	RB23	4.	8.42	3.	1.	0.	.27
+ HYDROGRAPH AT	DB23RE	362.	12.33	44.	12.	4.	.27
+ ROUTED TO	B23B24	341.	12.42	44.	12.	4.	.27
+ HYDROGRAPH AT	B24	289.	12.17	28.	9.	3.	.19
+ DIVERSION TO	RB24	289.	12.17	22.	6.	2.	.19
+ HYDROGRAPH AT	DB24RE	100.	12.42	8.	3.	1.	.19
+ 2 COMBINED AT	CPB24	439.	12.42	51.	15.	5.	.46
+ ROUTED TO	B24B25	337.	12.67	51.	15.	5.	.46
HYDROGRAPH AT							

+	B25	292.	12.17	22.	7.	2.	.20
+ 2 COMBINED AT	CPB25	352.	12.58	73.	21.	7.	.66
+ HYDROGRAPH AT	B26	485.	12.17	48.	15.	5.	.31
+ DIVERSION TO	RB26	485.	12.17	32.	9.	3.	.31
+ HYDROGRAPH AT	DB26RE	339.	12.33	21.	6.	2.	.31
+ ROUTED TO	B26B27	120.	13.00	21.	6.	2.	.31
+ HYDROGRAPH AT	B27	534.	12.25	65.	21.	7.	.36
+ 2 COMBINED AT	CPB27	533.	12.25	83.	28.	9.	.67
+ 4 COMBINED AT	DUMMY	11480.	12.50	3299.	1098.	387.	114.09
+ HYDROGRAPH AT	B76	421.	12.33	46.	14.	5.	.39
+ DIVERSION TO	RB76	421.	12.33	46.	14.	5.	.39
+ HYDROGRAPH AT	DB76RE	0.	.00	0.	0.	0.	.39
+ ROUTED TO	B7676A	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	B75	553.	12.25	49.	14.	5.	.42
+ DIVERSION TO	RB75	553.	12.25	49.	14.	5.	.42
+ HYDROGRAPH AT	DB75RE	0.	.00	0.	0.	0.	.42
+ ROUTED TO	B75A75	0.	.00	0.	0.	0.	.42
+ HYDROGRAPH AT	B75A	414.	12.25	43.	13.	4.	.28
+ 2 COMBINED AT	CPB75A	413.	12.25	43.	13.	4.	.70
+ ROUTED TO	B7576A	379.	12.33	42.	13.	4.	.70
+ HYDROGRAPH AT	B76A	528.	12.17	46.	15.	5.	.31
+ 3 COMBINED AT	CPB76A	773.	12.17	88.	27.	9.	1.40
+ ROUTED TO	B76B78	773.	12.17	88.	27.	9.	1.40
+ HYDROGRAPH AT	B77	1204.	12.33	136.	40.	13.	.82
+ DIVERSION TO	RB77	1034.	12.17	58.	16.	5.	.82
+ HYDROGRAPH AT	DB77RE	1204.	12.33	89.	24.	8.	.82
+ ROUTED TO	B77B78	619.	13.00	86.	24.	8.	.82
+ HYDROGRAPH AT	B78	471.	12.67	85.	25.	8.	.57
+ DIVERSION TO	RB78	200.	12.25	19.	6.	2.	.57
+ HYDROGRAPH AT	DB78RE	471.	12.67	73.	20.	7.	.57
+ 2 COMBINED AT	CPB78A	946.	12.92	158.	43.	14.	1.39
+ DIVERSION TO	RB78BN	632.	12.75	37.	9.	3.	1.39
+ HYDROGRAPH AT	DB78BN	946.	12.92	122.	34.	11.	1.39
+ 2 COMBINED AT	CPB78B	1020.	12.92	203.	61.	20.	2.79
+ ROUTED TO	B78B79	734.	13.58	202.	61.	20.	2.79
+ HYDROGRAPH AT	B79	990.	12.33	118.	35.	12.	.85
+ DIVERSION TO	RB79	322.	12.00	24.	8.	3.	.85
+ HYDROGRAPH AT	DB79RE	990.	12.33	104.	28.	9.	.85
+ 2 COMBINED AT	CPB79	1031.	12.42	304.	88.	30.	3.64
+ ROUTED TO	B79B80	965.	12.50	303.	88.	30.	3.64
HYDROGRAPH AT							

+	B80	350.	12.25	38.	12.	4.	.27
+ DIVERSION TO	RB80	350.	12.25	37.	10.	3.	.27
+ HYDROGRAPH AT	DB80RE	8.	14.00	4.	1.	0.	.27
+ 2 COMBINED AT	CPB80	965.	12.50	306.	89.	30.	3.91
+ ROUTED TO	SRB80	947.	12.50	306.	89.	30.	3.91
+ ROUTED TO	B80B81	862.	12.83	304.	89.	30.	3.91
+ HYDROGRAPH AT	B81	393.	12.25	40.	12.	4.	.25
+ DIVERSION TO	RB81	4.	9.58	3.	1.	0.	.25
+ HYDROGRAPH AT	DB81RE	393.	12.25	40.	11.	4.	.25
+ 2 COMBINED AT	CPB81	900.	12.75	338.	100.	34.	4.16
+ ROUTED TO	SRB81	830.	12.92	338.	100.	34.	4.16
+ ROUTED TO	B81B84	818.	13.00	337.	100.	34.	4.16
+ HYDROGRAPH AT	B82	220.	12.25	22.	7.	2.	.15
+ DIVERSION TO	RB82	220.	12.25	21.	6.	2.	.15
+ HYDROGRAPH AT	DB82RE	7.	13.33	3.	1.	0.	.15
+ ROUTED TO	B82B83	7.	13.58	3.	1.	0.	.15
+ HYDROGRAPH AT	B83	449.	12.08	41.	13.	4.	.22
+ DIVERSION TO	RB83	5.	6.50	4.	1.	0.	.22
+ HYDROGRAPH AT	DB83RE	449.	12.08	41.	12.	4.	.22
+ 2 COMBINED AT	CPB83	449.	12.08	42.	13.	4.	.37
+ ROUTED TO	SRB83	29.	12.58	25.	12.	4.	.37
+ ROUTED TO	B83B84	29.	12.75	25.	12.	4.	.37
+ HYDROGRAPH AT	B71	1005.	12.42	140.	44.	15.	.96
+ DIVERSION TO	RB71	1005.	12.42	136.	37.	12.	.96
+ HYDROGRAPH AT	DB71RE	39.	13.92	18.	7.	2.	.96
+ ROUTED TO	B71B72	27.	16.42	17.	7.	2.	.96
+ HYDROGRAPH AT	B72	1028.	12.50	144.	42.	14.	1.12
+ DIVERSION TO	RB72	680.	12.25	46.	13.	4.	1.12
+ HYDROGRAPH AT	DB72RE	1028.	12.50	109.	29.	10.	1.12
+ 2 COMBINED AT	CPB72	1026.	12.50	117.	36.	12.	2.08
+ ROUTED TO	B72B74	985.	12.58	116.	36.	12.	2.08
+ HYDROGRAPH AT	B73	286.	12.42	36.	11.	4.	.30
+ DIVERSION TO	RB73	159.	12.17	11.	3.	1.	.30
+ HYDROGRAPH AT	DB73RE	286.	12.42	29.	8.	3.	.30
+ ROUTED TO	SRB73	10.	13.58	9.	6.	3.	.30
+ ROUTED TO	B73B74	10.	14.67	9.	6.	3.	.30
+ HYDROGRAPH AT	B74	215.	12.08	21.	7.	2.	.11
+ DIVERSION TO	RB74	79.	11.92	8.	2.	1.	.11
+ HYDROGRAPH AT	DB74RE	215.	12.08	17.	5.	2.	.11
+ 3 COMBINED AT	CPB74	1003.	12.58	137.	46.	16.	2.49
ROUTED TO							

+	SRB74	153.	13.25	82.	39.	15.	2.49
+ ROUTED TO	B74B84	152.	13.42	81.	39.	15.	2.49
+ HYDROGRAPH AT	B84	379.	12.17	42.	13.	4.	.22
+ DIVERSION TO	RB84	4.	6.50	3.	1.	0.	.22
+ HYDROGRAPH AT	DB84RE	379.	12.17	42.	12.	4.	.22
+ 4 COMBINED AT	CPB84	947.	13.08	457.	156.	55.	7.24
+ ROUTED TO	SRB84	437.	15.08	345.	145.	52.	7.24
+ HYDROGRAPH AT	B28	1073.	12.42	144.	45.	15.	.96
+ DIVERSION TO	RB28	9.	1.08	1.	0.	0.	.96
+ HYDROGRAPH AT	DB28RE	1073.	12.42	144.	45.	15.	.96
+ HYDROGRAPH AT	B29	278.	12.25	33.	11.	4.	.18
+ DIVERSION TO	RB29	266.	12.25	21.	6.	2.	.18
+ HYDROGRAPH AT	DB29RE	240.	12.33	16.	5.	2.	.18
+ HYDROGRAPH AT	B30	306.	12.17	36.	12.	4.	.17
+ DIVERSION TO	RB30	250.	12.08	18.	5.	2.	.17
+ HYDROGRAPH AT	DB30RE	291.	12.25	24.	7.	2.	.17
+ ROUTED TO	SRB30	33.	12.75	23.	7.	2.	.17
+ HYDROGRAPH AT	B31	1009.	12.25	108.	34.	11.	.68
+ DIVERSION TO	RB31	575.	12.08	42.	12.	4.	.68
+ HYDROGRAPH AT	DB31RE	1009.	12.25	79.	22.	7.	.68
+ ROUTED TO	SRB31	43.	13.33	39.	22.	7.	.68
+ 2 COMBINED AT	DUMMY	76.	12.92	62.	29.	10.	.85
+ 5 COMBINED AT	DUMMY	12341.	12.50	3645.	1248.	442.	123.31
+ HYDROGRAPH AT	B32	831.	12.42	108.	32.	11.	.82
+ DIVERSION TO	RB32	620.	12.25	45.	13.	4.	.82
+ HYDROGRAPH AT	DB32RE	831.	12.42	72.	20.	7.	.82
+ ROUTED TO	SRB32	0.	.00	0.	0.	0.	.82
+ ROUTED TO	B32B33	0.	.00	0.	0.	0.	.82
+ HYDROGRAPH AT	B33	242.	12.33	24.	7.	2.	.28
+ DIVERSION TO	RB33	186.	12.17	9.	2.	1.	.28
+ HYDROGRAPH AT	DB33RE	242.	12.33	16.	4.	1.	.28
+ 2 COMBINED AT	CPB33	241.	12.33	16.	4.	1.	1.10
+ HYDROGRAPH AT	B34	241.	12.08	17.	5.	2.	.13
+ HYDROGRAPH AT	B38	191.	12.50	27.	7.	2.	.34
+ DIVERSION TO	RB38	4.	11.83	1.	0.	0.	.34
+ HYDROGRAPH AT	DB38RE	191.	12.50	27.	7.	2.	.34
+ ROUTED TO	B38B39	133.	13.50	26.	7.	2.	.34
+ HYDROGRAPH AT	B37	169.	12.92	40.	10.	3.	.47
+ ROUTED TO	B37B39	147.	13.92	39.	10.	3.	.47
+ HYDROGRAPH AT	B39	214.	13.00	57.	14.	5.	.77
3 COMBINED AT							

+	CPB39	390.	13.58	121.	31.	10.	1.58
+ ROUTED TO	SRB39	241.	14.25	104.	27.	9.	1.58
+ HYDROGRAPH AT	B35	228.	12.17	18.	5.	2.	.14
+ HYDROGRAPH AT	B36	119.	12.08	7.	2.	1.	.06
+ 4 COMBINED AT	DUMMY	559.	12.08	141.	39.	13.	1.91
+ 3 COMBINED AT	DUMMY	12480.	12.50	3748.	1276.	451.	126.33
+ HYDROGRAPH AT	L41	272.	12.33	26.	7.	2.	.25
+ DIVERSION TO	DL41S	171.	12.33	18.	5.	2.	.25
+ HYDROGRAPH AT	DL41SE	101.	12.33	8.	2.	1.	.25
+ ROUTED TO	L41L42	85.	12.50	8.	2.	1.	.25
+ HYDROGRAPH AT	L42	584.	12.50	70.	19.	6.	.74
+ 2 COMBINED AT	CPL42	668.	12.50	79.	21.	7.	.99
+ DIVERSION TO	DL421S	344.	12.50	40.	10.	3.	.99
+ HYDROGRAPH AT	DL421	324.	12.50	39.	10.	3.	.99
+ DIVERSION TO	DL422S	69.	12.50	10.	3.	1.	.99
+ HYDROGRAPH AT	DL422	255.	12.50	29.	8.	3.	.99
+ ROUTED TO	L42L43	203.	12.92	29.	8.	3.	.99
+ HYDROGRAPH AT	L43	979.	12.42	97.	25.	8.	1.00
+ HYDROGRAPH AT	DL381	211.	12.83	38.	10.	3.	4.90
+ ROUTED TO	L38L43	200.	13.25	38.	10.	3.	4.90
+ 3 COMBINED AT	CPL43	1052.	12.42	158.	41.	14.	6.89
+ DIVERSION TO	DL431S	4.	12.42	0.	0.	0.	6.89
+ HYDROGRAPH AT	DL431	1048.	12.42	158.	41.	14.	6.89
+ DIVERSION TO	DL432S	22.	12.42	2.	1.	0.	6.89
+ HYDROGRAPH AT	DL432	1026.	12.42	155.	41.	14.	6.89
+ ROUTED TO	L43L44	836.	12.58	155.	41.	14.	6.89
+ HYDROGRAPH AT	L44	173.	12.75	38.	10.	3.	.48
+ HYDROGRAPH AT	DL382	122.	12.83	45.	13.	4.	4.90
+ ROUTED TO	L38L44	113.	14.00	43.	13.	4.	4.90
+ HYDROGRAPH AT	DL391	689.	13.17	215.	58.	19.	18.45
+ ROUTED TO	L39L44	649.	13.75	215.	58.	19.	18.45
+ 4 COMBINED AT	CPL44	985.	13.67	418.	114.	38.	20.92
+ DIVERSION TO	DL441S	438.	13.67	185.	48.	16.	20.92
+ HYDROGRAPH AT	DL441	546.	13.67	232.	66.	22.	20.92
+ DIVERSION TO	DL442S	70.	13.67	30.	8.	3.	20.92
+ HYDROGRAPH AT	DL442	477.	13.67	202.	59.	20.	20.92
+ ROUTED TO	L44B40	469.	13.75	202.	59.	20.	20.92
+ HYDROGRAPH AT	B40	266.	12.58	53.	15.	5.	.51
+ HYDROGRAPH AT	DL392	43.	13.17	15.	4.	1.	18.45
+ ROUTED TO	L39B40	39.	14.50	15.	4.	1.	18.45
HYDROGRAPH AT							

+	DD681	176.	13.50	79.	22.	7.	18.95
+ ROUTED TO	D68B40	166.	13.83	79.	22.	7.	18.95
+ 4 COMBINED AT	CPB40	781.	12.75	338.	97.	33.	21.92
+ DIVERSION TO	DB401S	499.	12.75	206.	58.	20.	21.92
+ HYDROGRAPH AT	DB401	282.	12.75	132.	39.	13.	21.92
+ DIVERSION TO	DB402S	84.	12.75	47.	14.	5.	21.92
+ HYDROGRAPH AT	DB402	198.	12.75	85.	24.	8.	21.92
+ ROUTED TO	B40B41	174.	13.33	85.	24.	8.	21.92
+ HYDROGRAPH AT	B41	496.	12.92	92.	24.	8.	.95
+ HYDROGRAPH AT	DD682	16.	13.50	7.	2.	1.	18.95
+ ROUTED TO	D68B41	14.	14.50	7.	2.	1.	18.95
+ HYDROGRAPH AT	DD691	62.	14.08	33.	11.	4.	33.56
+ ROUTED TO	D69B41	62.	14.42	33.	11.	4.	33.56
+ 4 COMBINED AT	CPB41	537.	13.00	192.	55.	19.	37.49
+ DIVERSION TO	DB41S	511.	13.00	183.	52.	18.	37.49
+ HYDROGRAPH AT	DB41SE	27.	13.00	9.	2.	1.	37.49
+ ROUTED TO	B41B43	25.	13.17	8.	2.	1.	37.49
+ HYDROGRAPH AT	B43	112.	13.33	40.	10.	3.	.54
+ HYDROGRAPH AT	DD692	50.	14.08	27.	9.	3.	33.56
+ ROUTED TO	D69B43	46.	16.67	25.	9.	3.	33.56
+ 3 COMBINED AT	CPB43	115.	13.33	56.	19.	7.	38.03
+ ROUTED TO	B43B45	111.	13.83	55.	19.	7.	38.03
+ HYDROGRAPH AT	L40	541.	12.33	48.	12.	4.	.61
+ ROUTED TO	L40L45	439.	12.50	48.	12.	4.	.61
+ HYDROGRAPH AT	L45	530.	12.25	42.	10.	3.	.50
+ 2 COMBINED AT	CPL45	781.	12.33	90.	22.	7.	1.11
+ ROUTED TO	L45L46	708.	12.58	90.	22.	7.	1.11
+ HYDROGRAPH AT	L46	513.	12.33	47.	12.	4.	.49
+ HYDROGRAPH AT	DL41SE	171.	12.33	18.	5.	2.	.25
+ ROUTED TO	L41L46	135.	12.67	18.	5.	2.	.25
+ 3 COMBINED AT	CPL46	1172.	12.50	154.	39.	13.	1.85
+ DIVERSION TO	DL461S	122.	12.50	33.	9.	3.	1.85
+ HYDROGRAPH AT	DL461	1050.	12.50	121.	31.	10.	1.85
+ DIVERSION TO	DL462S	90.	12.50	12.	3.	1.	1.85
+ HYDROGRAPH AT	DL462	959.	12.50	109.	28.	9.	1.85
+ ROUTED TO	L46L47	838.	12.58	109.	28.	9.	1.85
+ HYDROGRAPH AT	L47	323.	12.67	43.	11.	4.	.50
+ HYDROGRAPH AT	DL421	344.	12.50	40.	10.	3.	.99
+ ROUTED TO	L42L47	310.	12.67	40.	10.	3.	.99
+ 3 COMBINED AT	CPL47	1444.	12.67	190.	49.	16.	3.09
DIVERSION TO							

+	DL471S	185.	12.25	45.	12.	4.	3.09
+ HYDROGRAPH AT	DL471	1259.	12.67	145.	37.	12.	3.09
+ DIVERSION TO	DL472S	1063.	12.67	125.	32.	11.	3.09
+ HYDROGRAPH AT	DL472	196.	12.67	20.	5.	2.	3.09
+ ROUTED TO	L47L48	154.	13.00	20.	5.	2.	3.09
+ HYDROGRAPH AT	L48	758.	12.50	87.	23.	8.	1.00
+ HYDROGRAPH AT	DL422	69.	12.50	10.	3.	1.	.99
+ ROUTED TO	L42L48	54.	13.08	10.	3.	1.	.99
+ HYDROGRAPH AT	DL431	4.	12.42	0.	0.	0.	6.89
+ ROUTED TO	L43L48	2.	13.08	0.	0.	0.	6.89
+ 4 COMBINED AT	CPL48	758.	12.50	115.	30.	10.	9.99
+ DIVERSION TO	DL481S	6.	12.50	0.	0.	0.	9.99
+ HYDROGRAPH AT	DL481	723.	12.50	109.	29.	10.	9.99
+ DIVERSION TO	DL482S	10.	12.50	1.	0.	0.	9.99
+ HYDROGRAPH AT	DL482	713.	12.50	108.	29.	10.	9.99
+ ROUTED TO	L48L49	629.	12.67	108.	29.	10.	9.99
+ HYDROGRAPH AT	L49	157.	12.75	34.	9.	3.	.47
+ HYDROGRAPH AT	DL432	22.	12.42	2.	1.	0.	6.89
+ ROUTED TO	L43L49	10.	14.17	2.	1.	0.	6.89
+ HYDROGRAPH AT	DL441	438.	13.67	185.	48.	16.	20.92
+ ROUTED TO	L44L49	426.	13.75	185.	48.	16.	20.92
+ 4 COMBINED AT	CPL49	1106.	12.75	310.	81.	27.	24.49
+ DIVERSION TO	DL491S	834.	12.75	255.	67.	22.	24.49
+ HYDROGRAPH AT	DL491	272.	12.75	55.	14.	5.	24.49
+ DIVERSION TO	DL492S	122.	12.75	33.	9.	3.	24.49
+ HYDROGRAPH AT	DL492	150.	12.75	22.	6.	2.	24.49
+ ROUTED TO	L49B44	138.	12.92	22.	6.	2.	24.49
+ HYDROGRAPH AT	B44	187.	12.75	39.	10.	3.	.52
+ HYDROGRAPH AT	DL442	70.	13.67	30.	8.	3.	20.92
+ ROUTED TO	L44B44	61.	14.75	29.	8.	3.	20.92
+ HYDROGRAPH AT	DB401	499.	12.75	206.	58.	20.	21.92
+ ROUTED TO	B40B44	433.	13.42	205.	58.	20.	21.92
+ 4 COMBINED AT	CPB44	582.	13.33	282.	78.	26.	26.02
+ DIVERSION TO	DB441S	71.	13.33	35.	10.	3.	26.02
+ HYDROGRAPH AT	DB441	510.	13.33	247.	69.	23.	26.02
+ DIVERSION TO	DB442S	45.	13.33	22.	6.	2.	26.02
+ HYDROGRAPH AT	DB442	466.	13.33	226.	63.	21.	26.02
+ ROUTED TO	B44B45	454.	13.42	225.	63.	21.	26.02
+ HYDROGRAPH AT	B45	292.	12.92	72.	19.	6.	.81
+ HYDROGRAPH AT	DB402	84.	12.75	47.	14.	5.	21.92
ROUTED TO							

+	B40B45	81.	13.17	47.	14.	5.	21.92
+ HYDROGRAPH AT	DB41SE	511.	13.00	183.	52.	18.	37.49
+ ROUTED TO	B41B45	407.	14.42	177.	52.	18.	37.49
+ 5 COMBINED AT	CPB45	947.	14.33	526.	157.	54.	42.94
+ ROUTED TO	B45B47	917.	14.92	521.	157.	54.	42.94
+ HYDROGRAPH AT	W21	502.	12.17	34.	8.	3.	.42
+ ROUTED TO	W21L50	336.	12.58	34.	8.	3.	.42
+ HYDROGRAPH AT	L50	511.	12.25	38.	10.	3.	.50
+ 2 COMBINED AT	CPL50	562.	12.33	72.	18.	6.	.92
+ ROUTED TO	L50L51	532.	12.58	72.	18.	6.	.92
+ HYDROGRAPH AT	L51	538.	12.33	51.	15.	5.	.50
+ DIVERSION TO	RL51	538.	12.33	36.	9.	3.	.50
+ HYDROGRAPH AT	DL51RE	326.	12.50	18.	5.	2.	.50
+ HYDROGRAPH AT	DL461	122.	12.50	33.	9.	3.	1.85
+ ROUTED TO	L46L51	118.	12.83	33.	9.	3.	1.85
+ 3 COMBINED AT	CPL51	920.	12.50	122.	32.	11.	3.27
+ ROUTED TO	L51L52	811.	12.67	122.	32.	11.	3.27
+ HYDROGRAPH AT	L52	488.	12.42	55.	16.	5.	.50
+ DIVERSION TO	RL52	488.	12.42	44.	12.	4.	.50
+ HYDROGRAPH AT	DL52RE	206.	12.67	15.	4.	1.	.50
+ HYDROGRAPH AT	DL462	90.	12.50	12.	3.	1.	1.85
+ ROUTED TO	L46L52	73.	13.00	12.	3.	1.	1.85
+ HYDROGRAPH AT	DL471	185.	12.25	45.	12.	4.	3.09
+ ROUTED TO	L47L52	186.	12.67	45.	12.	4.	3.09
+ 4 COMBINED AT	CPL52	1226.	12.67	193.	51.	17.	5.00
+ DIVERSION TO	DL521S	290.	12.67	33.	8.	3.	5.00
+ HYDROGRAPH AT	DL521	936.	12.67	160.	42.	14.	5.00
+ DIVERSION TO	DL522S	49.	12.67	8.	2.	1.	5.00
+ HYDROGRAPH AT	DL522	887.	12.67	152.	40.	13.	5.00
+ ROUTED TO	L52L53	747.	13.00	152.	40.	13.	5.00
+ HYDROGRAPH AT	L53	270.	12.92	68.	17.	6.	1.00
+ HYDROGRAPH AT	DL472	1063.	12.67	125.	32.	11.	3.09
+ ROUTED TO	L47L53	775.	13.33	125.	32.	11.	3.09
+ HYDROGRAPH AT	DL481	6.	12.50	0.	0.	0.	9.99
+ ROUTED TO	L48L53	1.	15.25	0.	0.	0.	9.99
+ 4 COMBINED AT	CPL53	1474.	13.25	318.	82.	28.	12.90
+ DIVERSION TO	DL531S	459.	13.25	69.	17.	6.	12.90
+ HYDROGRAPH AT	DL531	1015.	13.25	248.	65.	22.	12.90
+ DIVERSION TO	DL532S	49.	13.25	8.	2.	1.	12.90
+ HYDROGRAPH AT	DL532	965.	13.25	240.	63.	21.	12.90
ROUTED TO							

+	L53L54	932.	13.33	240.	63.	21.	12.90
HYDROGRAPH AT +	L54	191.	12.75	41.	11.	4.	.48
HYDROGRAPH AT +	DL482	10.	12.50	1.	0.	0.	9.99
ROUTED TO +	L48L54	4.	14.83	1.	0.	0.	9.99
HYDROGRAPH AT +	DL491	834.	12.75	255.	67.	22.	24.49
ROUTED TO +	L49L54	787.	13.00	254.	67.	22.	24.49
4 COMBINED AT +	CPL54	1611.	13.25	508.	134.	45.	27.88
DIVERSION TO +	DL54S	1332.	13.25	378.	98.	33.	27.88
HYDROGRAPH AT +	DL54SE	279.	13.25	130.	36.	12.	27.88
ROUTED TO +	L54B46	275.	13.33	130.	36.	12.	27.88
HYDROGRAPH AT +	B46	216.	12.75	46.	12.	4.	.54
HYDROGRAPH AT +	DL492	122.	12.75	33.	9.	3.	24.49
ROUTED TO +	L49B46	96.	13.83	32.	9.	3.	24.49
HYDROGRAPH AT +	DB441	71.	13.33	35.	10.	3.	26.02
ROUTED TO +	B44B46	68.	13.58	34.	10.	3.	26.02
4 COMBINED AT +	CPB46	464.	13.58	231.	63.	21.	29.96
ROUTED TO +	B46B47	459.	13.67	230.	63.	21.	29.96
HYDROGRAPH AT +	B47	200.	12.75	44.	12.	4.	.50
HYDROGRAPH AT +	DB442	45.	13.33	22.	6.	2.	26.02
ROUTED TO +	B44B47	39.	14.75	21.	6.	2.	26.02
4 COMBINED AT +	CPB47	1240.	14.83	773.	231.	79.	47.37
ROUTED TO +	B47B48	1233.	14.92	771.	231.	79.	47.37
HYDROGRAPH AT +	B48	164.	12.67	31.	8.	3.	.40
2 COMBINED AT +	CPB48	1234.	14.92	789.	237.	81.	47.77
ROUTED TO +	B48B54	1226.	15.08	785.	237.	81.	47.77
HYDROGRAPH AT +	B42	615.	12.08	48.	15.	5.	.35
ROUTED TO +	B42B53	171.	14.58	48.	15.	5.	.35
HYDROGRAPH AT +	B53	860.	12.67	143.	43.	14.	1.10
2 COMBINED AT +	CPB53	862.	12.67	185.	56.	19.	1.45
ROUTED TO +	B53B54	739.	12.83	185.	56.	19.	1.45
HYDROGRAPH AT +	B49	639.	12.08	45.	14.	5.	.32
ROUTED TO +	B49B50	348.	12.42	45.	14.	5.	.32
HYDROGRAPH AT +	B02	673.	12.33	86.	27.	9.	.54
DIVERSION TO +	RB02	479.	12.17	33.	10.	3.	.54
HYDROGRAPH AT +	DB02RE	673.	12.33	62.	17.	6.	.54
HYDROGRAPH AT +	B04	609.	12.08	41.	12.	4.	.31
DIVERSION TO +	RB04	226.	11.92	12.	4.	1.	.31
HYDROGRAPH AT +	DB04RE	609.	12.08	32.	9.	3.	.31
ROUTED TO +	B04B02	257.	12.50	31.	9.	3.	.31
2 COMBINED AT +	CPB02	839.	12.42	94.	26.	9.	.86
ROUTED TO							

+	B02B50	624.	12.67	91.	26.	9.	.86
+ HYDROGRAPH AT	B50	1209.	12.17	97.	29.	10.	.67
+ 3 COMBINED AT	CPB50	1300.	12.17	227.	68.	23.	1.85
+ ROUTED TO	B50B52	958.	12.42	227.	68.	23.	1.85
+ HYDROGRAPH AT	B51	1014.	12.17	89.	27.	9.	.61
+ ROUTED TO	B51B52	580.	12.67	89.	27.	9.	.61
+ HYDROGRAPH AT	B52	1094.	12.25	88.	23.	8.	.84
+ 3 COMBINED AT	CPB52	2082.	12.33	401.	118.	40.	3.30
+ ROUTED TO	B52B54	1840.	12.58	400.	117.	40.	3.30
+ HYDROGRAPH AT	B54	1487.	12.25	129.	36.	12.	1.23
+ DIVERSION TO	RB54	153.	11.83	15.	5.	2.	1.23
+ HYDROGRAPH AT	DB54RE	1487.	12.25	121.	31.	10.	1.23
+ 4 COMBINED AT	CPB54	2253.	12.58	1326.	404.	138.	53.74
+ ROUTED TO	B54B57	2227.	12.83	1316.	404.	138.	53.74
+ HYDROGRAPH AT	L55	220.	12.83	35.	9.	3.	.50
+ DIVERSION TO	DL551S	7.	12.83	0.	0.	0.	.50
+ HYDROGRAPH AT	DL551	213.	12.83	34.	9.	3.	.50
+ DIVERSION TO	DL552S	10.	12.83	2.	0.	0.	.50
+ HYDROGRAPH AT	DL552	203.	12.83	33.	8.	3.	.50
+ ROUTED TO	L55L56	185.	13.08	33.	8.	3.	.50
+ HYDROGRAPH AT	L56	940.	12.33	74.	19.	6.	1.00
+ DIVERSION TO	RL56	940.	12.33	74.	19.	6.	1.00
+ HYDROGRAPH AT	DL56RE	0.	.00	0.	0.	0.	1.00
+ HYDROGRAPH AT	DL521	290.	12.67	33.	8.	3.	5.00
+ ROUTED TO	L52L56	227.	12.92	33.	8.	3.	5.00
+ 3 COMBINED AT	CPL56	394.	13.00	63.	16.	5.	6.50
+ DIVERSION TO	DL561S	113.	13.00	13.	3.	1.	6.50
+ HYDROGRAPH AT	DL561	281.	13.00	50.	13.	4.	6.50
+ DIVERSION TO	DL562S	7.	13.00	1.	0.	0.	6.50
+ HYDROGRAPH AT	DL562	275.	13.00	49.	13.	4.	6.50
+ ROUTED TO	L56L57	256.	13.25	49.	13.	4.	6.50
+ HYDROGRAPH AT	L57	276.	13.00	70.	18.	6.	1.00
+ HYDROGRAPH AT	DL522	49.	12.67	8.	2.	1.	5.00
+ ROUTED TO	L52L57	28.	14.50	8.	2.	1.	5.00
+ HYDROGRAPH AT	DL531	459.	13.25	69.	17.	6.	12.90
+ ROUTED TO	L53L57	422.	13.50	69.	17.	6.	12.90
+ 4 COMBINED AT	CPL57	813.	13.42	183.	47.	16.	15.40
+ DIVERSION TO	DL571S	119.	13.42	21.	5.	2.	15.40
+ HYDROGRAPH AT	DL571	694.	13.42	162.	42.	14.	15.40
+ DIVERSION TO	DL572S	26.	13.42	7.	2.	1.	15.40
HYDROGRAPH AT							

+	DL572	668.	13.42	155.	40.	13.	15.40
+ ROUTED TO	L57L58	651.	13.50	155.	40.	13.	15.40
+ HYDROGRAPH AT	L58	168.	12.83	38.	10.	3.	.44
+ HYDROGRAPH AT	DL532	49.	13.25	8.	2.	1.	12.90
+ ROUTED TO	L53L58	35.	14.58	8.	2.	1.	12.90
+ HYDROGRAPH AT	DL54SE	1332.	13.25	378.	98.	33.	27.88
+ ROUTED TO	L54L58	1247.	13.83	375.	98.	33.	27.88
+ 4 COMBINED AT	CPL58	1790.	13.67	544.	143.	48.	30.82
+ DIVERSION TO	DL581S	862.	13.67	299.	79.	27.	30.82
+ HYDROGRAPH AT	DL581	928.	13.67	245.	64.	21.	30.82
+ DIVERSION TO	DL582S	58.	13.67	22.	6.	2.	30.82
+ HYDROGRAPH AT	DL582	870.	13.67	223.	58.	19.	30.82
+ ROUTED TO	L58B55	860.	13.83	223.	58.	19.	30.82
+ HYDROGRAPH AT	B55	199.	12.83	43.	11.	4.	.53
+ 2 COMBINED AT	CPB55	908.	13.75	258.	67.	22.	31.35
+ ROUTED TO	B55B56	878.	14.00	256.	67.	22.	31.35
+ HYDROGRAPH AT	B56	416.	13.50	123.	35.	12.	1.14
+ DIVERSION TO	RB56	416.	13.50	88.	23.	8.	1.14
+ HYDROGRAPH AT	DB56RE	269.	14.08	43.	12.	4.	1.14
+ 2 COMBINED AT	CPB56	872.	14.00	278.	74.	25.	32.49
+ ROUTED TO	B56B57	872.	14.08	278.	74.	25.	32.49
+ HYDROGRAPH AT	B57	1347.	12.33	147.	43.	14.	1.12
+ DIVERSION TO	RB57	1347.	12.33	147.	41.	14.	1.12
+ HYDROGRAPH AT	DB57RE	10.	17.58	7.	2.	1.	1.12
+ 3 COMBINED AT	CPB57	2355.	14.08	1553.	467.	159.	59.47
+ ROUTED TO	B57B58	2331.	14.25	1541.	467.	159.	59.47
+ HYDROGRAPH AT	B58	1416.	12.33	172.	52.	17.	1.20
+ DIVERSION TO	RB58	1416.	12.33	102.	28.	9.	1.20
+ HYDROGRAPH AT	DB58RE	1146.	12.50	85.	24.	8.	1.20
+ 2 COMBINED AT	CPB58	2352.	14.25	1592.	482.	164.	60.66
+ ROUTED TO	B58B59	2341.	14.33	1578.	482.	164.	60.66
+ HYDROGRAPH AT	B59	364.	13.08	77.	21.	7.	.70
+ DIVERSION TO	RB59	201.	12.58	19.	5.	2.	.70
+ HYDROGRAPH AT	DB59RE	364.	13.08	62.	16.	5.	.70
+ 2 COMBINED AT	CPB59	2551.	13.25	1623.	494.	168.	61.36
+ ROUTED TO	B59B65	2547.	13.33	1619.	494.	168.	61.36
+ HYDROGRAPH AT	B61	880.	12.50	132.	40.	13.	.96
+ DIVERSION TO	RB61	880.	12.50	128.	34.	11.	.96
+ HYDROGRAPH AT	DB61RE	42.	13.75	16.	6.	2.	.96
+ ROUTED TO	B61B62	31.	14.42	15.	6.	2.	.96
HYDROGRAPH AT							

+	B62	422.	12.42	56.	16.	5.	.43
+ DIVERSION TO	RB62	422.	12.42	53.	14.	5.	.43
+ HYDROGRAPH AT	DB62RE	29.	13.33	7.	2.	1.	.43
+ 2 COMBINED AT	CPB62	39.	14.42	21.	8.	3.	1.39
+ ROUTED TO	B62B63	36.	14.83	21.	8.	3.	1.39
+ HYDROGRAPH AT	B63	112.	12.33	12.	3.	1.	.12
+ 2 COMBINED AT	CPB63	111.	12.33	28.	11.	4.	1.51
+ ROUTED TO	SRB63	110.	12.33	29.	11.	4.	1.51
+ ROUTED TO	B63B65	99.	12.50	28.	11.	4.	1.51
+ HYDROGRAPH AT	B64	150.	12.75	24.	7.	2.	.23
+ DIVERSION TO	RB64	68.	12.25	5.	1.	0.	.23
+ HYDROGRAPH AT	DB64RE	150.	12.75	20.	5.	2.	.23
+ ROUTED TO	B64B65	112.	13.25	20.	5.	2.	.23
+ HYDROGRAPH AT	B65	226.	12.33	25.	7.	2.	.23
+ 4 COMBINED AT	CPB65	2636.	13.33	1636.	504.	172.	63.34
+ ROUTED TO	B65B66	2584.	13.67	1623.	504.	172.	63.34
+ HYDROGRAPH AT	S01	344.	12.33	45.	15.	5.	.27
+ DIVERSION TO	RS01	344.	12.33	45.	14.	5.	.27
+ HYDROGRAPH AT	DS01RE	4.	18.83	3.	1.	0.	.27
+ DIVERSION TO	DS011S	2.	18.83	2.	1.	0.	.27
+ HYDROGRAPH AT	DS011	2.	18.83	2.	0.	0.	.27
+ DIVERSION TO	DS012S	1.	18.83	0.	0.	0.	.27
+ HYDROGRAPH AT	DS012	1.	18.83	1.	0.	0.	.27
+ ROUTED TO	S01B66	1.	19.58	1.	0.	0.	.27
+ HYDROGRAPH AT	B66	409.	12.67	84.	24.	8.	.76
+ DIVERSION TO	RB66	326.	12.42	24.	7.	2.	.76
+ HYDROGRAPH AT	DB66RE	409.	12.67	66.	17.	6.	.76
+ 3 COMBINED AT	CPB66	2650.	13.67	1649.	516.	176.	64.37
+ ROUTED TO	B66B68	2605.	14.00	1640.	516.	176.	64.37
+ HYDROGRAPH AT	DS011	2.	18.83	2.	1.	0.	.27
+ ROUTED TO	S01S02	2.	20.50	2.	1.	0.	.27
+ HYDROGRAPH AT	S02	294.	12.75	64.	18.	6.	.61
+ DIVERSION TO	RS02	294.	12.75	40.	11.	4.	.61
+ HYDROGRAPH AT	DS02RE	225.	13.08	28.	8.	3.	.61
+ 2 COMBINED AT	CPS02	225.	13.08	28.	8.	3.	.87
+ DIVERSION TO	DS021S	95.	13.08	10.	3.	1.	.87
+ HYDROGRAPH AT	DS021	130.	13.08	18.	5.	2.	.87
+ DIVERSION TO	DS022S	48.	13.08	8.	2.	1.	.87
+ HYDROGRAPH AT	DS022	82.	13.08	11.	3.	1.	.87
+ ROUTED TO	S02B67	70.	13.25	10.	3.	1.	.87
HYDROGRAPH AT							

+	B67	282.	12.50	41.	12.	4.	.33
+ DIVERSION TO	RB67	282.	12.50	24.	6.	2.	.33
+ HYDROGRAPH AT	DB67RE	241.	12.67	21.	6.	2.	.33
+ HYDROGRAPH AT	DS012	1.	18.83	0.	0.	0.	.27
+ ROUTED TO	S01B67	1.	24.75	0.	0.	0.	.27
+ 3 COMBINED AT	CPB67	241.	12.67	31.	9.	3.	1.20
+ ROUTED TO	B67B68	217.	12.75	31.	9.	3.	1.20
+ HYDROGRAPH AT	B68	340.	12.75	73.	19.	6.	.74
+ DIVERSION TO	RB68	309.	12.58	25.	6.	2.	.74
+ HYDROGRAPH AT	DB68RE	340.	12.75	51.	13.	4.	.74
+ 3 COMBINED AT	CPB68	2670.	14.00	1665.	529.	180.	66.04
+ ROUTED TO	B68B69	2636.	14.25	1659.	529.	180.	66.04
+ HYDROGRAPH AT	B69	366.	12.83	82.	21.	7.	.91
+ HYDROGRAPH AT	DS022	48.	13.08	8.	2.	1.	.87
+ ROUTED TO	S02B69	24.	15.08	7.	2.	1.	.87
+ 3 COMBINED AT	CPB69	2670.	14.25	1673.	545.	186.	66.94
+ ROUTED TO	B69B70	2660.	14.42	1670.	545.	186.	66.94
+ HYDROGRAPH AT	B85	385.	12.50	58.	17.	6.	.41
+ DIVERSION TO	RB85	252.	12.25	21.	6.	2.	.41
+ HYDROGRAPH AT	DB85RE	385.	12.50	42.	11.	4.	.41
+ ROUTED TO	B85B86	310.	12.83	41.	11.	4.	.41
+ HYDROGRAPH AT	B86	611.	12.50	90.	28.	9.	.62
+ DIVERSION TO	RB86	8.	6.67	6.	1.	0.	.62
+ HYDROGRAPH AT	DB86RE	611.	12.50	90.	26.	9.	.62
+ 2 COMBINED AT	CPB86	633.	12.75	128.	37.	12.	1.03
+ ROUTED TO	B86B89	594.	12.83	128.	37.	12.	1.03
+ HYDROGRAPH AT	B87	477.	12.17	47.	15.	5.	.27
+ DIVERSION TO	RB87	75.	11.83	11.	4.	1.	.27
+ HYDROGRAPH AT	DB87RE	477.	12.17	42.	12.	4.	.27
+ ROUTED TO	B87B88	280.	12.67	40.	12.	4.	.27
+ HYDROGRAPH AT	B88	556.	12.42	81.	25.	8.	.51
+ DIVERSION TO	RB88	22.	11.08	11.	4.	1.	.51
+ HYDROGRAPH AT	DB88RE	556.	12.42	79.	22.	7.	.51
+ 2 COMBINED AT	CPB88	714.	12.50	117.	33.	11.	.78
+ ROUTED TO	B88B89	636.	12.75	116.	33.	11.	.78
+ HYDROGRAPH AT	B89	531.	12.25	57.	18.	6.	.38
+ DIVERSION TO	RB89	3.	1.25	2.	1.	0.	.38
+ HYDROGRAPH AT	DB89RE	531.	12.25	57.	17.	6.	.38
+ 3 COMBINED AT	CPB89	1267.	12.75	296.	87.	29.	2.18
+ ROUTED TO	SRB89	374.	13.58	291.	87.	29.	2.18
DIVERSION TO							

+	DB89SD	374.	13.58	291.	87.	29.	2.18
+ HYDROGRAPH AT	DB89SW	0.	.00	0.	0.	0.	2.18
+ ROUTED TO	B89B92	0.	.00	0.	0.	0.	2.18
+ HYDROGRAPH AT	B90	264.	12.50	41.	11.	4.	.46
+ DIVERSION TO	RB90	4.	11.50	2.	1.	0.	.46
+ HYDROGRAPH AT	DB90RE	264.	12.50	41.	11.	4.	.46
+ ROUTED TO	B90B91	196.	13.50	40.	11.	4.	.46
+ HYDROGRAPH AT	B91	207.	12.83	48.	13.	4.	.59
+ DIVERSION TO	RB91	122.	12.42	7.	2.	1.	.59
+ HYDROGRAPH AT	DB91RE	207.	12.83	43.	11.	4.	.59
+ 2 COMBINED AT	CPB91	324.	13.33	82.	21.	7.	1.04
+ ROUTED TO	B91B92	278.	14.17	80.	21.	7.	1.04
+ HYDROGRAPH AT	B92	2016.	12.25	192.	58.	19.	1.37
+ 3 COMBINED AT	CPB92	2009.	12.25	261.	79.	26.	4.60
+ ROUTED TO	B92B70	2019.	12.25	261.	79.	26.	4.60
+ HYDROGRAPH AT	B70	87.	12.42	13.	4.	1.	.11
+ 3 COMBINED AT	CPB70	2865.	14.42	1736.	601.	207.	71.65
+ ROUTED TO	B70B93	2860.	14.42	1736.	601.	207.	71.65
+ HYDROGRAPH AT	B93	151.	13.00	47.	14.	5.	.42
+ DIVERSION TO	RB93	2.	4.50	1.	0.	0.	.42
+ HYDROGRAPH AT	DB93RE	151.	13.00	47.	14.	5.	.42
+ 2 COMBINED AT	CPB93	2892.	14.42	1748.	611.	211.	72.08
+ ROUTED TO	B93B94	2866.	14.58	1745.	611.	211.	72.08
+ HYDROGRAPH AT	B94	186.	12.83	40.	10.	3.	.51
+ 2 COMBINED AT	CPB94	2874.	14.58	1747.	618.	213.	72.58
+ HYDROGRAPH AT	L63	65.	12.42	8.	2.	1.	.09
+ HYDROGRAPH AT	DL572	26.	13.42	7.	2.	1.	15.40
+ ROUTED TO	L57L63	24.	13.92	7.	2.	1.	15.40
+ HYDROGRAPH AT	DL581	862.	13.67	299.	79.	27.	30.82
+ ROUTED TO	L58L63	856.	13.83	299.	79.	27.	30.82
+ 3 COMBINED AT	CPL63	880.	13.83	310.	83.	28.	30.91
+ DIVERSION TO	DL63S	620.	13.83	136.	34.	11.	30.91
+ HYDROGRAPH AT	DL63SE	260.	13.17	174.	49.	16.	30.91
+ ROUTED TO	L63B95	261.	13.25	174.	49.	16.	30.91
+ HYDROGRAPH AT	B95	70.	12.25	6.	2.	1.	.08
+ HYDROGRAPH AT	DL582	58.	13.67	22.	6.	2.	30.82
+ ROUTED TO	L58B95	57.	14.00	22.	6.	2.	30.82
+ 3 COMBINED AT	CPB95	317.	14.00	200.	56.	19.	30.98
+ ROUTED TO	B95B96	313.	15.42	194.	56.	19.	30.98
+ HYDROGRAPH AT	B96	354.	12.58	68.	19.	6.	.69
DIVERSION TO							

+	RB96	61.	12.08	6.	2.	1.	.69
+ HYDROGRAPH AT	DB96RE	354.	12.58	65.	17.	6.	.69
+ 2 COMBINED AT	CPB96	321.	15.42	226.	70.	24.	31.68
+ ROUTED TO	B96B97	324.	13.08	222.	70.	24.	31.68
+ HYDROGRAPH AT	B97	1003.	12.42	124.	37.	12.	.93
+ 2 COMBINED AT	CPB97	886.	12.42	298.	101.	35.	32.61
+ DIVERSION TO	RB97	886.	12.42	178.	47.	16.	32.61
+ HYDROGRAPH AT	DB97RE	333.	15.75	190.	56.	19.	32.61
+ ROUTED TO	SRB97	179.	18.17	84.	45.	18.	32.61
+ DIVERSION TO	DD97S	16.	16.42	16.	16.	9.	32.61
+ HYDROGRAPH AT	DB97SE	163.	18.17	68.	29.	10.	32.61
+ ROUTED TO	B97B99	135.	20.42	65.	28.	10.	32.61
+ HYDROGRAPH AT	L60	259.	13.00	63.	16.	5.	1.00
+ HYDROGRAPH AT	DL552	10.	12.83	2.	0.	0.	.50
+ ROUTED TO	L55L60	6.	15.33	2.	0.	0.	.50
+ HYDROGRAPH AT	DL561	113.	13.00	13.	3.	1.	6.50
+ ROUTED TO	L56L60	74.	13.92	13.	3.	1.	6.50
+ 3 COMBINED AT	CPL60	259.	13.00	78.	20.	7.	7.50
+ DIVERSION TO	DL601S	124.	13.00	38.	10.	3.	7.50
+ HYDROGRAPH AT	DL601	126.	13.00	37.	9.	3.	7.50
+ DIVERSION TO	DL602S	19.	13.00	7.	2.	1.	7.50
+ HYDROGRAPH AT	DL602	106.	13.00	30.	7.	2.	7.50
+ ROUTED TO	L60L61	95.	13.50	30.	7.	2.	7.50
+ HYDROGRAPH AT	L61	154.	12.83	34.	8.	3.	.51
+ HYDROGRAPH AT	DL562	7.	13.00	1.	0.	0.	6.50
+ ROUTED TO	L56L61	4.	15.42	1.	0.	0.	6.50
+ 3 COMBINED AT	CPL61	192.	13.33	62.	16.	5.	8.01
+ DIVERSION TO	DL61S	125.	13.33	41.	10.	3.	8.01
+ HYDROGRAPH AT	DL61SE	67.	13.33	22.	6.	2.	8.01
+ ROUTED TO	L61L62	62.	13.75	22.	6.	2.	8.01
+ HYDROGRAPH AT	L62	164.	12.83	35.	9.	3.	.49
+ HYDROGRAPH AT	DL571	119.	13.42	21.	5.	2.	15.40
+ ROUTED TO	L57L62	105.	13.83	21.	5.	2.	15.40
+ 3 COMBINED AT	CPL62	207.	13.75	71.	18.	6.	17.41
+ ROUTED TO	L62L68	195.	14.00	71.	18.	6.	17.41
+ HYDROGRAPH AT	L64	96.	12.58	19.	5.	2.	.20
+ HYDROGRAPH AT	DL63SE	620.	13.83	136.	34.	11.	30.91
+ ROUTED TO	L63L64	579.	14.33	136.	34.	11.	30.91
+ 2 COMBINED AT	CPL64	582.	14.33	151.	39.	13.	31.10
+ ROUTED TO	L64L67	539.	14.92	150.	39.	13.	31.10
HYDROGRAPH AT							

+	L67	48.	12.75	11.	3.	1.	.10
+ 2 COMBINED AT	CPL67	541.	14.92	158.	41.	14.	31.21
+ ROUTED TO	L67L68	538.	15.00	158.	41.	14.	31.21
+ HYDROGRAPH AT	DL602	19.	13.00	7.	2.	1.	7.50
+ ROUTED TO	L60L68	15.	16.00	6.	2.	1.	7.50
+ HYDROGRAPH AT	DL61SE	125.	13.33	41.	10.	3.	8.01
+ ROUTED TO	L61L68	118.	13.58	40.	10.	3.	8.01
+ HYDROGRAPH AT	L68	640.	12.50	108.	32.	11.	1.00
+ 5 COMBINED AT	CPL68	663.	14.92	346.	95.	32.	34.21
+ ROUTED TO	L68L72	659.	15.00	346.	95.	32.	34.21
+ HYDROGRAPH AT	L72	375.	12.17	46.	16.	5.	.19
+ DIVERSION TO	RL72	10.	9.00	7.	2.	1.	.19
+ HYDROGRAPH AT	DL72RE	375.	12.17	46.	14.	5.	.19
+ 2 COMBINED AT	CPL72	668.	15.00	382.	107.	36.	34.41
+ DIVERSION TO	DL72S	171.	15.00	107.	32.	11.	34.41
+ HYDROGRAPH AT	DL72SE	497.	15.00	276.	75.	25.	34.41
+ ROUTED TO	L72B99	469.	15.50	275.	75.	25.	34.41
+ HYDROGRAPH AT	B99	118.	12.42	16.	5.	2.	.16
+ 3 COMBINED AT	CPB99	481.	13.00	285.	102.	36.	36.26
+ ROUTED TO	B99S11	478.	13.00	284.	102.	36.	36.26
+ HYDROGRAPH AT	S11	52.	12.42	8.	3.	1.	.06
+ 2 COMBINED AT	CPS11	493.	13.00	291.	104.	36.	36.33
+ ROUTED TO	SRS11	463.	13.25	262.	96.	33.	36.33
+ ROUTED TO	S11S14	541.	13.33	260.	95.	33.	36.33
+ HYDROGRAPH AT	S12	344.	12.08	27.	8.	3.	.20
+ HYDROGRAPH AT	DL72SE	171.	15.00	107.	32.	11.	34.41
+ ROUTED TO	L72S12	170.	15.08	107.	32.	11.	34.41
+ 2 COMBINED AT	CPS12	414.	12.17	129.	39.	13.	34.61
+ ROUTED TO	SRS12	404.	12.17	128.	37.	12.	34.61
+ ROUTED TO	S12S13	348.	12.33	128.	37.	12.	34.61
+ HYDROGRAPH AT	S13	406.	12.25	35.	10.	3.	.31
+ DIVERSION TO	RS13	87.	11.92	6.	2.	1.	.31
+ HYDROGRAPH AT	DS13RE	406.	12.25	31.	8.	3.	.31
+ 2 COMBINED AT	CPS13	680.	12.25	153.	44.	15.	34.92
+ DIVERSION TO	DS13S	427.	12.25	25.	6.	2.	34.92
+ HYDROGRAPH AT	DS13SE	253.	12.25	128.	38.	13.	34.92
+ ROUTED TO	S13S14	248.	12.42	128.	37.	13.	34.92
+ HYDROGRAPH AT	S14	340.	12.42	43.	13.	4.	.36
+ DIVERSION TO	RS14	340.	12.42	38.	10.	3.	.36
+ HYDROGRAPH AT	DS14RE	78.	12.92	9.	3.	1.	.36
3 COMBINED AT							

+	CPS14	698.	13.33	378.	132.	45.	37.20
+ ROUTED TO	S14S16	596.	16.00	375.	132.	45.	37.20
+ HYDROGRAPH AT	B98	425.	12.17	39.	12.	4.	.27
+ DIVERSION TO	RB98	425.	12.17	39.	12.	4.	.27
+ HYDROGRAPH AT	DB98RE	0.	.00	0.	0.	0.	.27
+ ROUTED TO	B98100	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	B100	141.	12.25	14.	4.	1.	.12
+ HYDROGRAPH AT	DB97SE	16.	16.42	16.	16.	9.	32.61
+ 3 COMBINED AT	CPB100	141.	12.25	20.	17.	10.	32.99
+ ROUTED TO	B100S	88.	12.50	17.	16.	10.	32.99
+ HYDROGRAPH AT	S15	691.	12.25	64.	19.	6.	.48
+ DIVERSION TO	RS15	691.	12.25	47.	13.	4.	.48
+ HYDROGRAPH AT	DS15RE	345.	12.42	23.	7.	2.	.48
+ 2 COMBINED AT	CPS15	249.	12.50	30.	21.	11.	33.48
+ ROUTED TO	S15S16	130.	13.00	28.	20.	11.	33.48
+ HYDROGRAPH AT	S16	595.	12.58	91.	27.	9.	.68
+ DIVERSION TO	RS16	595.	12.58	91.	27.	9.	.68
+ HYDROGRAPH AT	DS16RE	1.	21.75	0.	0.	0.	.68
+ 3 COMBINED AT	CPS16	633.	13.67	400.	151.	56.	38.75
+ ROUTED TO	S16S18	610.	13.92	397.	150.	56.	38.75
+ HYDROGRAPH AT	S17	115.	12.75	24.	6.	2.	.26
+ ROUTED TO	S17S18	108.	13.08	24.	6.	2.	.26
+ HYDROGRAPH AT	S18	708.	12.50	92.	26.	9.	.74
+ DIVERSION TO	RS18	708.	12.50	92.	26.	9.	.74
+ HYDROGRAPH AT	DS18RE	0.	.00	0.	0.	0.	.74
+ 3 COMBINED AT	CPS18	645.	13.92	413.	154.	58.	39.75
+ ROUTED TO	S18S21	626.	14.08	412.	154.	58.	39.75
+ HYDROGRAPH AT	S19	423.	12.83	74.	20.	7.	.81
+ DIVERSION TO	RS19	423.	12.83	74.	20.	7.	.81
+ HYDROGRAPH AT	DS19RE	0.	.00	0.	0.	0.	.81
+ HYDROGRAPH AT	DS13SE	427.	12.25	25.	6.	2.	34.92
+ ROUTED TO	S13S19	206.	13.00	25.	6.	2.	34.92
+ 2 COMBINED AT	CPS19	205.	13.00	25.	6.	2.	35.72
+ ROUTED TO	S19S20	165.	13.25	25.	6.	2.	35.72
+ HYDROGRAPH AT	S20	462.	12.67	73.	21.	7.	.61
+ DIVERSION TO	RS20	462.	12.67	45.	12.	4.	.61
+ HYDROGRAPH AT	DS20RE	344.	12.83	33.	9.	3.	.61
+ 2 COMBINED AT	CPS20	299.	13.00	47.	13.	4.	36.33
+ ROUTED TO	S20S21	228.	13.92	45.	13.	4.	36.33
+ HYDROGRAPH AT	S21	52.	12.83	12.	3.	1.	.16
3 COMBINED AT							

+		CPS21	828.	14.00	458.	167.	62.	41.32
+	DIVERSION TO	DS21S	414.	14.00	229.	84.	31.	41.32
+	HYDROGRAPH AT	DS21SE	414.	14.00	229.	84.	31.	41.32
+	ROUTED TO	S21S23	380.	14.75	226.	83.	31.	41.32
+	HYDROGRAPH AT	B101	76.	12.25	8.	2.	1.	.08
+	ROUTED TO	SRB101	50.	12.50	8.	2.	1.	.08
+	ROUTED TO	B101S	42.	12.92	8.	2.	1.	.08
+	HYDROGRAPH AT	S06	532.	12.25	48.	14.	5.	.39
+	DIVERSION TO	RS06	532.	12.25	48.	14.	5.	.39
+	HYDROGRAPH AT	DS06RE	0.	.00	0.	0.	0.	.39
+	2 COMBINED AT	CPS06	42.	12.92	8.	2.	1.	.47
+	ROUTED TO	S06S07	33.	13.67	8.	2.	1.	.47
+	HYDROGRAPH AT	S07	531.	12.33	61.	19.	6.	.42
+	DIVERSION TO	RS07	531.	12.33	61.	19.	6.	.42
+	HYDROGRAPH AT	DS07RE	1.	21.58	0.	0.	0.	.42
+	2 COMBINED AT	CPS07	33.	13.67	8.	2.	1.	.89
+	ROUTED TO	S07S08	29.	14.25	8.	2.	1.	.89
+	HYDROGRAPH AT	S08	372.	12.25	38.	12.	4.	.27
+	DIVERSION TO	RS08	372.	12.25	38.	12.	4.	.27
+	HYDROGRAPH AT	DS08RE	0.	.00	0.	0.	0.	.27
+	2 COMBINED AT	CPS08	29.	14.25	8.	2.	1.	1.16
+	ROUTED TO	S08S09	27.	14.58	8.	2.	1.	1.16
+	HYDROGRAPH AT	S09	515.	12.25	47.	14.	5.	.37
+	DIVERSION TO	RS09	515.	12.25	42.	11.	4.	.37
+	HYDROGRAPH AT	DS09RE	84.	12.58	9.	3.	1.	.37
+	2 COMBINED AT	CPS09	84.	12.58	16.	5.	2.	1.53
+	ROUTED TO	SRS09	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS091W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS092W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S23	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S22	304.	12.33	28.	7.	2.	.27
+	DIVERSION TO	RS22	304.	12.33	23.	6.	2.	.27
+	HYDROGRAPH AT	DS22RE	114.	12.58	5.	1.	0.	.27
+	ROUTED TO	S22S23	27.	13.83	5.	1.	0.	.27
+	HYDROGRAPH AT	S23	590.	12.50	89.	23.	8.	1.03
+	DIVERSION TO	RS23	590.	12.50	89.	23.	8.	1.03
+	HYDROGRAPH AT	DS23RE	0.	.00	0.	0.	0.	1.03
+	4 COMBINED AT	CPS23	380.	14.75	225.	83.	31.	44.14
	ROUTED TO							

+	SRS23	375.	14.75	224.	83.	31.	44.14
+ ROUTED TO	S23S24	362.	15.25	221.	82.	31.	44.14
+ HYDROGRAPH AT	S03	607.	12.58	104.	32.	11.	.72
+ DIVERSION TO	RS03	607.	12.58	102.	28.	9.	.72
+ HYDROGRAPH AT	DS03RE	22.	14.50	11.	4.	1.	.72
+ HYDROGRAPH AT	DS021	95.	13.08	10.	3.	1.	.87
+ ROUTED TO	S02S03	68.	13.50	10.	3.	1.	.87
+ 2 COMBINED AT	CPS03	68.	13.50	20.	7.	2.	1.59
+ ROUTED TO	S03S04	42.	14.83	18.	7.	2.	1.59
+ HYDROGRAPH AT	S04	435.	12.58	81.	24.	8.	.70
+ DIVERSION TO	RS04	435.	12.58	50.	13.	4.	.70
+ HYDROGRAPH AT	DS04RE	342.	12.83	37.	10.	3.	.70
+ 2 COMBINED AT	CPS04	341.	12.83	51.	17.	6.	2.30
+ ROUTED TO	SRS04	168.	13.17	51.	17.	6.	2.30
+ ROUTED TO	S04S10	138.	14.25	47.	17.	6.	2.30
+ HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S10	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	S05	83.	12.83	19.	5.	2.	.21
+ ROUTED TO	S05S10	64.	14.33	18.	5.	2.	.21
+ HYDROGRAPH AT	S10	184.	13.00	53.	14.	5.	.62
+ 4 COMBINED AT	CPS10	262.	14.25	110.	35.	12.	4.65
+ ROUTED TO	S10S24	236.	14.83	109.	35.	12.	4.65
+ HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+ ROUTED TO	S09S24	0.	.00	0.	0.	0.	1.53
+ HYDROGRAPH AT	S24	185.	12.67	35.	9.	3.	.42
+ 4 COMBINED AT	CPS24	503.	15.25	281.	110.	41.	47.68
+ ROUTED TO	S24S25	464.	16.17	280.	109.	41.	47.68
+ HYDROGRAPH AT	S25	203.	13.00	56.	14.	5.	.59
+ 2 COMBINED AT	CPS25	463.	16.17	287.	119.	44.	48.27
+ HYDROGRAPH AT	S81	82.	12.50	13.	3.	1.	.13
+ HYDROGRAPH AT	S82	90.	12.92	23.	6.	2.	.20
+ ROUTED TO	S82S83	65.	15.42	21.	6.	2.	.20
+ HYDROGRAPH AT	S83	84.	13.08	26.	8.	3.	.22
+ 2 COMBINED AT	CPS83	84.	13.08	44.	13.	4.	.42
+ HYDROGRAPH AT	S84	189.	12.50	33.	9.	3.	.21
+ 4 COMBINED AT	DUMMY	502.	16.17	324.	139.	51.	49.03
+ 3 COMBINED AT	DUMMY	13365.	12.50	5181.	1835.	650.	247.94
+ HYDROGRAPH AT	W28	870.	12.33	86.	22.	7.	.99
+ DIVERSION TO	RW28	395.	12.08	14.	4.	1.	.99
+ HYDROGRAPH AT	DW28RE	870.	12.33	73.	18.	6.	.99
ROUTED TO							

+		W28W29	535.	13.00	72.	18.	6.	.99
+	HYDROGRAPH AT	W29	552.	12.33	51.	13.	4.	.64
+	DIVERSION TO	RW29	522.	12.25	22.	5.	2.	.64
+	HYDROGRAPH AT	DW29RE	489.	12.42	30.	8.	3.	.64
+	2 COMBINED AT	CPW29	578.	13.00	102.	26.	9.	1.63
+	ROUTED TO	W29W30	558.	13.08	102.	26.	9.	1.63
+	HYDROGRAPH AT	W30	340.	12.25	25.	7.	2.	.27
+	2 COMBINED AT	CPW30	560.	13.08	126.	32.	11.	1.90
+	ROUTED TO	W30L59	533.	13.17	126.	32.	11.	1.90
+	HYDROGRAPH AT	L59	492.	12.33	48.	13.	4.	.50
+	DIVERSION TO	RL59	492.	12.33	48.	13.	4.	.50
+	HYDROGRAPH AT	DL59RE	0.	.00	0.	0.	0.	.50
+	HYDROGRAPH AT	DL551	7.	12.83	0.	0.	0.	.50
+	ROUTED TO	L55L59	2.	13.92	0.	0.	0.	.50
+	3 COMBINED AT	CPL59	533.	13.17	127.	32.	11.	2.90
+	ROUTED TO	L59L65	485.	13.42	126.	32.	11.	2.90
+	HYDROGRAPH AT	W31	284.	12.25	22.	6.	2.	.23
+	ROUTED TO	W31W32	191.	12.50	22.	6.	2.	.23
+	HYDROGRAPH AT	W32	390.	12.50	60.	17.	6.	.61
+	HYDROGRAPH AT	OW37	167.	12.75	7.	2.	1.	.10
+	3 COMBINED AT	CPW32	626.	12.58	88.	24.	8.	.85
+	DIVERSION TO	DW32S	626.	12.58	88.	24.	8.	.85
+	HYDROGRAPH AT	DW32SE	0.	.00	0.	0.	0.	.85
+	ROUTED TO	W32L65	0.	.00	0.	0.	0.	.85
+	HYDROGRAPH AT	L65	224.	12.67	43.	12.	4.	.55
+	3 COMBINED AT	CPL65	564.	13.33	168.	43.	15.	4.29
+	ROUTED TO	L65S34	559.	13.42	167.	43.	15.	4.29
+	HYDROGRAPH AT	DW32SE	626.	12.58	88.	24.	8.	.85
+	ROUTED TO	W32S34	588.	12.83	88.	24.	8.	.85
+	HYDROGRAPH AT	S34	632.	12.67	94.	26.	9.	.91
+	3 COMBINED AT	CPS34	1557.	12.75	346.	93.	31.	5.19
+	DIVERSION TO	DS34S	844.	12.75	183.	49.	16.	5.19
+	HYDROGRAPH AT	DS34SE	714.	12.75	163.	44.	15.	5.19
+	ROUTED TO	S34S44	675.	12.92	163.	44.	15.	5.19
+	HYDROGRAPH AT	L66	276.	13.00	77.	20.	7.	1.00
+	HYDROGRAPH AT	DL601	124.	13.00	38.	10.	3.	7.50
+	ROUTED TO	L60L66	111.	13.75	38.	10.	3.	7.50
+	2 COMBINED AT	CPL66	312.	13.50	110.	29.	10.	8.50
+	ROUTED TO	L66L71	308.	13.58	110.	29.	10.	8.50
+	HYDROGRAPH AT	L71	206.	12.08	19.	6.	2.	.11
	DIVERSION TO							

+		RL71	3.	8.83	2.	1.	0.	.11
+	HYDROGRAPH AT	DL71RE	206.	12.08	19.	5.	2.	.11
+	2 COMBINED AT	CPL71	314.	13.58	127.	34.	11.	8.61
+	ROUTED TO	L71S35	293.	14.17	126.	34.	11.	8.61
+	HYDROGRAPH AT	L69	124.	12.08	11.	4.	1.	.06
+	ROUTED TO	SRL69	60.	12.25	11.	4.	1.	.06
+	ROUTED TO	L69S35	41.	13.17	11.	4.	1.	.06
+	HYDROGRAPH AT	L70	104.	12.08	9.	3.	1.	.05
+	ROUTED TO	SRL70	67.	12.17	9.	3.	1.	.05
+	ROUTED TO	L70S35	42.	12.92	9.	3.	1.	.05
+	HYDROGRAPH AT	S35	494.	12.50	70.	19.	6.	.74
+	4 COMBINED AT	CPS35	509.	12.50	208.	58.	20.	9.45
+	ROUTED TO	S35S44	453.	13.00	206.	58.	20.	9.45
+	HYDROGRAPH AT	S44	104.	12.25	8.	2.	1.	.08
+	3 COMBINED AT	CPS44	1047.	13.00	354.	99.	33.	14.23
+	ROUTED TO	SRS44	476.	14.33	285.	79.	26.	14.23
+	ROUTED TO	S44S45	473.	15.33	282.	79.	26.	14.23
+	HYDROGRAPH AT	DS34SE	844.	12.75	183.	49.	16.	5.19
+	ROUTED TO	S34S45	790.	13.00	183.	49.	16.	5.19
+	HYDROGRAPH AT	S45	511.	12.33	45.	12.	4.	.49
+	DIVERSION TO	RS45	511.	12.33	45.	12.	4.	.49
+	HYDROGRAPH AT	DS45RE	0.	.00	0.	0.	0.	.49
+	3 COMBINED AT	CPS45	790.	13.00	464.	134.	45.	14.72
+	ROUTED TO	S45S46	704.	13.17	422.	123.	41.	14.72
+	HYDROGRAPH AT	S46	1179.	12.25	95.	25.	8.	.90
+	DIVERSION TO	RS46	1179.	12.25	95.	25.	8.	.90
+	HYDROGRAPH AT	DS46RE	0.	.00	0.	0.	0.	.90
+	2 COMBINED AT	CPS46	704.	13.17	422.	123.	41.	15.62
+	ROUTED TO	SRS46	643.	13.33	417.	121.	40.	15.62
+	ROUTED TO	S46S47	635.	13.92	411.	121.	40.	15.62
+	HYDROGRAPH AT	S47	169.	12.75	35.	9.	3.	.48
+	2 COMBINED AT	CPS47	662.	13.92	414.	128.	43.	16.10
+	ROUTED TO	S47S48	713.	14.17	413.	128.	43.	16.10
+	HYDROGRAPH AT	S48	242.	12.42	35.	10.	3.	.36
+	2 COMBINED AT	CPS48	720.	14.17	415.	136.	46.	16.46
+	DIVERSION TO	DS48S	2.	14.17	1.	0.	0.	16.46
+	HYDROGRAPH AT	DS48S	717.	14.17	414.	136.	46.	16.46
+	ROUTED TO	S48S50	567.	14.75	410.	136.	46.	16.46
+	HYDROGRAPH AT	S49	128.	12.83	28.	7.	2.	.38
+	ROUTED TO	S49S50	117.	13.33	27.	7.	2.	.38
	HYDROGRAPH AT							

+	S50	127.	12.75	25.	6.	2.	.31
+ 3 COMBINED AT	CPS50	591.	14.75	433.	147.	50.	17.14
+ ROUTED TO	SRS50	541.	16.75	417.	147.	50.	17.14
+ ROUTED TO	S50S51	541.	16.75	417.	147.	50.	17.14
+ HYDROGRAPH AT	S36	209.	12.50	32.	9.	3.	.29
+ DIVERSION TO	RS36	209.	12.50	32.	9.	3.	.29
+ HYDROGRAPH AT	DS36RE	0.	.00	0.	0.	0.	.29
+ ROUTED TO	SRS36	0.	.00	0.	0.	0.	.29
+ ROUTED TO	S36S37	0.	.00	0.	0.	0.	.29
+ HYDROGRAPH AT	S37	473.	12.67	88.	23.	8.	1.03
+ 2 COMBINED AT	CPS37	472.	12.67	88.	23.	8.	1.32
+ ROUTED TO	S37S38	411.	13.25	88.	23.	8.	1.32
+ HYDROGRAPH AT	S38	319.	12.75	63.	16.	5.	.78
+ 2 COMBINED AT	CPS38	624.	13.17	150.	39.	13.	2.10
+ ROUTED TO	S38S39	565.	13.67	149.	39.	13.	2.10
+ HYDROGRAPH AT	S39	199.	12.92	44.	11.	4.	.60
+ 2 COMBINED AT	CPS39	661.	13.58	193.	50.	17.	2.70
+ ROUTED TO	S39S43	607.	14.25	190.	50.	17.	2.70
+ HYDROGRAPH AT	S40	217.	12.67	39.	10.	3.	.51
+ ROUTED TO	S40S41	187.	13.33	39.	10.	3.	.51
+ HYDROGRAPH AT	S41	311.	12.92	75.	19.	6.	1.00
+ 2 COMBINED AT	CPS41	447.	13.25	113.	28.	9.	1.51
+ ROUTED TO	S41S42	413.	13.75	113.	28.	9.	1.51
+ HYDROGRAPH AT	S42	182.	12.75	38.	10.	3.	.51
+ 2 COMBINED AT	CPS42	469.	13.67	149.	38.	13.	2.02
+ ROUTED TO	S42S43	450.	14.00	148.	38.	13.	2.02
+ HYDROGRAPH AT	S43	140.	12.75	28.	7.	2.	.35
+ 3 COMBINED AT	CPS43	1048.	14.17	360.	95.	32.	5.07
+ ROUTED TO	SRS43	917.	14.50	284.	95.	32.	5.07
+ ROUTED TO	S43S51	825.	15.17	283.	95.	32.	5.07
+ HYDROGRAPH AT	S28	237.	12.08	12.	3.	1.	.14
+ DIVERSION TO	RS28	237.	12.08	12.	3.	1.	.14
+ HYDROGRAPH AT	DS28RE	0.	.00	0.	0.	0.	.14
+ ROUTED TO	S28S29	0.	.00	0.	0.	0.	.14
+ HYDROGRAPH AT	S29	303.	12.67	56.	15.	5.	.62
+ 2 COMBINED AT	CPS29	303.	12.67	56.	15.	5.	.76
+ ROUTED TO	S29S30	279.	12.92	56.	15.	5.	.76
+ HYDROGRAPH AT	S30	167.	12.83	36.	9.	3.	.47
+ 2 COMBINED AT	CPS30	439.	12.83	91.	24.	8.	1.22
+ ROUTED TO	S30S32	421.	13.08	91.	24.	8.	1.22
HYDROGRAPH AT							

+	S31	169.	12.75	33.	8.	3.	.44
+ ROUTED TO	S31S32	154.	13.00	33.	8.	3.	.44
+ HYDROGRAPH AT	S32	67.	12.67	13.	3.	1.	.15
+ 3 COMBINED AT	CPS32	623.	13.08	137.	35.	12.	1.81
+ HYDROGRAPH AT	S26	191.	12.75	42.	12.	4.	.43
+ DIVERSION TO	RS26	178.	12.58	16.	4.	1.	.43
+ HYDROGRAPH AT	DS26RE	191.	12.75	29.	8.	3.	.43
+ HYDROGRAPH AT	DS21SE	414.	14.00	229.	84.	31.	41.32
+ ROUTED TO	S21S26	400.	14.33	227.	83.	31.	41.32
+ 2 COMBINED AT	CPS26	415.	14.33	241.	89.	33.	41.75
+ DIVERSION TO	DS26S	67.	14.33	19.	5.	2.	41.75
+ HYDROGRAPH AT	DS26SE	348.	14.33	222.	84.	31.	41.75
+ ROUTED TO	S26S27	338.	14.50	220.	84.	31.	41.75
+ HYDROGRAPH AT	S27	57.	12.50	8.	2.	1.	.11
+ 2 COMBINED AT	CPS27	339.	14.50	221.	85.	32.	41.86
+ 2 COMBINED AT	CP3227	623.	13.17	332.	117.	43.	43.67
+ ROUTED TO	SR3227	180.	18.08	170.	113.	41.	43.67
+ ROUTED TO	S32S33	180.	19.33	170.	112.	41.	43.67
+ HYDROGRAPH AT	S33	121.	13.25	42.	11.	4.	.42
+ HYDROGRAPH AT	DS26SE	67.	14.33	19.	5.	2.	41.75
+ ROUTED TO	S26S33	31.	17.67	17.	5.	2.	41.75
+ 3 COMBINED AT	CPS33	201.	17.92	187.	124.	46.	44.09
+ ROUTED TO	S33S51	200.	19.17	187.	124.	46.	44.09
+ HYDROGRAPH AT	S51	76.	12.67	15.	4.	1.	.12
+ 4 COMBINED AT	CPS51	1087.	15.50	718.	322.	113.	58.92
+ ROUTED TO	SRS51	924.	16.50	662.	282.	99.	58.92
+ ROUTED TO	S51S54	921.	16.83	654.	281.	99.	58.92
+ HYDROGRAPH AT	S52	186.	13.00	51.	13.	4.	.42
+ ROUTED TO	S52S54	180.	13.33	51.	13.	4.	.42
+ HYDROGRAPH AT	S54	338.	12.42	44.	11.	4.	.42
+ 3 COMBINED AT	CPS54	921.	16.83	654.	295.	105.	59.76
+ ROUTED TO	S54S55	915.	17.42	643.	294.	105.	59.76
+ HYDROGRAPH AT	S53	211.	12.92	50.	12.	4.	.40
+ ROUTED TO	S53S55	182.	13.92	49.	12.	4.	.40
+ HYDROGRAPH AT	S55	348.	13.00	95.	24.	8.	.75
+ 3 COMBINED AT	CPS55	921.	17.42	645.	320.	114.	60.92
+ ROUTED TO	S55S74	891.	18.92	624.	317.	114.	60.92
+ HYDROGRAPH AT	W59	248.	12.17	17.	5.	2.	.17
+ ROUTED TO	W59W60	173.	12.25	17.	5.	2.	.17
+ HYDROGRAPH AT	W61	562.	12.17	34.	9.	3.	.39
DIVERSION TO							

+		DW61S	189.	12.17	19.	5.	2.	.39
+	HYDROGRAPH AT	DW61SE	373.	12.17	15.	4.	1.	.39
+	HYDROGRAPH AT	W60	242.	12.17	15.	4.	1.	.16
+	3 COMBINED AT	CPW60	768.	12.17	46.	12.	4.	.72
+	ROUTED TO	SRW60	110.	12.50	46.	12.	4.	.72
+	ROUTED TO	W60S61	108.	12.92	46.	12.	4.	.72
+	HYDROGRAPH AT	S61	363.	12.08	26.	8.	3.	.23
+	2 COMBINED AT	CPS61	365.	12.08	71.	20.	7.	.95
+	ROUTED TO	S61S62	324.	12.25	71.	20.	7.	.95
+	HYDROGRAPH AT	S62	191.	12.17	11.	3.	1.	.13
+	2 COMBINED AT	CPS62	490.	12.17	82.	23.	8.	1.08
+	ROUTED TO	S62S64	362.	12.42	82.	23.	8.	1.08
+	HYDROGRAPH AT	S63	741.	12.17	72.	22.	7.	.60
+	ROUTED TO	S63S64	661.	12.25	72.	22.	7.	.60
+	HYDROGRAPH AT	S64	496.	12.25	37.	9.	3.	.47
+	3 COMBINED AT	CPS64	1398.	12.33	188.	53.	18.	2.16
+	ROUTED TO	S64S67	1101.	12.58	188.	53.	18.	2.16
+	HYDROGRAPH AT	S67	225.	12.17	14.	4.	1.	.16
+	2 COMBINED AT	CPS67	1114.	12.58	201.	57.	19.	2.32
+	ROUTED TO	SRS67	1106.	12.58	193.	52.	17.	2.32
+	ROUTED TO	S67S68	847.	13.08	188.	51.	17.	2.32
+	HYDROGRAPH AT	S68	242.	12.42	34.	10.	3.	.34
+	2 COMBINED AT	CPS68	896.	13.08	216.	61.	20.	2.65
+	ROUTED TO	S68S69	772.	13.58	213.	61.	20.	2.65
+	HYDROGRAPH AT	S69	201.	12.58	38.	11.	4.	.47
+	2 COMBINED AT	CPS69	812.	13.58	245.	71.	24.	3.12
+	ROUTED TO	S69S70	735.	14.00	242.	71.	24.	3.12
+	HYDROGRAPH AT	S70	221.	12.92	53.	13.	4.	.75
+	2 COMBINED AT	CPS70	808.	13.92	288.	84.	28.	3.87
+	ROUTED TO	S70S71	733.	14.50	287.	84.	28.	3.87
+	HYDROGRAPH AT	S71	61.	12.67	12.	3.	1.	.13
+	2 COMBINED AT	CPS71	734.	14.50	295.	87.	29.	4.00
+	ROUTED TO	SRS71	701.	14.75	295.	87.	29.	4.00
+	DIVERSION TO	DS71W	0.	.00	0.	0.	0.	4.00
+	HYDROGRAPH AT	DS71SW	701.	14.75	295.	87.	29.	4.00
+	ROUTED TO	S71S74	611.	15.08	284.	87.	29.	4.00
+	HYDROGRAPH AT	S56	279.	12.58	47.	13.	4.	.61
+	ROUTED TO	S56S57	233.	13.17	47.	12.	4.	.61
+	HYDROGRAPH AT	S57	373.	12.58	59.	15.	5.	.77
+	2 COMBINED AT	CPS57	399.	12.92	105.	28.	9.	1.37
	ROUTED TO							

+		S57S58	385.	13.25	105.	28.	9.	1.37
+	HYDROGRAPH AT	DS48S	2.	14.17	1.	0.	0.	16.46
+	ROUTED TO	S48S58	2.	17.17	1.	0.	0.	16.46
+	HYDROGRAPH AT	S58	81.	12.67	14.	4.	1.	.20
+	3 COMBINED AT	CPS58	385.	13.08	110.	29.	10.	18.04
+	ROUTED TO	SRS58	384.	13.17	109.	29.	10.	18.04
+	ROUTED TO	S58S59	365.	13.67	109.	29.	10.	18.04
+	HYDROGRAPH AT	S59	144.	12.33	14.	4.	1.	.17
+	2 COMBINED AT	CPS59	367.	13.67	120.	32.	11.	18.20
+	ROUTED TO	SRS59	301.	14.17	88.	25.	8.	18.20
+	ROUTED TO	S59S74	253.	15.50	83.	25.	8.	18.20
+	HYDROGRAPH AT	S72	208.	13.00	56.	14.	5.	.40
+	ROUTED TO	S72S73	192.	13.67	55.	14.	5.	.40
+	HYDROGRAPH AT	S73	201.	12.67	40.	10.	3.	.28
+	2 COMBINED AT	CPS73	246.	13.50	95.	24.	8.	.68
+	ROUTED TO	S73S74	227.	14.58	92.	24.	8.	.68
+	HYDROGRAPH AT	S74	536.	13.33	187.	47.	16.	1.61
+	5 COMBINED AT	CPS74	1171.	15.00	792.	451.	162.	68.95
+	DIVERSION TO	DS741W	518.	15.00	348.	197.	71.	68.95
+	HYDROGRAPH AT	DS741	654.	15.00	444.	255.	92.	68.95
+	DIVERSION TO	DS742W	42.	15.00	32.	22.	8.	68.95
+	HYDROGRAPH AT	DS742	612.	15.00	412.	233.	84.	68.95
+	ROUTED TO	S74S79	598.	16.08	410.	232.	84.	68.95
+	HYDROGRAPH AT	DW61SE	189.	12.17	19.	5.	2.	.39
+	ROUTED TO	W61S65	104.	13.08	19.	5.	2.	.39
+	HYDROGRAPH AT	S65	772.	12.33	85.	23.	8.	.88
+	2 COMBINED AT	CPS65	773.	12.33	104.	29.	10.	1.27
+	ROUTED TO	S65S66	567.	12.83	104.	29.	10.	1.27
+	HYDROGRAPH AT	S66	835.	12.25	85.	25.	8.	.65
+	DIVERSION TO	RS66	835.	12.25	85.	25.	8.	.65
+	HYDROGRAPH AT	DS66RE	0.	.00	0.	0.	0.	.65
+	2 COMBINED AT	CPS66	567.	12.83	104.	29.	10.	1.92
+	ROUTED TO	SRS66	294.	13.33	56.	15.	5.	1.92
+	ROUTED TO	S66S75	253.	13.67	56.	15.	5.	1.92
+	HYDROGRAPH AT	S75	114.	12.75	23.	6.	2.	.34
+	2 COMBINED AT	CPS75	286.	13.67	76.	21.	7.	2.26
+	ROUTED TO	S75S76	238.	14.33	75.	21.	7.	2.26
+	HYDROGRAPH AT	S76	261.	13.00	64.	16.	5.	1.01
+	2 COMBINED AT	CPS76	303.	13.33	136.	37.	12.	3.27
+	ROUTED TO	S76S77	289.	13.50	134.	37.	12.	3.27
	HYDROGRAPH AT							

+	S77	379.	12.83	93.	27.	9.	.91
+ 2 COMBINED AT	CPS77	567.	13.08	223.	63.	21.	4.18
+ ROUTED TO	SRS77	567.	13.08	223.	63.	21.	4.18
+ ROUTED TO	S77S78	543.	13.58	221.	63.	21.	4.18
+ HYDROGRAPH AT	S78	53.	13.00	15.	4.	1.	.18
+ HYDROGRAPH AT	DS71SW	0.	.00	0.	0.	0.	4.00
+ ROUTED TO	S71S78	0.	.00	0.	0.	0.	4.00
+ 3 COMBINED AT	CPS78	563.	13.50	225.	64.	22.	7.97
+ ROUTED TO	SRS78	528.	13.83	190.	53.	18.	7.97
+ ROUTED TO	S78S79	496.	14.33	186.	53.	18.	7.97
+ HYDROGRAPH AT	S79	391.	13.00	109.	27.	9.	.92
+ 3 COMBINED AT	CPS79	747.	15.92	529.	287.	103.	73.83
+ ROUTED TO	S79S80	741.	16.50	525.	286.	103.	73.83
+ HYDROGRAPH AT	S92	341.	13.00	89.	22.	7.	.69
+ HYDROGRAPH AT	DS741	518.	15.00	348.	197.	71.	68.95
+ ROUTED TO	S74S92	513.	15.17	348.	197.	71.	68.95
+ 2 COMBINED AT	CPS92	530.	15.17	356.	213.	77.	69.64
+ ROUTED TO	S92S80	514.	16.25	356.	212.	77.	69.64
+ HYDROGRAPH AT	DS742	42.	15.00	32.	22.	8.	68.95
+ ROUTED TO	S74S80	40.	17.08	32.	21.	8.	68.95
+ HYDROGRAPH AT	S80	156.	12.92	40.	11.	4.	.44
+ 4 COMBINED AT	CPS80	1280.	16.42	903.	520.	190.	74.96
+ HYDROGRAPH AT	S89	149.	12.58	28.	7.	2.	.20
+ HYDROGRAPH AT	S90	79.	12.50	12.	3.	1.	.09
+ ROUTED TO	S90S91	74.	12.67	12.	3.	1.	.09
+ HYDROGRAPH AT	S91	157.	12.67	31.	8.	3.	.22
+ 2 COMBINED AT	CPS91	231.	12.67	43.	11.	4.	.31
+ HYDROGRAPH AT	S88	68.	12.33	9.	2.	1.	.07
+ HYDROGRAPH AT	S87	83.	12.67	16.	4.	1.	.12
+ HYDROGRAPH AT	S86	152.	12.50	24.	6.	2.	.20
+ HYDROGRAPH AT	S85	153.	12.92	39.	10.	3.	.34
+ 5 COMBINED AT	DUMMY	626.	12.58	130.	33.	11.	1.04
+ 4 COMBINED AT	DUMMY	13671.	12.50	5782.	2226.	801.	324.14

*** NORMAL END OF HEC-1 ***

Existing Conditions HEC-1 (MB02)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************                                    ****************************************
 *                                      *                                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
 *             JUN   1998               *                                    *   HYDROLOGIC ENGINEERING CENTER      *
 *           VERSION 4.1                *                                    *         609 SECOND STREET            *
 *                                      *                                    *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE   19AUG09  TIME  09:12:35  *                                    *          (916) 756-1104              *
 *                                      *                                    *                                      *
 ****************************************                                    ****************************************

                                        X     X  XXXXXXX   XXXXX          X
                                        X     X  X        X     X        XX
                                        X     X  X        X              X
                                        XXXXXXX  XXXX     X        XXXXX  X
                                        X     X  X        X              X
                                        X     X  X        X     X        X
                                        X     X  XXXXXXX   XXXXX        XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                                HEC-1 INPUT                                                    PAGE  1

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

        1           ID        Flood Control District of Maricopa County
        2           ID        L303_EX_MB02 - Loop 303/ White Tanks ADMPU AHA
        3           ID        100 YEAR
        4           ID        24 Hour Storm
        5           ID        Unit Hydrograph: S-Graph
        6           ID        08/18/2009
        7           ID            FCDMC CONTRACT 2007C031
        8           ID            BY HDR ENGINEERING (#79902)
        9           ID            EXISTING CONDITIONS-AUGUST 2009
       10           ID            MAJOR BASIN 02
       11           ID            FILE NAME: EX-MB02.DAT
       12           IT       5        0        0    2000
       13           IN      15
       14           IO       3
                    *DIAGRAM
                    *
       15           JD   3.941  0.0001
       16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
       17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
       18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
       19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
       20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
       21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
       22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
       23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
       24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
       25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
       26           JD   3.843     5.0
       27           JD   3.744    10.0
       28           JD   3.646    20.0
       29           JD   3.547    30.0
       30           JD   3.429    60.0
                    *

       31           KK     L21BASIN
       32           KM        Basin Boundary from McMicken Dam on the west and the Beardsley CSR on
       33           KM        the east
       34           BA   0.525
       35           LG    0.34    0.32    4.55    0.37       1
       36           UI       0      20      20      20      21      58      70      88     109     125
       37           UI     140     158     170     180     187     193     193     194     187     179
       38           UI     172     150     140     123     113     101      93      83      76      70
       39           UI      61      56      51      45      40      38      34      31      32      22
       40           UI      21      21      20      14      14      14      13      14      11       5
                    *

       41           KK  DL21REDIVERT
       42           KM        Mass grading and Storage along canal
       43           DT    RL21    57.3     0.0
       44           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
       45           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                    *
1                                                HEC-1 INPUT                                                    PAGE  2

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

       46           KK  L21L22ROUTE
       47           KM        Cross-section: Cross-section determined from A-team survey
       48           KM        Manning's N Value: earth w/sparse trees and brush, ponding against canal
       49           RS       1    FLOW
       50           RC   0.032   0.032   0.032    8793  0.0020    0.00
       51           RX  100.00  101.00  107.00  117.00  169.00  409.00  512.00  513.00
       52           RY  1328.1 1328.00 1326.00 1324.00 1324.10 1326.00 1328.00 1328.10
                    *

       53           KK     L22BASIN
       54           KM        Basin Boundary from McMicken Dam on the west and the Beardsley CSR on
       55           KM        the east
       56           BA   0.362
       57           LG    0.34    0.34    4.35    0.39       0
       58           UI       0      19      19      21      56      79     101     124     144     162
       59           UI     170     183     184     177     172     154     133     117     103      89
       60           UI      78      68      59      52      43      38      36      29      28      20
       61           UI      20      18      13      13      13      12       5       5       4       5
       62           UI       5       4       5       4       5       5       4       0       0       0
                    *

       63           KK  DL22REDIVERT
       64           KM        Storage along canal
       65           DT    RL22    15.6     0.0
       66           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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 67          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

 68          KK   CPL22COMBINE
 69          HC       2   0.887
             *

 70          KK  L22W01ROUTE
 71          KM        Cross-section: Cross-section determined from 1991 topo
 72          KM        Manning's N Value: earth w/ sparse trees and brush
 73          RS       4    FLOW
 74          RC   0.032   0.032   0.032    3159  0.0063    0.00
 75          RX  100.00  101.00  102.00  115.00  128.00  140.00  141.00  142.00
 76          RY  1320.2 1320.10 1320.00 1314.00 1314.10 1320.00 1320.10 1320.20
             *

 77          KK     W01BASIN
 78          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 79          BA   0.191
 80          LG    0.34    0.34    3.95    0.40       0
 81          UI       0      38     144     258     304     262     170     110      71      44
 82          UI      29      21       8       7       8       0       0       0       0       0
 83          UI       0       0       0       0       0       0       0       0       0       0
 84          UI       0       0       0       0       0       0       0       0       0       0
 85          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 86          KK   CPW01COMBINE
 87          HC       2   1.078
             *

 88          KK  W01W02ROUTE
 89          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
 90          KM        width based on aerial
 91          KM        Manning's N Value: natural desert wash w/ vegetation
 92          RS       1    FLOW
 93          RC   0.035   0.035   0.035    2650  0.0053    0.00
 94          RX  100.00  111.00  122.00  139.00  162.00  182.00  191.00  200.00
 95          RY  1290.5 1290.25 1290.00 1286.00 1286.10 1290.00 1290.25 1290.50
             *

 96          KK     W02BASIN
 97          KM        Basin Boundary from 1990 Topo, all flow to south
 98          KM        McMicken Dam on the west and the Beardsley CSR on the East
 99          BA   0.394
100          LG    0.35    0.35    4.65    0.32       0
101          UI       0      56     195     370     497     530     435     300     209     145
102          UI      99      70      46      38      14      13      14      13       0       0
103          UI       0       0       0       0       0       0       0       0       0       0
104          UI       0       0       0       0       0       0       0       0       0       0
105          UI       0       0       0       0       0       0       0       0       0       0
             *

106          KK   CPW02COMBINE
107          HC       2   1.472
             *

108          KK  W02W05ROUTE
109          KM        Cross-section: Natural Desert Wash w/ vegetation
110          RS       1    FLOW
111          RC   0.035   0.035   0.035    2214  0.0045    0.00
112          RX  100.00  106.00  112.00  119.00  135.00  137.00  138.00  141.00
113          RY  1280.0 1278.00 1277.00 1276.00 1275.90 1277.00 1278.00 1280.00
             *

114          KK     W03BASIN
115          KM        BASIN BOUNDARY FROM 1990 TOPO
116          BA   1.971
117          LG    0.35    0.35    4.00    0.47      20
118          UI       0     145     146     415     653     907    1064    1233    1685    1257
119          UI     947     849     756     672     606     522     442     374     341     315
120          UI     263     217     186     167     159     119     113     107      71      72
121          UI      70      71      37      27      28      28      28      28      28      28
122          UI      27      29      27       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  4

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

123          KK  W03W04ROUTE
124          KM        Cross-section: Side slopes and width based on aerial and topo
125          KM        Manning's N Value: natural desert wash w/ vegetation
126          RS       3    FLOW
127          RC   0.035   0.035   0.035   18417  0.0490    0.00
128          RX  100.00  140.00  180.00  210.00  235.00  305.00  345.00  385.00
129          RY  1511.0 1510.50 1510.00 1502.00 1502.10 1510.00 1511.00 1512.00
             *

130          KK     W04BASIN
131          KM        BASIN BOUNDARY FROM 1990 TOPO
132          BA   2.034
133          LG    0.35    0.35    4.60    0.34      10
134          UI       0     144     147     379     620     881    1032    1176    1561    1470
135          UI     998     876     788     702     637     566     477     407     357     335
136          UI     304     239     203     188     158     157     113     111     105      72
137          UI      71      71      71      40      28      28      27      28      28      28
138          UI      28      28      27      28       0       0       0       0       0       0
             *

139          KK   CPW04COMBINE
140          HC       2   4.005
             *

141          KK  W04W05ROUTE
142          KM        Cross-section: Based on aerial and topo
143          KM        Manning's N Value: Natural Desert wash w/ vegetation
144          RS       2    FLOW
145          RC   0.035   0.035   0.035    5298  0.0098    0.00
146          RX  100.00  120.00  140.00  160.00  174.00  214.00  234.00  254.00
147          RY  1313.0 1312.50 1312.00 1308.00 1308.10 1312.00 1312.50 1313.00
             *

148          KK     W05BASIN
149          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
150          BA   0.316
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151          LG    0.35    0.35    4.25    0.42       0
152          UI       0      32      62     147     214     282     302     300     260     199
153          UI     153     119      90      67      54      40      32      22      22       9
154          UI       7       8       8       8       8       0       0       0       0       0
155          UI       0       0       0       0       0       0       0       0       0       0
156          UI       0       0       0       0       0       0       0       0       0       0
             *

157          KK   CPW05COMBINE
158          HC       3   5.793
             *

159          KK  DW05SEDIVERT
160          KM        North Inlet Channel Divert from L303M3LA.OUT model given to HDR by
161          KM        FCDMC 05062009
162          DT   DW05S      0.0     0.0
163          DI   600.0   800.0  1000.0  1200.0  1400.0  1600.0  2000.0  2400.0  2715.0  2800.0
164          DQ   105.0   163.0   361.0   498.0   640.0   792.0  1100.0  1437.0  1605.0  1630.0
             *
1                                          HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

165          KK  W0512AROUTE
166          KM        White Tanks FRS#3 North Inlet Channel South
167          KM        Route taken from HEC-1 L303M3LA.OUT
168          KM        Cholla Wash
169          RS       3    FLOW
170          RC   0.050   0.030   0.050    5306  0.0083    0.00
171          RX  1010.0 1015.00 1020.00 1050.00 1100.00 1275.00 1580.00 1750.00
172          RY  1251.0 1249.00 1249.00 1245.00 1244.90 1250.00 1250.00 1254.00
             *

173          KK     W06BASIN
174          KM        BASIN BOUNDARY FROM 1990 TOPO
175          BA   0.707
176          LG    0.35    0.35    4.30    0.41      18
177          UI       0     103     362     675     987     837     576     461     363     257
178          UI     217     150     119      90      72      49      48      20      20      19
179          UI      20      20       0       0       0       0       0       0       0       0
180          UI       0       0       0       0       0       0       0       0       0       0
181          UI       0       0       0       0       0       0       0       0       0       0
             *

182          KK     W07BASIN
183          KM        BASIN BOUNDARY FROM 1990 TOPO
184          BA   0.312
185          LG    0.35    0.35    4.25    0.42      19
186          UI       0      65     253     428     510     316     236     171     126      89
187          UI      63      46      33      26      14      11      10      10       0       0
188          UI       0       0       0       0       0       0       0       0       0       0
189          UI       0       0       0       0       0       0       0       0       0       0
190          UI       0       0       0       0       0       0       0       0       0       0
             *

191          KK   CPW07COMBINE
192          HC       2   1.019
             *

193          KK  W07W08ROUTE
194          KM        Cross-section: Based on aerial and topo
195          KM        Manning's N Value: Natural Desert wash w/ vegetation
196          KM        Channel n value modified to slow down velocity
197          RS       1    FLOW
198          RC   0.045   0.040   0.045    5589  0.0796    0.00
199          RX  100.00  136.00  173.00  197.00  234.00  254.00  298.00  342.00
200          RY  2880.0 2865.00 2850.00 2840.00 2840.00 2850.00 2865.00 2880.00
             *

201          KK     W08BASIN
202          KM        BASIN BOUNDARY FROM 1990 TOPO
203          BA   0.445
204          LG    0.35    0.35    3.95    0.40      20
205          UI       0     156     585     939     575     413     262     182     116      78
206          UI      49      32      19      19      19       0       0       0       0       0
207          UI       0       0       0       0       0       0       0       0       0       0
208          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE  6

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

209          UI       0       0       0       0       0       0       0       0       0       0
             *

210          KK   CPW08COMBINE
211          HC       2   1.464
             *

212          KK     W09BASIN
213          KM        BASIN BOUNDARY FROM 1990 TOPO
214          BA   0.335
215          LG    0.35    0.35    3.95    0.40      20
216          UI       0     125     468     716     427     304     193     127      85      53
217          UI      37      19      14      15       0       0       0       0       0       0
218          UI       0       0       0       0       0       0       0       0       0       0
219          UI       0       0       0       0       0       0       0       0       0       0
220          UI       0       0       0       0       0       0       0       0       0       0
             *

221          KK   CPW09COMBINE
222          HC       2   1.799
             *

223          KK  W09W10ROUTE
224          KM        Cross-section: Based on aerial and topo
225          KM        Manning's N Value: Natural Desert wash w/ vegetation
226          KM        Channel n value modified to slow down velocity
227          RS       1    FLOW
228          RC   0.045   0.040   0.045   11134  0.0683    0.00
229          RX  100.00  137.00  172.00  192.00  220.00  230.00  284.00  338.00
230          RY  1990.0 1975.00 1960.00 1950.00 1950.00 1960.00 1975.00 1990.00
             *

231          KK     W10BASIN
232          KM        BASIN BOUNDARY FROM 1990 TOPO
233          BA   1.338
234          LG    0.35    0.35    3.95    0.40      20
235          UI       0     153     376     806    1108    1572    1334     920     794     647
236          UI     533     402     350     278     212     175     141     119      85      75
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 237          UI      75      29      30      30      29      30      29       0       0       0
 238          UI       0       0       0       0       0       0       0       0       0       0
 239          UI       0       0       0       0       0       0       0       0       0       0
              *

 240          KK   CPW10COMBINE
 241          HC       2   3.137
              *

 242          KK     W11BASIN
 243          KM        BASIN BOUNDARY FROM 1990 TOPO
 244          BA   0.812
 245          LG    0.35    0.35    3.95    0.40      20
 246          UI       0     100     272     567     759    1098     696     556     469     375
 247          UI     285     236     190     141     116      92      77      52      48      39
 248          UI      20      19      19      19      19      20       0       0       0       0
 249          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE  7

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 250          UI       0       0       0       0       0       0       0       0       0       0
              *

 251          KK   CPW11COMBINE
 252          HC       2   3.949
              *

 253          KK  W11W12ROUTE
 254          KM        Cross-section: Based on aerial and topo
 255          KM        Manning's N Value: Natural Desert wash w/ vegetation
 256          RS       8    FLOW
 257          RC   0.045   0.035   0.045   21182  0.0205    0.00
 258          RX  100.00  110.30  290.50  304.40  319.20  330.60  344.60  569.70
 259          RY  1312.0 1310.00 1308.00 1306.00 1305.90 1308.00 1310.00 1312.00
              *

 260          KK     W12BASIN
 261          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
 262          BA   1.868
 263          LG    0.34    0.34    4.60    0.34       3
 264          UI       0     125     126     289     490     706     847     961    1170    1474
 265          UI    1002     820     727     654     604     537     483     418     353     310
 266          UI     293     266     221     193     160     148     139     120      96      96
 267          UI      83      61      61      61      61      37      24      24      24      24
 268          UI      24      25      24      24      24      24      24       0       0       0
              *

 269          KK  DW05SERETRIEVE
 270          KM        Flow traveling down North Inlet Channel
 271          DR   DW05S
              *

 272          KK  W0512BROUTE
 273          KM        White Tanks FRS#3 North Inlet Channel North
 274          KM        Channel plans FCD Contract No 2005C019
 275          KM        N value modified to mimic drop structure velocity dissipation
 276          RS       2    FLOW
 277          RC   0.035   0.035   0.035    5494  0.0170    0.00
 278          RX  100.00  120.00  135.00  165.00  220.00  300.00  315.00  379.00
 279          RY  1244.7 1239.65 1239.50 1232.00 1231.90 1239.50 1239.65 1255.65
              *

 280          KK   CPW12COMBINE
 281          HC       4   11.61
              *

 282          KK  W12W13ROUTE
 283          KM        From NIC South Channel Plans at Sta. 535+00
 284          RS       1    FLOW
 285          RC   0.032   0.032   0.032    2062  0.0051    0.00
 286          RX  100.00  120.00  162.50  205.00  355.00  397.50  440.00  460.00
 287          RY  1218.4 1218.18 1211.10 1203.98 1204.45 1211.53 1218.65 1218.85
              *
1                                          HEC-1 INPUT                                          PAGE  8

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 288          KK     W13BASIN
 289          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
 290          BA   1.584
 291          LG    0.35    0.35    4.90    0.29       3
 292          UI       0     107     108     254     430     622     734     838    1035    1255
 293          UI     820     689     615     557     511     445     405     352     287     261
 294          UI     248     223     176     154     137     121     119      90      83      83
 295          UI      59      52      53      53      48      21      20      21      20      21
 296          UI      20      21      21      20      21      21       0       0       0       0
              *

 297          KK   CPW13COMBINE
 298          HC       2  13.194
              *

 299          KK  W13W16ROUTE
 300          KM        From NIC South Channel Plans at Sta. 523+00
 301          KM        Manning's n Value: from aerial, earth with sparse trees and shrubs
 302          RS       2    FLOW
 303          RC   0.032   0.032   0.032    6257  0.0051    0.00
 304          RX  100.00  115.00  162.00  209.10  359.10  435.90  465.00  480.00
 305          RY  1216.9 1216.77 1208.93 1201.09 1203.09 1215.09 1223.54 1223.69
              *

 306          KK     W15BASIN
 307          KM        BASIN BOUNDARY FROM 1990 TOPO
 308          BA   1.227
 309          LG    0.35    0.35    4.55    0.35       0
 310          UI       0      98     112     315     498     652     757     975    1045     671
 311          UI     578     523     457     400     352     284     245     227     196     161
 312          UI     128     117     107      86      75      70      49      48      47      43
 313          UI      19      18      19      19      19      19      18      19      19       0
 314          UI       0       0       0       0       0       0       0       0       0       0
              *

 315          KK     W14BASIN
 316          KM        BASIN BOUNDARY FROM 1990 TOPO
 317          BA   1.582
 318          LG    0.35    0.37    5.20    0.25       3
 319          UI       0     165     333     776    1104    1420    1804    1142     948     811
 320          UI     682     567     431     386     320     242     201     182     128     124
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 321          UI      82      80      79      32      32      32      32      31      32      32
 322          UI       0       0       0       0       0       0       0       0       0       0
 323          UI       0       0       0       0       0       0       0       0       0       0
              *

 324          KK  W14W15ROUTE
 325          KM        Cross-section: Based on aerial and topo
 326          KM        Manning's N Value: Natural Desert wash w/ vegetation
 327          RS       3    FLOW
 328          RC   0.035   0.035   0.035    7308  0.0104    0.00
 329          RX  100.00  130.00  150.00  184.00  210.00  226.00  246.00  276.00
 330          RY  1280.0 1276.00 1274.00 1270.00 1269.90 1274.00 1276.00 1280.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 331          KK   CPW15COMBINE
 332          HC       2   2.809
              *

 333          KK  W15W16ROUTE
 334          KM        Cross-section: Based on aerial and topo
 335          KM        Manning's N Value: Natural Desert wash w/ vegetation
 336          RS       1    FLOW
 337          RC   0.035   0.035   0.035    2750  0.0087    0.00
 338          RX  100.00  135.00  232.00  328.00  360.00  498.00  635.00  735.00
 339          RY  1202.0 1200.00 1199.00 1198.00 1197.90 1199.00 1200.00 1202.00
              *

 340          KK     W16BASIN
 341          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, THE FRS#4 AND 1990 TOPO
 342          BA   0.530
 343          LG    0.22    0.22    4.55    0.33       0
 344          UI       0      61     148     318     464     562     575     509     384     282
 345          UI     211     157     115      87      65      42      42      15      14      15
 346          UI      15      15       0       0       0       0       0       0       0       0
 347          UI       0       0       0       0       0       0       0       0       0       0
 348          UI       0       0       0       0       0       0       0       0       0       0
              *

 349          KK   CPW16COMBINE
 350          HC       3  16.533
              *

 351          KK  W16W20ROUTE
 352          KM        Cross-section: Based on aerial and topo
 353          KM        Manning's N Value: clean earth; straight
 354          RS       1    FLOW
 355          RC   0.022   0.022   0.022    3633  0.0130    0.00
 356          RX  100.00  113.00  127.00  136.00  245.00  272.00  318.00  384.00
 357          RY  1186.0 1184.00 1182.00 1180.00 1179.90 1182.00 1184.00 1186.00
              *

 358          KK     W18BASIN
 359          KM        BASIN BOUNDARY FROM 1990 TOPO
 360          BA   1.260
 361          LG    0.35    0.35    4.40    0.38       8
 362          UI       0      38      38      38      38      38      99     112     147     168
 363          UI     200     230     242     261     278     296     307     348     390     440
 364          UI     461     337     285     264     241     228     223     213     202     195
 365          UI     185     177     171     161     152     148     137     130     119     110
 366          UI     100      97      93      90      89      86      79      81      68      62
              *

 367          KK     W17BASIN
 368          KM        BASIN BOUNDARY FROM 1990 TOPO
 369          BA   1.497
 370          LG    0.35    0.35    4.30    0.41      18
 371          UI       0     169     396     865    1197    1639    1571    1038     892     737
 372          UI     607     469     398     324     247     201     173     131     110      82
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 373          UI      83      52      32      33      32      32      33      32       0       0
 374          UI       0       0       0       0       0       0       0       0       0       0
 375          UI       0       0       0       0       0       0       0       0       0       0
              *

 376          KK  W17W18ROUTE
 377          KM        Cross-section: Based on aerial and topo
 378          KM        Manning's N Value: natural desert wash w/ vegetation
 379          KM        and heavy vegetation
 380          RS       2    FLOW
 381          RC   0.045   0.035   0.045    8559  0.0257    0.00
 382          RX  100.00  140.00  150.00  156.00  194.00  216.00  255.00  342.00
 383          RY  1302.0 1300.00 1298.00 1296.00 1295.90 1298.00 1300.00 1302.00
              *

 384          KK   CPW18COMBINE
 385          HC       2   2.757
              *

 386          KK  W18W20ROUTE
 387          KM        Cross-section: Estimated 3' deep, side slopes and width based
 388          KM        on aerial / Manning's N Value: natural desert wash w/ vegetation
 389          RS       5    FLOW
 390          RC   0.035   0.035   0.035    6914  0.0058    0.00
 391          RX  100.00  155.00  170.00  210.00  216.00  256.00  276.00  336.00
 392          RY  1249.0 1248.25 1248.00 1245.00 1245.10 1248.00 1248.25 1249.00
              *

 393          KK     W19BASIN
 394          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 395          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 396          BA   1.158
 397          LG    0.35    0.35    3.88    0.42      20
 398          UI       0     241     939    1587    1896    1172     876     636     467     328
 399          UI     236     172     119      99      51      39      39      39       0       0
 400          UI       0       0       0       0       0       0       0       0       0       0
 401          UI       0       0       0       0       0       0       0       0       0       0
 402          UI       0       0       0       0       0       0       0       0       0       0
              *

 403          KK   SRW19STORAGE
 404          KM        Master Drainage Plan for the Caterpillar Property (Basin #16)
 405          KO
 406          RS       1    STOR
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407          SV            1.00   31.00  114.00  270.00  502.00  807.00 1319.00 1388.00 1460.00
408          SQ                                                                            135.00
409          SE  1198.0 1200.00 1210.00 1220.00 1230.00 1240.00 1250.00 1260.00 1261.00 1262.00
410          ST
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

411          KK  W19W20ROUTE
412          KM       Cross-section: Estimated 4' deep and 3:1 side slopes, width based
413          KM       on aerial / Manning's N Value: earth with sparse trees and shrubs
414          RS       1    FLOW
415          RC  0.032   0.032   0.032    3790  0.0158    0.00
416          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
417          RY  1240.5 1240.25 1240.00 1236.00 1236.00 1240.00 1240.25 1240.50
             *

418          KK    W20BASIN
419          KM       BASIN BOUNDARY FROM WHITE TANKS #4 FRS, S-S-D CURVES
420          KM       FROM JAN 2009 FCDMC, AND FROM 1990 TOPO
421          BA   1.137
422          LG   0.29    0.29    4.10    0.44       0
423          UI      0     100     150     366     579     723     888    1136     729     598
424          UI    530     465     400     335     271     238     215     173     135     120
425          UI    111      82      77      61      49      49      49      19      20      19
426          UI     19      20      19      19      19      20       0       0       0       0
427          UI      0       0       0       0       0       0       0       0       0       0
             *

428          KK   CPW20COMBINE
429          HC       4  21.585
             *

430          KK   SRW20STORAGE
431          KM       White Tanks FRS #3 from FCDMC 1/8/2009
432          KO
433          RS       1    STOR
434          SV          135.00  385.00  810.00 1600.00 2200.00 2560.00 3175.00 4300.00 5500.00
435          SQ                                                   68.00 1343.0016310.0045000.00
436          SE  1196.0 1196.30 1199.00 1201.00 1206.00 1208.60 1210.00 1212.00 1215.00 1218.00
437          ST
             *

438          KK    W22BASIN
439          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
440          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
441          BA   0.782
442          LG   0.35    0.35    4.15    0.44      19
443          UI      0     237     914    1559    1035     751     503     352     228     158
444          UI    107      80      37      31      31      31       0       0       0       0
445          UI      0       0       0       0       0       0       0       0       0       0
446          UI      0       0       0       0       0       0       0       0       0       0
447          UI      0       0       0       0       0       0       0       0       0       0
             *

448          KK  W22W23ROUTE
449          KM       Cross-section: Based on aerial and topo
450          KM       Manning's N Value: pavement, n-value deviates from table
451          RS       1    FLOW
452          RC  0.035   0.013   0.035    4866  0.0719    0.00
453          RX  100.00  112.00  113.00  126.00  439.00  477.00  496.00  515.00
454          RY  1820.0 1815.00 1810.00 1800.00 1799.90 1810.00 1815.00 1820.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

455          KK    W23BASIN
456          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
457          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
458          BA   0.897
459          LG   0.35    0.35    4.35    0.40      18
460          UI      0     236     906    1581    1306     885     636     424     309     204
461          UI    145      98      80      33      34      33      33       0       0       0
462          UI      0       0       0       0       0       0       0       0       0       0
463          UI      0       0       0       0       0       0       0       0       0       0
464          UI      0       0       0       0       0       0       0       0       0       0
             *

465          KK   CPW23COMBINE
466          HC       2   1.679
             *

467          KK  W23W24ROUTE
468          KM       Cross-section: Based on aerial and topo
469          KM       Manning's N Value: natural desert wash w/ vegetation
470          RS       1    FLOW
471          RC  0.045   0.035   0.045    5335  0.0367    0.00
472          RX  100.00  120.00  140.00  180.00  220.00  240.00  260.00  280.00
473          RY  1462.0 1461.00 1460.00 1450.00 1450.10 1460.00 1461.00 1462.00
             *

474          KK    W24BASIN
475          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
476          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
477          BA   0.475
478          LG   0.35    0.35    4.90    0.29      14
479          UI      0      88     342     575     788     483     372     280     201     154
480          UI    104      82      60      39      38      15      14      15      15       0
481          UI      0       0       0       0       0       0       0       0       0       0
482          UI      0       0       0       0       0       0       0       0       0       0
483          UI      0       0       0       0       0       0       0       0       0       0
             *

484          KK   CPW24COMBINE
485          HC       2   2.154
             *

486          KK  W24W27ROUTE
487          KM       Cross-section: Based on aerial and topo
488          KM       Manning's N Value: natural desert wash w/ vegetation
489          RS       1    FLOW
490          RC  0.035   0.035   0.035    5873  0.0289    0.00
491          RX  100.00  120.00  140.00  160.00  180.00  200.00  220.00  240.00
492          RY  1094.0 1092.00 1090.00 1084.00 1084.10 1090.00 1090.25 1090.50
             *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 493          KK     W25BASIN
 494          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 495          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 496          BA   1.099
 497          LG    0.35     0.35     4.80     0.30        8
 498          UI       0      143      438      866     1174     1490      915      737      620      467
 499          UI     358      307      216      171      140      110       76       71       53       27
 500          UI      28       28       27       28        0        0        0        0        0        0
 501          UI       0        0        0        0        0        0        0        0        0        0
 502          UI       0        0        0        0        0        0        0        0        0        0
              *

 503          KK   SRW25STORAGE
 504          KM        Verrado on-line storage basin (Wood Patel ID SR20)
 505          KO
 506          RS       1     STOR
 507          SV             1.05    26.91    54.31    92.89   138.67   176.47   190.08   219.05   249.57
 508          SQ                                                                 265.00 1377.00 2963.00
 509          SE  1443.0 1446.00 1454.00 1458.00 1462.00 1466.00 1469.00 1470.00 1472.00 1474.00
 510          ST
              *

 511          KK  W25W26ROUTE
 512          KM        Cross-section: Based on aerial and topo
 513          KM        Manning's N Value: natural desert wash w/ vegetation
 514          RS       1     FLOW
 515          RC   0.035    0.035    0.035     6978   0.0178     0.00
 516          RX  100.00   120.00   140.00   156.00   176.00   192.00   212.00   232.00
 517          RY  1451.5 1451.25 1451.00 1447.00 1447.10 1451.00 1451.25 1451.50
              *

 518          KK     W26BASIN
 519          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 520          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 521          BA   0.682
 522          LG    0.33     0.37     6.20     0.17       15
 523          UI       0       86      245      500      680      926      574      465      390      304
 524          UI     231      197      152      110       95       69       59       43       42       21
 525          UI      17       16       17       16       17        0        0        0        0        0
 526          UI       0        0        0        0        0        0        0        0        0        0
 527          UI       0        0        0        0        0        0        0        0        0        0
              *

 528          KK   CPW26COMBINE
 529          HC       2    1.781
              *

 530          KK   SRW26STORAGE
 531          KM        Verrado on-line storage basin (Wood Patel ID SR21 and PH 6 Golf)
 532          KO
 533          RS       1     STOR
 534          SV             0.68    20.68    57.58    95.91   102.34   117.65   130.00
 535          SQ                                                         265.00 1377.00 2000.00
 536          SE  1319.0 1320.00 1330.00 1340.00 1347.00 1348.00 1350.00 1351.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 537          ST
              *

 538          KK  W26W27ROUTE
 539          KM        Cross-section: based on topo and aerial
 540          KM        Manning's N Value: natural desert wash w/ vegetation
 541          RS       1     FLOW
 542          RC   0.035    0.035    0.035     3484   0.0172     0.00
 543          RX  100.00   120.00   140.00   152.00   168.00   180.00   200.00   220.00
 544          RY  1298.5 1298.25 1298.00 1294.00 1294.10 1298.00 1298.25 1298.50
              *

 545          KK     W27BASIN
 546          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 547          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 548          BA   0.410
 549          LG    0.32     0.37     5.80     0.20       11
 550          UI       0       76      295      497      679      417      322      241      174      132
 551          UI      91       71       51       34       33       12       13       13       13        0
 552          UI       0        0        0        0        0        0        0        0        0        0
 553          UI       0        0        0        0        0        0        0        0        0        0
 554          UI       0        0        0        0        0        0        0        0        0        0
              *

 555          KK   CPW27COMBINE
 556          HC       3    4.345
              *

 557          KK  W27W44ROUTE
 558          KM        Cross-section: Clean straight earth
 559          RS       1     FLOW
 560          RC   0.022    0.022    0.022     7169   0.0098     0.00
 561          RX  100.00   182.00   270.00   288.00   318.00   329.00   333.00   338.00
 562          RY  1256.0 1254.00 1250.00 1248.00 1248.00 1250.00 1254.00 1256.00
              *

 563          KK     W43BASIN
 564          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 565          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 566          BA   0.209
 567          LG    0.20     0.28     3.48     0.55       61
 568          UI       0      971      508      111        0        0        0        0        0        0
 569          UI       0        0        0        0        0        0        0        0        0        0
 570          UI       0        0        0        0        0        0        0        0        0        0
 571          UI       0        0        0        0        0        0        0        0        0        0
 572          UI       0        0        0        0        0        0        0        0        0        0
              *

 573          KK   SRW43STORAGE
 574          KM        Verrado on-line storage basin (WLB) (Wood Patel ID SR23)
 575          KO
 576          RS       1     STOR
 577          SV             6.04    20.38    53.82   325.98   455.42   606.10   645.49   685.61   767.98
 578          SQ                                                                          928.00 8950.00
 579          SE  1272.0 1276.00 1280.00 1284.00 1296.00 1300.00 1304.00 1305.00 1306.00 1308.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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580          ST
             *

581          KK  W43W44ROUTE
582          KM       Cross-section: Side slopes and width based on aerial and topo
583          KM       Manning's N Value: natural desert wash w/ vegetation
584          RS       1    FLOW
585          RC   0.035   0.035   0.035    8415  0.0125    0.00
586          RX  100.00  145.00  180.00  210.00  220.00  245.00  270.00  295.00
587          RY  1266.0 1264.00 1262.00 1258.00 1258.00 1262.00 1265.50 1266.00
             *

588          KK     W44BASIN
589          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
590          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
591          BA   0.598
592          LG   0.35    0.35    4.90    0.29       0
593          UI      0      55      89     214     334     438     500     527     506     421
594          UI    332     266     206     162     127      99      82      59      48      37
595          UI     37      13      14      13      14      13      14       0       0       0
596          UI      0       0       0       0       0       0       0       0       0       0
597          UI      0       0       0       0       0       0       0       0       0       0
             *

598          KK   CPW44COMBINE
599          HC       3   5.152
             *

600          KK  W44W46ROUTE
601          KM       Cross-section: Estimated 2' deep, side slopes and width based on aerial/
602          KM       Manning's N Value: earth w/ sparse trees and shrubs
603          RS       1    FLOW
604          RC   0.032   0.032   0.032    1706  0.0070    0.00
605          RX  100.00  116.00  132.00  162.00  192.00  252.00  272.00  292.00
606          RY  1216.0 1215.00 1214.00 1208.00 1208.10 1210.00 1211.00 1212.00
             *

607          KK     W45BASIN
608          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
609          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
610          BA   1.035
611          LG   0.35    0.33    7.30    0.11       3
612          UI      0     136     414     824    1120    1399     860     697     573     441
613          UI    336     286     202     161     130     104      71      67      47      26
614          UI     26      26      26      26       0       0       0       0       0       0
615          UI      0       0       0       0       0       0       0       0       0       0
616          UI      0       0       0       0       0       0       0       0       0       0
             *

617          KK  W45W46ROUTE
618          KM       Cross-section: Based on aerial and topo / Manning's N Value: natural
619          RS       4    FLOW
620          RC   0.035   0.035   0.035    9372  0.0125    0.00
621          RX  100.00  160.00  205.00  265.00  285.00  310.00  345.00  385.00
622          RY  1274.0 1270.00 1268.00 1262.00 1262.10 1272.00 1275.50 1276.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

623          KK     W46BASIN
624          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
625          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
626          BA   0.926
627          LG   0.27    0.29    6.40    0.18      16
628          UI      0      88     165     367     477     592     749    1082     916     727
629          UI    580     459     331     180     148      97      75      27      27      27
630          UI     28      27       0       0       0       0       0       0       0       0
631          UI      0       0       0       0       0       0       0       0       0       0
632          UI      0       0       0       0       0       0       0       0       0       0
             *

633          KK  CPW46ACOMBINE
634          HC       2   1.961
             *

635          KK  DW46REDIVERT
636          KM       Master Drainage Plan for the Caterpillar Property (Basin #27)
637          DT    RW46     0.0     0.0
638          DI     0.0    35.0    98.0   179.0   276.0   520.0   888.0  1339.0  1859.0  2439.0
639          DQ     0.0     0.0     0.0     0.0     0.0   135.0   382.0   701.0  1080.0  1509.0
             *

640          KK  CPW46BCOMBINE
641          HC       2   7.113
             *

642          KK  W46W54ROUTE
643          KM       Cross-section: side slopes, width based on aerial and topo
644          KM       Manning's N Value: natural desert wash w/ vegetation
645          RS       1    FLOW
646          RC   0.035   0.035   0.035    3908  0.0397    0.00
647          RX  100.00  112.00  124.00  140.00  160.00  190.00  220.00  240.00
648          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
             *

649          KK     W47BASIN
650          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
651          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
652          BA   0.666
653          LG   0.35    0.35    3.95    0.40      20
654          UI      0      96     349     638     936     788     540     432     340     243
655          UI    202     142     111      83      66      47      43      19      19      18
656          UI     19      18       0       0       0       0       0       0       0       0
657          UI      0       0       0       0       0       0       0       0       0       0
658          UI      0       0       0       0       0       0       0       0       0       0
             *

659          KK     W48BASIN
660          KM       BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
661          KM       WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
662          BA   0.353
663          LG   0.35    0.35    3.95    0.40      20
664          UI      0      57     232     395     573     367     281     216     157     124
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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665          UI      85      65      48      36      28      20      10      11      11      11
666          UI       0       0       0       0       0       0       0       0       0       0
667          UI       0       0       0       0       0       0       0       0       0       0
668          UI       0       0       0       0       0       0       0       0       0       0
             *

669          KK   CPW47COMBINE
670          HC       2   1.019
             *

671          KK  W47W49ROUTE
672          KM        Cross-section: Based on aerial and topo
673          KM        Manning's N Value: natural desert wash w/ vegetation
674          RS       1    FLOW
675          RC   0.035   0.035   0.035    5077  0.0414    0.00
676          RX  100.00  150.00  190.00  210.00  235.00  255.00  275.00  310.00
677          RY  1740.0 1720.00 1710.00 1707.00 1708.00 1714.00 1730.00 1740.00
             *

678          KK     W50BASIN
679          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
680          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
681          BA   1.345
682          LG    0.35    0.35    4.25    0.42      19
683          UI       0     122     193     458     725     898    1129    1321     842     706
684          UI     619     546     461     378     312     278     240     189     156     135
685          UI     120      93      88      60      60      59      35      24      23      24
686          UI      23      24      24      23      23       0       0       0       0       0
687          UI       0       0       0       0       0       0       0       0       0       0
             *

688          KK     W49BASIN
689          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
690          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
691          BA   0.384
692          LG    0.35    0.35    3.95    0.40      20
693          UI       0      66     265     449     631     397     302     231     165     129
694          UI      89      69      49      35      30      16      12      12      12      12
695          UI       0       0       0       0       0       0       0       0       0       0
696          UI       0       0       0       0       0       0       0       0       0       0
697          UI       0       0       0       0       0       0       0       0       0       0
             *

698          KK   CPW49COMBINE
699          HC       3   2.748
             *

700          KK  W49W51ROUTE
701          KM        Cross-section: side slopes, width based on aerial and topo
702          KM        Manning's N Value: natural desert wash w/ vegetation
703          RS       1    FLOW
704          RC   0.035   0.035   0.035    5726  0.0253    0.00
705          RX  100.00  150.00  220.00  236.00  286.00  300.00  340.00  380.00
706          RY  1485.0 1482.00 1479.00 1476.00 1476.10 1479.00 1485.00 1490.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

707          KK     W51BASIN
708          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
709          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
710          BA   0.149
711          LG    0.35    0.35    3.85    0.43       1
712          UI       0      21      74     140     188     200     165     113      79      55
713          UI      38      26      18      14       5       5       5       5       0       0
714          UI       0       0       0       0       0       0       0       0       0       0
715          UI       0       0       0       0       0       0       0       0       0       0
716          UI       0       0       0       0       0       0       0       0       0       0
             *

717          KK   CPW51COMBINE
718          HC       2   2.897
             *

719          KK     W52BASIN
720          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
721          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
722          BA   1.123
723          LG    0.35    0.35    4.40    0.38       9
724          UI       0     116     224     522     764     958    1288     824     673     577
725          UI     489     413     317     275     240     179     147     128     100      88
726          UI      67      57      56      35      22      22      22      22      22      22
727          UI      22       0       0       0       0       0       0       0       0       0
728          UI       0       0       0       0       0       0       0       0       0       0
             *

729          KK   CPW52COMBINE
730          HC       2    4.02
             *

731          KK  W52W53ROUTE
732          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
733          KM        aerial / Manning's N Value: natural desert wash w/ vegetation
734          RS       1    FLOW
735          RC   0.035   0.035   0.035    4917  0.0112    0.00
736          RX  100.00  118.00  124.00  130.00  146.00  150.00  164.00  182.00
737          RY  1375.0 1373.00 1370.00 1368.00 1368.00 1370.00 1373.00 1375.00
             *

738          KK     W53BASIN
739          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
740          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
741          BA   0.568
742          LG    0.30    0.32    4.45    0.42       7
743          UI       0     223     858    1219     946     528     288     161      89      32
744          UI      31       0       0       0       0       0       0       0       0       0
745          UI       0       0       0       0       0       0       0       0       0       0
746          UI       0       0       0       0       0       0       0       0       0       0
747          UI       0       0       0       0       0       0       0       0       0       0
             *
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

748          KK   CPW53COMBINE
749          HC       2   4.588
             *
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750          KK  DW53REDIVERT
751          KM        Verrado - Planning Unit Drainage Plan for Portions of Planning Unit V
752          KM        (2nd Submittal) (ESTIMATED FROM GOLF BASINS IN REPORT)
753          DT    RW53      0.0      0.0
754          DI     0.0   1000.0   1500.0   2000.0   2500.0   3000.0   3500.0   4000.0   4145.0   4500.0
755          DQ     0.0     10.0    115.0    290.0    460.0    715.0    980.0   1100.0   1145.0   1260.0
             *

756          KK  W53W54ROUTE
757          KM        Cross-section: side slopes, width based on aerial and topo
758          KM        Manning's N Value: natural desert wash w/ vegetation
759          RS       2    FLOW
760          RC   0.035    0.035    0.035     9900   0.0157     0.00
761          RX  100.00   124.00   144.00   150.00   160.00   190.00   220.00   240.00
762          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
             *

763          KK     W54BASIN
764          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
765          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
766          BA   0.980
767          LG    0.23     0.26     4.50     0.43       18
768          UI       0      105      248      485      621      807     1191     1143      882      676
769          UI     520      329      183      143      104       33       32       32       33        0
770          UI       0        0        0        0        0        0        0        0        0        0
771          UI       0        0        0        0        0        0        0        0        0        0
772          UI       0        0        0        0        0        0        0        0        0        0
             *

773          KK   CPW54COMBINE
774          HC       3  12.681
             *

775          KK  W54W57ROUTE
776          KM        Cross-section: side slopes and width based on aerial
777          KM        Manning's N Value: natural desert wash w/ vegetation
778          RS       1    FLOW
779          RC   0.035    0.035    0.035     5173  0.0151     0.00
780          RX  100.00   124.00   144.00   156.00   180.00   204.00   216.00   228.00
781          RY  1126.0 1125.00 1124.00 1114.00 1114.10 1117.00 1117.50 1118.00
             *

782          KK     W56BASIN
783          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
784          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
785          BA   0.448
786          LG    0.17     0.28     4.20     0.61        5
787          UI       0      143      474      812      956      583      279      126       47       28
788          UI       0        0        0        0        0        0        0        0        0        0
789          UI       0        0        0        0        0        0        0        0        0        0
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

790          UI       0        0        0        0        0        0        0        0        0        0
791          UI       0        0        0        0        0        0        0        0        0        0
             *

792          KK  DW56REDIVERT
793          KM        Sienna Hills (aka Tesota Hills) Preliminary Drainage Report
794          DT    RW56     35.6      0.0
795          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
796          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

797          KK  W56W57ROUTE
798          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
799          KM        based on aerial / Manning's N Value: clean straight earth
800          RS       1    FLOW
801          RC   0.022    0.022    0.022     4948  0.0038     0.00
802          RX  100.00   108.00   116.00   128.00   131.00   143.00   153.00   163.00
803          RY  1108.5 1108.25 1108.00 1105.00 1105.10 1108.00 1108.25 1108.50
             *

804          KK     W55BASIN
805          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
806          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
807          BA   0.496
808          LG    0.32     0.33     4.00     0.50       17
809          UI       0       80      326      555      806      516      393      304      221      173
810          UI     120       92       67       51       38       29       15       15       15       15
811          UI       0        0        0        0        0        0        0        0        0        0
812          UI       0        0        0        0        0        0        0        0        0        0
813          UI       0        0        0        0        0        0        0        0        0        0
             *

814          KK  DW55REDIVERT
815          KM        Verrado GOB5
816          DT   DW55S      0.0      0.0
817          DI     0.0     55.0    101.0    537.0   1297.0   2269.0   4708.0   7684.0  11074.0      0.0
818          DQ     0.0      0.0      0.0    382.0   1080.0   1984.0   4269.0   7072.0  10310.0      0.0
             *

819          KK  W55W57ROUTE
820          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
821          KM        based on aerial / Manning's N Value: natural desert wash w/ vegetation
822          RS       4    FLOW
823          RC   0.035    0.035    0.035     5747  0.0096     0.00
824          RX  100.00   110.00   120.00   136.00   156.00   172.00   192.00   212.00
825          RY  1136.5 1136.25 1136.00 1134.00 1134.10 1136.00 1136.25 1136.50
             *

826          KK     W57BASIN
827          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
828          KM        WOOD/PATEL, 2006 MODIFIED SLIGHTLY TO MATCH NEW TOPO
829          BA   1.161
830          LG    0.27     0.29     4.65     0.37       19
831          UI       0      138      388      695      889     1284     1641     1231      946      700
832          UI     409      239      166      101       43       43       42        0        0        0
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

833          UI       0        0        0        0        0        0        0        0        0        0
834          UI       0        0        0        0        0        0        0        0        0        0
835          UI       0        0        0        0        0        0        0        0        0        0
             *

836          KK  DW57REDIVERT
```

```
837          KM        Master Drainage Plan for the Caterpillar Property (Basin #42)
838          DT  DW57RE     21.6      0.0
839          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
840          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

841          KK   CPW57COMBINE
842          HC       4  14.786
             *

843          KK   SRW57STORAGE
844          KM        Verrado SR42
845          KO
846          RS       1    STOR
847          SV           24.40   29.60   35.70   42.00   48.50   55.20   62.20   69.30   76.70
848          SQ                                  368.00 1040.00 1912.00 2944.00 4114.00 5410.00
849          SE  1084.0 1090.00 1091.00 1092.00 1093.00 1094.00 1095.00 1096.00 1097.00 1098.00
850          ST
             *

851          KK  W57W58ROUTE
852          KM        Cross-section: Taken from aerial and topo
853          KM        Manning's N Value: clean straight earth
854          RS       1    FLOW
855          RC   0.022   0.022   0.022    1236  0.0067    0.00
856          RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
857          RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
             *

858          KK     W58BASIN
859          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN WOOD/PATEL 2006
860          KM        NEW 2' CI TOPO OBTAINED 2008
861          BA   0.131
862          LG    0.30     0.33     4.65     0.35       18
863          UI       0       33      129      212      230      161       98       59       38       22
864          UI      14        6        6        5        0        0        0        0        0        0
865          UI       0        0        0        0        0        0        0        0        0        0
866          UI       0        0        0        0        0        0        0        0        0        0
867          UI       0        0        0        0        0        0        0        0        0        0
             *

868          KK   CPW58COMBINE
869          HC       2  14.917
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

870          KK   SRW58STORAGE
871          KM        Storage based on new topo section calculations
872          KO
873          RS       1    STOR
874          SV           0.17     2.57     5.40    13.08    31.52    47.89    64.25   111.96   171.81
875          SQ                  784.10 2217.60 3099.20 3799.80 4122.90 4540.00 6878.8012249.90
876          SE  1084.0 1086.00 1088.00 1090.00 1092.00 1094.00 1095.00 1096.00 1098.00 1100.00
877          ST
             *

878          KK  DW58SEDIVERT
879          KM        Divert is stage storage on 4-10x8 boxes under I-10. Diverted flow goes e
880          DT   DW58S      0.0      0.0
881          DI     0.0    100.0   2000.0   4100.0   4200.0   5000.0   6000.0   7000.0   8000.0   9000.0
882          DQ     0.0    100.0   2000.0   4100.0   4195.5   4606.7   4833.2   4983.7   5102.6   5203.3
             *

883          KK     W38BASIN
884          KM        BASIN BOUNDARY FORMED BY MCDOWELL, I-10, JACKRABBIT
885          KM        AND TUTHILL, DETAILED I-10 TOPO AND CULVERT INFO
886          BA   0.251
887          LG    0.32     0.32     4.65     0.33        7
888          UI       0       30       77      163      235      279      279      236      174      127
889          UI      93       68       51       36       27       20       14        7        7        8
890          UI       7        0        0        0        0        0        0        0        0        0
891          UI       0        0        0        0        0        0        0        0        0        0
892          UI       0        0        0        0        0        0        0        0        0        0
             *

893          KK   CPW38COMBINE
894          HC       2  15.168
             *

895          KK  DW38SEDIVERT
896          KM        Full flow capacity of culverts under I-10 is main flow. Diverted flow go
897          DT   DW38S      0.0      0.0
898          DI     0.0    100.0    200.0    300.0    400.0    467.0    500.0    800.0   1000.0 10000.0
899          DQ     0.0    100.0    200.0    300.0    400.0    467.0    467.0    467.0    467.0    467.0
             *

900          KK  W38W37ROUTE
901          KM        Cross section based from 1990 topo, Manning's N Value: clean earth
902          RS       3    FLOW
903          RC   0.022   0.022   0.022    2849  0.0053    0.00
904          RX  100.00  204.00  440.00  608.00  687.00  700.00  736.00  759.00
905          RY  1083.0 1082.00 1080.00 1078.00 1078.00 1080.00 1082.00 1083.00
             *

906          KK     W33BASIN
907          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
908          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
909          BA   0.839
910          LG    0.31     0.27     4.00     0.47        4
911          UI       0       92      207      460      670      834      886      810      641      473
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

912          UI     361      275      195      155      114       85       63       52       23       22
913          UI      23       22       23        0        0        0        0        0        0        0
914          UI       0        0        0        0        0        0        0        0        0        0
915          UI       0        0        0        0        0        0        0        0        0        0
             *

916          KK  W33W35ROUTE
917          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on aer
918          KM        Manning's N Value: clean straight earth
919          RS       1    FLOW
920          RC   0.032   0.022   0.032    2658  0.0034    0.00
921          RX  100.00  112.00  124.00  154.00  174.00  210.00  230.00  240.00
922          RY  1162.5 1162.25 1162.00 1158.00 1158.50 1162.00 1162.25 1162.50
```

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          *
  923     KK     W34BASIN
  924     KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
  925     KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
  926     BA   0.228
  927     LG    0.32     0.31     3.74     0.46       20
  928     UI       0       33      131      238      312      316      236      162      111       74
  929     UI      52       34       23       13        9        8        9        0        0        0
  930     UI       0        0        0        0        0        0        0        0        0        0
  931     UI       0        0        0        0        0        0        0        0        0        0
  932     UI       0        0        0        0        0        0        0        0        0        0
          *

  933     KK   SRW34STORAGE
  934     KM        Master Drainage Plan for the Caterpillar Property (Basin #29)
  935     KO
  936     RS       1    STOR
  937     SV             0.99    12.73    23.45    36.25    50.68    54.76    59.33    83.20
  938     SQ                                                                  88.00  6226.00
  939     SE  1164.5 1166.00 1170.00 1172.00 1174.00 1176.00 1177.50 1178.00 1180.00
  940     ST
          *

  941     KK  W34W35ROUTE
  942     KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
  943     KM        Manning's N Value: clean straight earth
  944     RS       1    FLOW
  945     RC   0.022    0.022    0.022      813   0.0111     0.00
  946     RX  100.00   104.00   108.00   120.00   132.00   144.00   152.00   160.00
  947     RY  1166.2 1166.10 1166.00 1160.00 1160.10 1162.00 1162.10 1162.20
          *

  948     KK     W35BASIN
  949     KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
  950     KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
  951     BA   0.283
  952     LG    0.32     0.34     3.71     0.47        4
  953     UI       0       33       83      180      257      312      308      268      201      146
  954     UI     108       80       58       43       33       22       19        8        8        8
  955     UI       8        8        0        0        0        0        0        0        0        0
  956     UI       0        0        0        0        0        0        0        0        0        0
```



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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  957     UI       0        0        0        0        0        0        0        0        0        0
          *

  958     KK   CPW35COMBINE
  959     HC       3     1.35
          *

  960     KK   SRW35STORAGE
  961     KM        Storage behind Indian School Road
  962     KO
  963     RS       1    STOR
  964     SV             1.46     7.31    19.76    47.29
  965     SQ                             735.39  2080.00
  966     SE  1154.0 1156.00 1158.00 1160.00 1162.00
  967     ST
          *

  968     KK  W35W36ROUTE
  969     KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
  970     KM        Manning's N Value: earth w/ sparse trees and shrubs
  971     RS       2    FLOW
  972     RC   0.032    0.032    0.032     6051   0.0076     0.00
  973     RX  100.00   108.00   116.00   132.00   156.00   172.00   192.00   212.00
  974     RY  1136.2 1136.10 1136.00 1132.00 1132.10 1134.00 1135.00 1136.00
          *

  975     KK     W36BASIN
  976     KM        PASQUELETTI MOUNTAIN RANCH for areas outside Ph1 that have homes
  977     BA   0.720
  978     LG    0.31     0.28     4.00     0.47        4
  979     UI       0       65      101      247      385      507      591      617      609      513
  980     UI     409      329      255      204      160      126      102       76       64       45
  981     UI      45       25       16       16       15       16       16       16        0        0
  982     UI       0        0        0        0        0        0        0        0        0        0
  983     UI       0        0        0        0        0        0        0        0        0        0
          *

  984     KK  DW36REDIVERT
  985     DT    RW36     12.5      0.0
  986     DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
  987     DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
          *

  988     KK   CPW36COMBINE
  989     HC       2     2.07
          *

  990     KK  W36W37ROUTE
  991     KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on aer
  992     KM        Manning's N Value: earth w/ sparse trees and brush
  993     RS       2    FLOW
  994     RC   0.032    0.032    0.032     4527   0.0084     0.00
  995     RX  100.00   112.00   118.00   130.00   154.00   184.00   196.00   208.00
  996     RY  1094.2 1094.10 1094.00 1090.00 1090.10 1094.00 1094.10 1094.20
          *
```



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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  997     KK     W37BASIN
  998     KM        WESTERN LIMIT DEFINED BY JACKRABBIT WASH
  999     KM        CAPACITY APPROX 12,000 CFS, VALENCIA HEIGHTS
 1000     BA   1.210
 1001     LG    0.32     0.31     4.20     0.44        4
 1002     UI       0       96      108      313      489      656      805      894      927      886
 1003     UI     789      650      519      424      350      279      227      187      151      120
 1004     UI     103       74       65       67       26       23       24       23       24       23
 1005     UI      24       23        0        0        0        0        0        0        0        0
 1006     UI       0        0        0        0        0        0        0        0        0        0
          *

 1007     KK   CPW37COMBINE
 1008     HC       2     3.28
```

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                    *

1009                KK    DW37DIVERT
1010                KM        Overtopping of Jackrabbit due to unimproved channel
1011                DT   DW37E     0.0     0.0
1012                DI     0.0  1484.0  2484.0  3484.0     0.0     0.0     0.0     0.0     0.0     0.0
1013                DQ     0.0     0.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
                    *

1014                KK  CPW37BCOMBINE
1015                HC       2  18.448
                    *

1016                KK  W37S60ROUTE
1017                KM        As-Built plans for WT FRS#4 Inlet Improvments
1018                KM        FCD Contract No 94-09, Sta 19+31.29 to 28+00 Cross Section
1019                RS       1    FLOW
1020                RC   0.013   0.013   0.013    8927  0.0015    0.00
1021                RX  100.00  104.60  108.60  112.60  148.60  152.60  156.60  162.40
1022                RY  1051.8 1048.50 1046.50 1045.50 1044.90 1046.90 1048.90 1051.80
                    *

1023                KK  DW58SERETRIEVE
1024                KM        Diverted flow from flow overtopping berm east of 4-10x8 boxes under I-10
1025                DR   DW58S
                    *

1026                KK  W58S60ROUTE
1027                KM        Cross-section: I-10 to Van Buren, FRS #4 Inlet Channel
1028                KM        taken from aerial and topo
1029                KM        Manning's N Value: earth w/ sparse trees and shrubs
1030                RS       1    FLOW
1031                RC   0.035   0.035   0.035    4164  0.0067    0.00
1032                RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
1033                RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
                    *
1                                                HEC-1 INPUT                                                PAGE 26

LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1034                KK  DW38SERETRIEVE
1035                KM        Flow that did not go south thru culverts under I-10 continues east
1036                DR   DW38S
                    *

1037                KK  W38S60ROUTE
1038                KM        Desert, assumed 0.5% side slopes, V-ditch
1039                KM        Manning's N Value: avg value for cultivated areas from
1040                KM        Estimated Manning's Roughness Coefficient for
1041                KM        Stream Channels and Flood Plains in MC
1042                RS       8    FLOW
1043                RC   0.035   0.035   0.035    6303  0.0057    0.00
1044                RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1045                RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
                    *

1046                KK     S60BASIN
1047                KM        WHITE TANKS #3 FRS. S-S-D CURVE FROM JAN 2009 FCDMC CURVES
1048                BA   1.014
1049                LG   0.34    0.34    4.15    0.45       6
1050                UI      0     134     431     837    1174    1303    1147     835     595     419
1051                UI    291     218     144      96      79      33      33      33      33       0
1052                UI      0       0       0       0       0       0       0       0       0       0
1053                UI      0       0       0       0       0       0       0       0       0       0
1054                UI      0       0       0       0       0       0       0       0       0       0
                    *

1055                KK  DS60REDIVERT
1056                KM        Retention volume estimated based on aerial
1057                DT    RS60    18.7     0.0
1058                DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1059                DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                    *

1060                KK   CPS60COMBINE
1061                HC       4  19.462
                    *

1062                KK   SRS60STORAGE
1063                KM        White Tanks #4 from FCDMC 1/8/2009
1064                KO
1065                RS       1    STOR
1066                SV          573.00  573.00  627.00  760.00 1239.00 1263.00 1275.00 1524.00 1787.00
1067                SQ                                                  40.00   50.00 2305.00 7450.00
1068                SE  1039.0 1039.10 1041.80 1042.80 1044.80 1049.60 1049.80 1049.90 1051.80 1053.80
1069                ST
                    *
1070                ZZ
1
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   31         L21
              .
              .
   43         .------->    RL21
   41      DL21RE
              V
              V
   46      L21L22
              .
              .
   53         .         L22
              .           .
              .           .
   65         .           .------->    RL22
   63         .      DL22RE
              .           .
              .           .
   68       CPL22............
              V
              V
   70      L22W01
              .
              .
   77         .         W01
```

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            .           .
            .           .
 86      CPW01............
            V
            V
 88     W01W02
            .
            .
 96         .         W02
            .           .
            .           .
106      CPW02............
            V
            V
108     W02W05
            .
            .
114         .         W03
            .           V
            .           V
123         .      W03W04
            .           .
            .           .
130         .           .         W04
            .           .           .
            .           .           .
139         .       CPW04............
            .           V
            .           V
141         .      W04W05
            .           .
            .           .
148         .           .         W05
            .           .           .
            .           .           .
157      CPW05........................
            .
            .
162         .-------->   DW05S
159     DW05SE
            V
            V
165     W0512A
            .
            .
173         .         W06
            .           .
            .           .
182         .           .         W07
            .           .           .
            .           .           .
191         .       CPW07............
            .           V
            .           V
193         .      W07W08
            .           .
            .           .
201         .           .         W08
            .           .           .
            .           .           .
210         .       CPW08............
            .           .
            .           .
212         .           .         W09
            .           .           .
            .           .           .
221         .       CPW09............
            .           V
            .           V
223         .      W09W10
            .           .
            .           .
231         .           .         W10
            .           .           .
            .           .           .
240         .       CPW10............
            .           .
            .           .
242         .           .         W11
            .           .           .
            .           .           .
251         .       CPW11............
            .           V
            .           V
253         .      W11W12
            .           .
            .           .
260         .           .         W12
            .           .           .
            .           .           .
271         .           .           .          .<-------   DW05S
269         .           .           .      DW05SE
            .           .           .           V
            .           .           .           V
272         .           .           .      W0512B
            .           .           .           .
            .           .           .           .
280      CPW12...................................
            V
            V
282     W12W13
            .
            .
288         .         W13
            .           .
            .           .
297      CPW13............
            V
            V
299     W13W16
            .
            .
306         .         W15
            .           .
            .           .
315         .           .         W14
            .           .           V
            .           .           V
324         .           .      W14W15
            .           .           .
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331          .      CPW15............
             .          V
             .          V
333          .     W15W16
             .          .
             .          .
340          .          .        W16
             .          .          .
             .          .          .
349      CPW16........................
             V
             V
351     W16W20
             .
             .
358          .        W18
             .          .
             .          .
367          .          .        W17
             .          .          V
             .          .          V
376          .          .     W17W18
             .          .          .
             .          .          .
384          .      CPW18............
             .          V
             .          V
386          .     W18W20
             .          .
             .          .
393          .          .        W19
             .          .          V
             .          .          V
403          .          .      SRW19
             .          .          V
             .          .          V
411          .          .     W19W20
             .          .          .
             .          .          .
418          .          .          .        W20
             .          .          .          .
             .          .          .          .
428      CPW20....................................
             V
             V
430      SRW20
             .
             .
438          .        W22
             .          V
             .          V
448          .     W22W23
             .          .
             .          .
455          .          .        W23
             .          .          .
             .          .          .
465          .      CPW23............
             .          V
             .          V
467          .     W23W24
             .          .
             .          .
474          .          .        W24
             .          .          .
             .          .          .
484          .      CPW24............
             .          V
             .          V
486          .     W24W27
             .          .
             .          .
493          .          .        W25
             .          .          V
             .          .          V
503          .          .      SRW25
             .          .          V
             .          .          V
511          .          .     W25W26
             .          .          .
             .          .          .
518          .          .          .        W26
             .          .          .          .
             .          .          .          .
528          .          .      CPW26............
             .          .          V
             .          .          V
530          .          .      SRW26
             .          .          V
             .          .          V
538          .          .     W26W27
             .          .          .
             .          .          .
545          .          .          .        W27
             .          .          .          .
             .          .          .          .
555          .      CPW27........................
             .          V
             .          V
557          .     W27W44
             .          .
             .          .
563          .          .        W43
             .          .          V
             .          .          V
573          .          .      SRW43
             .          .          V
             .          .          V
581          .          .     W43W44
             .          .          .
             .          .          .
588          .          .          .        W44
             .          .          .          .
             .          .          .          .
598          .      CPW44........................
             .          V
             .          V
600          .     W44W46
             .          .
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607          .          .        W45
             .          .         V
             .          .         V
617          .          .     W45W46
             .          .         .
             .          .         .
623          .          .         .        W46
             .          .         .          .
             .          .         .          .
633          .          .     CPW46A............
             .          .         .
             .          .         .
637          .          .         .-------->   RW46
635          .          .     DW46RE
             .          .         .
             .          .         .
640          .     CPW46B............
             .          V
             .          V
642          .     W46W54
             .          .
             .          .
649          .          .        W47
             .          .         .
             .          .         .
659          .          .         .        W48
             .          .         .          .
             .          .         .          .
669          .          .      CPW47............
             .          .         V
             .          .         V
671          .          .     W47W49
             .          .         .
             .          .         .
678          .          .         .        W50
             .          .         .          .
             .          .         .          .
688          .          .         .          .        W49
             .          .         .          .          .
             .          .         .          .          .
698          .          .      CPW49........................
             .          .         V
             .          .         V
700          .          .     W49W51
             .          .         .
             .          .         .
707          .          .         .        W51
             .          .         .          .
             .          .         .          .
717          .          .      CPW51............
             .          .         .
             .          .         .
719          .          .         .        W52
             .          .         .          .
             .          .         .          .
729          .          .      CPW52............
             .          .         V
             .          .         V
731          .          .     W52W53
             .          .         .
             .          .         .
738          .          .         .        W53
             .          .         .          .
             .          .         .          .
748          .          .      CPW53............
             .          .         .
             .          .         .
753          .          .         .-------->   RW53
750          .          .     DW53RE
             .          .         V
             .          .         V
756          .          .     W53W54
             .          .         .
             .          .         .
763          .          .         .        W54
             .          .         .          .
             .          .         .          .
773          .      CPW54........................
             .          V
             .          V
775          .     W54W57
             .          .
             .          .
782          .          .        W56
             .          .         .
             .          .         .
794          .          .         .-------->   RW56
792          .          .     DW56RE
             .          .         V
             .          .         V
797          .          .     W56W57
             .          .         .
             .          .         .
804          .          .         .        W55
             .          .         .          .
             .          .         .          .
816          .          .         .          .-------->  DW55S
814          .          .         .     DW55RE
             .          .         .         V
             .          .         .         V
819          .          .         .     W55W57
             .          .         .          .
             .          .         .          .
826          .          .         .          .        W57
             .          .         .          .          .
             .          .         .          .          .
838          .          .         .          .          .-------->  DW57RE
836          .          .         .          .     DW57RE
             .          .         .          .          .
             .          .         .          .          .
841          .      CPW57....................................
             .          V
             .          V
843          .      SRW57
             .          V
             .          V
851          .     W57W58
             .          .
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858          .          .        W58
             .          .          .
             .          .          .
868          .     CPW58............
             .          V
             .          V
870          .     SRW58
             .          .
             .          .
880          .          .-------->  DW58S
878          .     DW58SE
             .          .
             .          .
883          .          .        W38
             .          .          .
             .          .          .
893          .     CPW38............
             .          .
             .          .
897          .          .-------->  DW38S
895          .     DW38SE
             .          V
             .          V
900          .     W38W37
             .          .
             .          .
906          .          .        W33
             .          .          V
             .          .          V
916          .          .     W33W35
             .          .          .
             .          .          .
923          .          .          .        W34
             .          .          .          V
             .          .          .          V
933          .          .          .      SRW34
             .          .          .          V
             .          .          .          V
941          .          .          .     W34W35
             .          .          .          .
             .          .          .          .
948          .          .          .          .        W35
             .          .          .          .          .
             .          .          .          .          .
958          .          .     CPW35........................
             .          .          V
             .          .          V
960          .          .     SRW35
             .          .          V
             .          .          V
968          .          .     W35W36
             .          .          .
             .          .          .
975          .          .          .        W36
             .          .          .          .
             .          .          .          .
985          .          .          .          .-------->   RW36
984          .          .          .     DW36RE
             .          .          .          .
             .          .          .          .
988          .          .     CPW36............
             .          .          V
             .          .          V
990          .          .     W36W37
             .          .          .
             .          .          .
997          .          .          .        W37
             .          .          .          .
             .          .          .          .
1007         .          .     CPW37............
             .          .          .
             .          .          .
1011         .          .          .-------->  DW37E
1009         .          .     DW37
             .          .          .
             .          .          .
1014         .     CPW37B............
             .          V
             .          V
1016         .     W37S60
             .          .
             .          .
1025         .          .          .<--------  DW58S
1023         .          .     DW58SE
             .          .          V
             .          .          V
1026         .          .     W58S60
             .          .          .
             .          .          .
1036         .          .          .          .<--------  DW38S
1034         .          .          .     DW38SE
             .          .          .          V
             .          .          .          V
1037         .          .          .     W38S60
             .          .          .          .
             .          .          .          .
1046         .          .          .          .        S60
             .          .          .          .          .
             .          .          .          .          .
1057         .          .          .          .          .-------->   RS60
1055         .          .          .          .     DS60RE
             .          .          .          .          .
             .          .          .          .          .
1060         .     CPS60.................................
             .          V
             .          V
1062         .     SRS60
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	L21	194.	13.25	57.	14.	5.	.52		
+	DIVERSION TO	RL21	194.	13.25	57.	14.	5.	.52		

+	HYDROGRAPH AT	DL21RE	0.	.00	0.	0.	0.	.52
+	ROUTED TO	L21L22	0.	.00	0.	0.	0.	.52
+	HYDROGRAPH AT	L22	174.	12.92	38.	10.	3.	.36
+	DIVERSION TO	RL22	174.	12.92	31.	8.	3.	.36
+	HYDROGRAPH AT	DL22RE	56.	13.75	7.	2.	1.	.36
+	2 COMBINED AT	CPL22	56.	13.75	7.	2.	1.	.89
+	ROUTED TO	L22W01	44.	14.00	7.	2.	1.	.89
+	HYDROGRAPH AT	W01	251.	12.25	20.	5.	2.	.19
+	2 COMBINED AT	CPW01	250.	12.25	27.	7.	2.	1.08
+	ROUTED TO	W01W02	196.	12.33	27.	7.	2.	1.08
+	HYDROGRAPH AT	W02	460.	12.33	44.	11.	4.	.39
+	2 COMBINED AT	CPW02	654.	12.33	70.	18.	6.	1.47
+	ROUTED TO	W02W05	610.	12.42	70.	18.	6.	1.47
+	HYDROGRAPH AT	W03	1389.	12.58	268.	79.	26.	1.97
+	ROUTED TO	W03W04	1199.	12.83	268.	79.	26.	1.97
+	HYDROGRAPH AT	W04	1416.	12.58	258.	71.	24.	2.03
+	2 COMBINED AT	CPW04	2357.	12.67	523.	149.	50.	4.01
+	ROUTED TO	W04W05	2225.	12.83	523.	149.	50.	4.01
+	HYDROGRAPH AT	W05	269.	12.42	32.	8.	3.	.32
+	3 COMBINED AT	CPW05	2514.	12.75	618.	173.	58.	5.79
+	DIVERSION TO	DW05S	1498.	12.75	310.	95.	32.	5.79
+	HYDROGRAPH AT	DW05SE	1016.	12.75	309.	77.	26.	5.79
+	ROUTED TO	W0512A	989.	12.92	309.	77.	26.	5.79
+	HYDROGRAPH AT	W06	817.	12.25	97.	28.	9.	.71
+	HYDROGRAPH AT	W07	402.	12.25	43.	13.	4.	.31
+	2 COMBINED AT	CPW07	1216.	12.25	139.	40.	13.	1.02
+	ROUTED TO	W07W08	1095.	12.33	139.	40.	13.	1.02
+	HYDROGRAPH AT	W08	681.	12.17	64.	19.	6.	.44
+	2 COMBINED AT	CPW08	1604.	12.25	203.	59.	20.	1.46
+	HYDROGRAPH AT	W09	521.	12.17	48.	14.	5.	.34
+	2 COMBINED AT	CPW09	2064.	12.25	250.	73.	24.	1.80
+	ROUTED TO	W09W10	1762.	12.33	250.	73.	24.	1.80
+	HYDROGRAPH AT	W10	1366.	12.33	191.	56.	19.	1.34
+	2 COMBINED AT	CPW10	3121.	12.33	440.	128.	43.	3.14
+	HYDROGRAPH AT	W11	864.	12.33	116.	34.	11.	.81
+	2 COMBINED AT	CPW11	3977.	12.33	556.	162.	54.	3.95
+	ROUTED TO	W11W12	2841.	13.00	555.	162.	54.	3.95
+	HYDROGRAPH AT	W12	1189.	12.58	215.	55.	18.	1.87
+	HYDROGRAPH AT	DW05SE	1498.	12.75	310.	95.	32.	5.79
+	ROUTED TO	W0512B	1461.	12.92	309.	95.	32.	5.79

+	4 COMBINED AT	CPW12	5627.	13.00	1321.	372.	124.	11.61
+	ROUTED TO	W12W13	5595.	13.00	1321.	372.	124.	11.61
+	HYDROGRAPH AT	W13	1057.	12.58	188.	48.	16.	1.58
+	2 COMBINED AT	CPW13	6091.	13.00	1486.	414.	139.	13.19
+	ROUTED TO	W13W16	5945.	13.17	1484.	414.	139.	13.19
+	HYDROGRAPH AT	W15	876.	12.50	132.	33.	11.	1.23
+	HYDROGRAPH AT	W14	1486.	12.33	193.	50.	17.	1.58
+	ROUTED TO	W14W15	1340.	12.58	193.	50.	17.	1.58
+	2 COMBINED AT	CPW15	2177.	12.58	324.	82.	27.	2.81
+	ROUTED TO	W15W16	1944.	12.67	324.	82.	27.	2.81
+	HYDROGRAPH AT	W16	581.	12.33	66.	17.	6.	.53
+	3 COMBINED AT	CPW16	6977.	13.08	1822.	500.	167.	16.53
+	ROUTED TO	W16W20	6960.	13.08	1822.	500.	167.	16.53
+	HYDROGRAPH AT	W18	431.	13.50	135.	36.	12.	1.26
+	HYDROGRAPH AT	W17	1460.	12.33	204.	59.	20.	1.50
+	ROUTED TO	W17W18	1296.	12.50	204.	59.	20.	1.50
+	2 COMBINED AT	CPW18	1438.	12.50	337.	95.	32.	2.76
+	ROUTED TO	W18W20	1255.	12.92	337.	95.	32.	2.76
+	HYDROGRAPH AT	W19	1510.	12.25	164.	48.	16.	1.16
+	ROUTED TO	SRW19	0.	.00	0.	0.	0.	1.16
+	ROUTED TO	W19W20	0.	.00	0.	0.	0.	1.16
+	HYDROGRAPH AT	W20	863.	12.42	121.	30.	10.	1.14
+	4 COMBINED AT	CPW20	8098.	13.08	2199.	603.	202.	21.58
+	ROUTED TO	SRW20	0.	.00	0.	0.	0.	21.58
+	HYDROGRAPH AT	W22	1108.	12.17	107.	31.	10.	.78
+	ROUTED TO	W22W23	1073.	12.25	107.	31.	10.	.78
+	HYDROGRAPH AT	W23	1227.	12.17	123.	36.	12.	.90
+	2 COMBINED AT	CPW23	2264.	12.25	230.	67.	22.	1.68
+	ROUTED TO	W23W24	2100.	12.25	229.	67.	22.	1.68
+	HYDROGRAPH AT	W24	623.	12.25	66.	18.	6.	.47
+	2 COMBINED AT	CPW24	2718.	12.25	295.	85.	28.	2.15
+	ROUTED TO	W24W27	2495.	12.33	295.	85.	28.	2.15
+	HYDROGRAPH AT	W25	1198.	12.25	140.	38.	13.	1.10
+	ROUTED TO	SRW25	0.	.00	0.	0.	0.	1.10
+	ROUTED TO	W25W26	0.	.00	0.	0.	0.	1.10
+	HYDROGRAPH AT	W26	812.	12.33	105.	29.	10.	.68
+	2 COMBINED AT	CPW26	810.	12.33	105.	29.	10.	1.78
+	ROUTED TO	SRW26	0.	.00	0.	0.	0.	1.78
+	ROUTED TO	W26W27	0.	.00	0.	0.	0.	1.78
+	HYDROGRAPH AT	W27	561.	12.25	59.	16.	5.	.41

+	3 COMBINED AT	CPW27	2983.	12.33	352.	101.	34.	4.34
+	ROUTED TO	W27W44	2553.	12.42	352.	101.	34.	4.34
+	HYDROGRAPH AT	W43	517.	12.08	45.	15.	5.	.21
+	ROUTED TO	SRW43	0.	.00	0.	0.	0.	.21
+	ROUTED TO	W43W44	0.	.00	0.	0.	0.	.21
+	HYDROGRAPH AT	W44	510.	12.50	68.	17.	6.	.60
+	3 COMBINED AT	CPW44	3046.	12.42	418.	117.	39.	5.15
+	ROUTED TO	W44W46	3030.	12.50	418.	117.	39.	5.15
+	HYDROGRAPH AT	W45	1302.	12.25	155.	40.	13.	1.03
+	ROUTED TO	W45W46	1134.	12.58	155.	40.	13.	1.03
+	HYDROGRAPH AT	W46	1085.	12.50	148.	42.	14.	.93
+	2 COMBINED AT	CPW46A	2199.	12.50	303.	81.	27.	1.96
+	DIVERSION TO	RW46	1331.	12.50	132.	33.	11.	1.96
+	HYDROGRAPH AT	DW46RE	868.	12.50	171.	48.	16.	1.96
+	2 COMBINED AT	CPW46B	3823.	12.50	578.	162.	54.	7.11
+	ROUTED TO	W46W54	3746.	12.58	578.	162.	54.	7.11
+	HYDROGRAPH AT	W47	794.	12.25	95.	28.	9.	.67
+	HYDROGRAPH AT	W48	444.	12.25	51.	15.	5.	.35
+	2 COMBINED AT	CPW47	1236.	12.25	146.	43.	14.	1.02
+	ROUTED TO	W47W49	1152.	12.33	146.	43.	14.	1.02
+	HYDROGRAPH AT	W50	1126.	12.42	185.	54.	18.	1.35
+	HYDROGRAPH AT	W49	490.	12.25	55.	16.	5.	.38
+	3 COMBINED AT	CPW49	2574.	12.33	385.	112.	37.	2.75
+	ROUTED TO	W49W51	2390.	12.42	384.	112.	37.	2.75
+	HYDROGRAPH AT	W51	166.	12.33	16.	4.	1.	.15
+	2 COMBINED AT	CPW51	2530.	12.42	400.	116.	39.	2.90
+	HYDROGRAPH AT	W52	987.	12.42	137.	37.	12.	1.12
+	2 COMBINED AT	CPW52	3509.	12.42	536.	153.	51.	4.02
+	ROUTED TO	W52W53	3259.	12.50	535.	153.	51.	4.02
+	HYDROGRAPH AT	W53	909.	12.17	66.	18.	6.	.57
+	2 COMBINED AT	CPW53	3426.	12.50	601.	170.	57.	4.59
+	DIVERSION TO	RW53	941.	12.50	87.	22.	7.	4.59
+	HYDROGRAPH AT	DW53RE	2486.	12.50	514.	148.	50.	4.59
+	ROUTED TO	W53W54	2364.	12.67	513.	148.	50.	4.59
+	HYDROGRAPH AT	W54	1096.	12.42	139.	40.	13.	.98
+	3 COMBINED AT	CPW54	6695.	12.58	1184.	337.	113.	12.68
+	ROUTED TO	W54W57	6501.	12.67	1183.	337.	113.	12.68
+	HYDROGRAPH AT	W56	644.	12.25	46.	12.	4.	.45
+	DIVERSION TO	RW56	644.	12.25	46.	12.	4.	.45
+	HYDROGRAPH AT	DW56RE	0.	.00	0.	0.	0.	.45

+	ROUTED TO	W56W57	0.	.00	0.	0.	0.	.45
+	HYDROGRAPH AT	W55	585.	12.25	65.	19.	6.	.50
+	DIVERSION TO	DW55S	426.	12.25	30.	8.	3.	.50
+	HYDROGRAPH AT	DW55RE	159.	12.25	34.	11.	4.	.50
+	ROUTED TO	W55W57	144.	12.58	34.	11.	4.	.50
+	HYDROGRAPH AT	W57	1425.	12.42	169.	49.	16.	1.16
+	DIVERSION TO	DW57RE	651.	12.08	37.	11.	4.	1.16
+	HYDROGRAPH AT	DW57RE	1425.	12.42	144.	38.	13.	1.16
+	4 COMBINED AT	CPW57	7483.	12.58	1338.	380.	127.	14.79
+	ROUTED TO	SRW57	7274.	12.67	1338.	364.	121.	14.79
+	ROUTED TO	W57W58	7265.	12.67	1338.	364.	121.	14.79
+	HYDROGRAPH AT	W58	197.	12.25	19.	5.	2.	.13
+	2 COMBINED AT	CPW58	7290.	12.67	1354.	369.	123.	14.92
+	ROUTED TO	SRW58	5850.	12.92	1354.	369.	123.	14.92
+	DIVERSION TO	DW58S	4799.	12.92	1281.	350.	117.	14.92
+	HYDROGRAPH AT	DW58SE	1051.	12.92	73.	18.	6.	14.92
+	HYDROGRAPH AT	W38	272.	12.33	32.	8.	3.	.25
+	2 COMBINED AT	CPW38	1097.	12.92	102.	26.	9.	15.17
+	DIVERSION TO	DW38S	467.	12.75	71.	18.	6.	15.17
+	HYDROGRAPH AT	DW38SE	630.	12.92	31.	8.	3.	15.17
+	ROUTED TO	W38W37	527.	13.08	31.	8.	3.	15.17
+	HYDROGRAPH AT	W33	795.	12.42	95.	25.	8.	.84
+	ROUTED TO	W33W35	744.	12.50	95.	25.	8.	.84
+	HYDROGRAPH AT	W34	291.	12.25	33.	10.	3.	.23
+	ROUTED TO	SRW34	0.	.00	0.	0.	0.	.23
+	ROUTED TO	W34W35	0.	.00	0.	0.	0.	.23
+	HYDROGRAPH AT	W35	273.	12.33	31.	8.	3.	.28
+	3 COMBINED AT	CPW35	985.	12.42	125.	33.	11.	1.35
+	ROUTED TO	SRW35	784.	12.67	114.	29.	10.	1.35
+	ROUTED TO	W35W36	707.	12.83	113.	29.	10.	1.35
+	HYDROGRAPH AT	W36	578.	12.50	81.	21.	7.	.72
+	DIVERSION TO	RW36	494.	12.33	24.	6.	2.	.72
+	HYDROGRAPH AT	DW36RE	578.	12.50	58.	15.	5.	.72
+	2 COMBINED AT	CPW36	1050.	12.75	171.	44.	15.	2.07
+	ROUTED TO	W36W37	1010.	12.92	170.	44.	15.	2.07
+	HYDROGRAPH AT	W37	860.	12.58	134.	35.	12.	1.21
+	2 COMBINED AT	CPW37	1651.	12.75	302.	78.	26.	3.28
+	DIVERSION TO	DW37E	167.	12.75	6.	1.	0.	3.28
+	HYDROGRAPH AT	DW37	1484.	12.67	297.	77.	26.	3.28
+	2 COMBINED AT	CPW37B	1597.	13.00	301.	78.	26.	18.45

+	ROUTED TO	W37S60	1476.	13.17	299.	78.	26.	18.45
+	HYDROGRAPH AT	DW58SE	4799.	12.92	1281.	350.	117.	14.92
+	ROUTED TO	W58S60	4776.	13.00	1281.	350.	117.	14.92
+	HYDROGRAPH AT	DW38SE	467.	12.75	71.	18.	6.	15.17
+	ROUTED TO	W38S60	408.	13.50	70.	18.	6.	15.17
+	HYDROGRAPH AT	S60	1092.	12.33	113.	30.	10.	1.01
+	DIVERSION TO	RS60	822.	12.17	36.	9.	3.	1.01
+	HYDROGRAPH AT	DS60RE	1092.	12.33	80.	21.	7.	1.01
+	4 COMBINED AT	CPS60	6461.	13.08	1703.	459.	153.	19.46
+	ROUTED TO	SRS60	0.	.00	0.	0.	0.	19.46

*** NORMAL END OF HEC-1 ***

Future Conditions HEC-1 (MB01)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************                                    ****************************************
*                                      *                                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
*             JUN   1998               *                                    *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.1                *                                    *         609 SECOND STREET            *
*                                      *                                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   19AUG09  TIME  09:28:43  *                                    *          (916) 756-1104              *
*                                      *                                    *                                      *
****************************************                                    ****************************************

                                        X     X  XXXXXXX   XXXXX           X
                                        X     X  X        X     X         XX
                                        X     X  X        X               X
                                        XXXXXXX  XXXX     X        XXXXX  X
                                        X     X  X        X               X
                                        X     X  X        X    X          X
                                        X     X  XXXXXXX   XXXXX         XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                                HEC-1 INPUT                                                    PAGE  1

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID        Flood Control District of Maricopa County
  2           ID        L303_FU_MB01 - Loop 303/ White Tanks ADMPU AHA
  3           ID        100 YEAR
  4           ID        24 Hour Storm
  5           ID        Unit Hydrograph: S-Graph
  6           ID        08/18/2009
  7           ID            FCDMC CONTRACT 2007C031
  8           ID            BY HDR ENGINEERING (#79902)
  9           ID            FUTURE CONDITIONS-AUGUST 2009
 10           ID            MAJOR BASIN 01
 11           ID            FILE NAME: FU-MB01.DAT
 12           IT       5       0       0    2000
 13           IN      15
 14           IO       5
              *DIAGRAM
              *
 15           JD   3.480  0.0001
 16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
 18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
 19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
 26           JD   3.393     5.0
 27           JD   3.306    10.0
 28           JD   3.219    20.0
 29           JD   3.132    30.0
 30           JD   3.028    60.0
 31           JD   2.965    90.0
 32           JD   2.927   120.0
              *

 33           KK     N07BASIN
 34           KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
 35           BA   0.570
 36           LG    0.16    0.25    5.40    0.30      61
 37           UI       0     107     405     604     990     931     612     389     172     105
 38           UI      36      29      29       0       0       0       0       0       0       0
 39           UI       0       0       0       0       0       0       0       0       0       0
 40           UI       0       0       0       0       0       0       0       0       0       0
 41           UI       0       0       0       0       0       0       0       0       0       0
              *

 42           KK  DN07REDIVERT
 43           KM        Additional Retention based on 100yr 2hr retention.
 44           KM        C value is based on future land use, P=2.7, A=acres
 45           DT    RN07    56.1     0.0
 46           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 47           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                                HEC-1 INPUT                                                    PAGE  2

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 48           KK   DN07ADIVERT
 49           KM        Divert portion through openings in Corte Bella perimeter walls
 50           DT  DN07AS     0.0     0.0
 51           DI     0.0     9.0    64.0   243.0  1000.0     0.0     0.0     0.0     0.0     0.0
 52           DQ     0.0     0.0    26.0   116.0   116.0     0.0     0.0     0.0     0.0     0.0
              *

 53           KK   DN07BDIVERT
 54           KM        Divert portion through openings in Corte Bella perimeter walls
 55           DT  DN07BS     0.0     0.0
 56           DI     0.0    11.4    22.9   152.3   289.9  1000.0     0.0     0.0     0.0     0.0
 57           DQ     0.0     0.0     4.9    69.1   127.9   127.9     0.0     0.0     0.0     0.0
              *

 58           KK   DN07CDIVERT
 59           KM        Divert portion through openings in Corte Bella perimeter walls
 60           DT  DN07CS     0.0     0.0
 61           DI     0.0    64.4   209.0   452.0  1000.0     0.0     0.0     0.0     0.0     0.0
 62           DQ     0.0     0.0    38.0   107.0   107.0     0.0     0.0     0.0     0.0     0.0
              *

 63           KK   DN07DDIVERT
 64           KM        Divert at Corte Bella
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 65          DT  DN07DS      0.0      0.0
 66          DI     0.0    138.7    164.6    352.2    558.0   1000.0      0.0      0.0      0.0      0.0
 67          DQ     0.0    138.7    159.8    299.2    450.0    450.0      0.0      0.0      0.0      0.0
             *

 68          KK  N07N06ROUTE
 69          KM        Pleasant Valley Country Club Master Drainage Plan
 70          KM        by DEI dated May 17, 2001
 71          RS       1    FLOW
 72          RC   0.035    0.035    0.035     6607   0.0045     0.00
 73          RX  100.00   120.00   140.00   152.00   156.00   168.00   183.00   198.00
 74          RY  1042.5 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1042.20
             *

 75          KK     N01BASIN
 76          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION BOUNDARY
 77          KM        GRAND AVE AND MCMICKEN DAM
 78          BA   0.345
 79          LG    0.14     0.24     4.60     0.44       51
 80          UI       0      180      550      948      595      255       94       27        0        0
 81          UI       0        0        0        0        0        0        0        0        0        0
 82          UI       0        0        0        0        0        0        0        0        0        0
 83          UI       0        0        0        0        0        0        0        0        0        0
 84          UI       0        0        0        0        0        0        0        0        0        0
             *
1                                          HEC-1 INPUT                                                    PAGE  3
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 85          KK  DN01REDIVERT
 86          KM        Additional Retention based on 100yr 2hr retention.
 87          KM        C value is based on future land use, P=2.7, A=acres
 88          DT    RN01     27.9      0.0
 89          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 90          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

 91          KK    N02ABASIN
 92          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER
 93          KM        DRAINAGE PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT
 94          KM        AS-BUILT CONDITIONS AND MC MICKEN DAM
 95          BA   0.083
 96          LG    0.10     0.24     5.00     0.39       30
 97          UI       0       11       37       60       80      129      108       80       59       32
 98          UI      19       12        6        3        3        4        0        0        0        0
 99          UI       0        0        0        0        0        0        0        0        0        0
100          UI       0        0        0        0        0        0        0        0        0        0
101          UI       0        0        0        0        0        0        0        0        0        0
             *

102          KK  DN02ARDIVERT
103          KM        Additional Retention based on 100yr 2hr retention.
104          KM        C value is based on future land use, P=2.7, A=acres
105          DT   RN02A      8.4      0.0
106          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
107          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

108          KK  N2AN01ROUTE
109          KM        Cross-section: cross-section from aerial
110          KM        Manning's N Value: Natural desert wash with vegetation
111          RS       1    FLOW
112          RC   0.035    0.035    0.035     2386   0.0010     0.00
113          RX  100.00   120.00   140.00   149.00   150.00   160.00   180.00   200.00
114          RY  1000.0   999.50   999.00   997.00   997.10   999.00   999.50  1000.00
             *

115          KK   CPN01COMBINE
116          HC       2   0.428
             *

117          KK  N01N02ROUTE
118          KM        Cross-section:  / Manning's N Value: Concrete channel
119          KM        10-ft bottom, with 2:1 side slopes, left and right
120          KM        Mannings N Value: clean earth, straight
121          RS       1    FLOW
122          RC   0.022    0.016    0.022     3902   0.0051     0.00
123          RX  100.00   100.10   112.00   122.00   132.00   142.00   153.90   154.00
124          RY  1300.0 1295.25 1295.00 1290.00 1290.10 1295.00 1295.25 1300.00
             *
1                                          HEC-1 INPUT                                                    PAGE  4
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

125          KK     N02BASIN
126          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
127          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
128          BA   0.510
129          LG    0.20     0.25     5.20     0.33       21
130          UI       0      150      511      824     1102      698      371      157       71       31
131          UI      31        0        0        0        0        0        0        0        0        0
132          UI       0        0        0        0        0        0        0        0        0        0
133          UI       0        0        0        0        0        0        0        0        0        0
134          UI       0        0        0        0        0        0        0        0        0        0
             *

135          KK  DN02REDIVERT
136          KM        Sun City West Expansion Area 2
137          KM        Additional Retention based on 100yr 2hr retention.
138          KM        C value is based on future land use, P=2.7, A=acres
139          DT    RN02     38.4      0.0
140          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
141          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

142          KK    N03ABASIN
143          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
144          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
145          KM        MICKEN DAM
146          BA   0.065
147          LG    0.17     0.24     4.90     0.38       21
148          UI       0       14       50       76      126      101       66       35       17        9
149          UI       4        3        0        0        0        0        0        0        0        0
150          UI       0        0        0        0        0        0        0        0        0        0
151          UI       0        0        0        0        0        0        0        0        0        0
152          UI       0        0        0        0        0        0        0        0        0        0
             *
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153          KK  DN03ARDIVERT
154          KM        Additional Retention based on 100yr 6hr retention.
155          KM        C value is based on future land use, P=2.7, A=acres
156          DT   RN03A      4.1      0.0
157          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
158          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

159          KK  N3AN02ROUTE
160          KM        Cross-section:  / Manning's N Value: Golf course channel
161          RS       12     FLOW
162          RC   0.025    0.025    0.025     5514  0.0054     0.00
163          RX  100.00   120.00   140.00   180.00  280.00   340.00   360.00   380.00
164          RY  1000.0   998.50   997.40   995.00  995.00   997.70   998.70  1000.00
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

165          KK   CPN02COMBINE
166          HC        3   1.003
             *

167          KK  N02N3BROUTE
168          KM        Cross-section:  / Manning's N Value: Golf course channel
169          KM        Route is from CPN02 to CPN03B
170          RS        9     FLOW
171          RC   0.025    0.025    0.025     3992  0.0020     0.00
172          RX  100.00   130.00   150.00   155.00  215.00   220.00   230.00   245.00
173          RY  1288.5  1286.00  1283.00  1282.50 1282.60  1283.00  1285.00  1286.00
             *

174          KK    N03BBASIN
175          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
176          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
177          BA   0.285
178          LG    0.23     0.25     4.80     0.36       30
179          UI       0      109      342      619      573      335      131       58       19       20
180          UI       0        0        0        0        0        0        0        0        0        0
181          UI       0        0        0        0        0        0        0        0        0        0
182          UI       0        0        0        0        0        0        0        0        0        0
183          UI       0        0        0        0        0        0        0        0        0        0
             *

184          KK  DN3BREDIVERT
185          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
186          DT   RN03B      8.0      0.0
187          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
188          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

189          KK  CPN03BCOMBINE
190          HC        2   1.288
             *

191          KK  N3BN04ROUTE
192          KM        Cross-section:  / Manning's N Value: Golf course channel
193          KM        Route is from CPN03B to CPN04
194          RS        8     FLOW
195          RC   0.025    0.025    0.025     5663  0.0020     0.00
196          RX  100.00   110.00   120.00   150.00  300.00   330.00   340.00   350.00
197          RY  1000.0   999.00   998.00   996.00  996.10   998.00   999.00  1000.00
             *

198          KK     N04BASIN
199          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
200          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
201          BA   0.992
202          LG    0.21     0.25     5.40     0.29       26
203          UI       0      109      275      516      663      871     1299     1124      873      660
204          UI     493      272      185      123       79       33       34       34       34        0
205          UI       0        0        0        0        0        0        0        0        0        0
206          UI       0        0        0        0        0        0        0        0        0        0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

207          UI       0        0        0        0        0        0        0        0        0        0
             *

208          KK     N03BASIN
209          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
210          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS
211          BA   0.358
212          LG    0.24     0.26     4.65     0.39       27
213          UI       0      105      359      578      774      490      261      110       50       21
214          UI      22        0        0        0        0        0        0        0        0        0
215          UI       0        0        0        0        0        0        0        0        0        0
216          UI       0        0        0        0        0        0        0        0        0        0
217          UI       0        0        0        0        0        0        0        0        0        0
             *

218          KK  DN03REDIVERT
219          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
220          KM        Additional Retention based on 100yr 2hr retention.
221          KM        C value is based on future land use, P=2.7, A=acres
222          DT    RN03     10.0      0.0
223          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
224          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

225          KK  N03N04ROUTE
226          KM        Cross-section:  / Manning's N Value: Golf course channel
227          RS        8     FLOW
228          RC   0.025    0.025    0.025     7853  0.0035     0.00
229          RX  100.00   140.00   175.00   260.00  350.00   415.50   445.00   475.00
230          RY  1000.0   999.00   998.00   995.00  995.00   998.00   999.00  1000.00
             *

231          KK    N04ABASIN
232          KM        BASIN BOUNDARY FROM SUN CITY WEST EXPANSION AREA MASTER DRAINAGE
233          KM        PLAN, JAN 1992, MODIFIED SLIGHTLY TO REFLECT AS-BUILT CONDITIONS AND MC
234          KM        MICKEN DAM
235          BA   0.199
236          LG    0.13     0.24     5.20     0.34       30
237          UI       0       78      246      447      392      229       85       37       14        0
238          UI       0        0        0        0        0        0        0        0        0        0
239          UI       0        0        0        0        0        0        0        0        0        0
240          UI       0        0        0        0        0        0        0        0        0        0
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241          UI       0       0       0       0       0       0       0       0       0       0
             *

242          KK  DN04ARDIVERT
243          KM        Additional Retention based on 100yr 2hr retention.
244          KM        C value is based on future land use, P=2.7, A=acres
245          DT   RN04A    15.8     0.0
246          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
247          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
1                                    HEC-1 INPUT                                          PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

248          KK  N4AN04ROUTE
249          KM        Cross-section:  / Manning's N Value: Golf course channel
250          KM        Route is from N04A to CPN04
251          RS      30    FLOW
252          RC   0.025   0.025   0.025    7932  0.0044    0.00
253          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
254          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

255          KK    N04BBASIN
256          KM        BASIN BOUNDARY FROM CORTE BELLA AND MCMICKEN DAM
257          BA   0.131
258          LG    0.23    0.24    4.80    0.37      30
259          UI       0     166     499     273      59      16       0       0       0       0
260          UI       0       0       0       0       0       0       0       0       0       0
261          UI       0       0       0       0       0       0       0       0       0       0
262          UI       0       0       0       0       0       0       0       0       0       0
263          UI       0       0       0       0       0       0       0       0       0       0
             *

264          KK  DN04BRDIVERT
265          KM        Additional Retention based on 100yr 2hr retention.
266          KM        C value is based on future land use, P=2.7, A=acres
267          DT   RN04B     9.9     0.0
268          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
269          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

270          KK  N4BN04ROUTE
271          KM        Cross-section:  / Manning's N Value: Golf course channel
272          KM        Route is from N04B to CPN04
273          RS      45    FLOW
274          RC   0.025   0.025   0.025    6839  0.0050    0.00
275          RX  100.00  110.00  120.00  150.00  300.00  330.00  340.00  350.00
276          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
             *

277          KK   CPN04COMBINE
278          HC       5   2.968
             *

279          KK  DN04REDIVERT
280          KM        Master Drainage Plan for Del Webb's Sun City West - Expansion Area
281          KM        Additional Retention based on 100yr 2hr retention.
282          KM        C value is based on future land use, P=2.7, A=acres
283          DT    RN04    96.0     0.0
284          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
285          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
1                                    HEC-1 INPUT                                          PAGE  8

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

286          KK  N04N05ROUTE
287          KM        Cross-section:  / Manning's N Value: Golf course channel
288          RS      12    FLOW
289          RC   0.025   0.025   0.025    5405  0.0019    0.00
290          RX  100.00  120.00  136.00  153.00  236.00  253.00  270.00  290.00
291          RY  1270.5 1268.50 1266.70 1265.00 1264.90 1266.70 1268.50 1270.50
             *

292          KK     N05BASIN
293          KM        BASIN BOUNDARY FROM CORTEBELLA MASTER DRAINAGE REPORT, DEI
294          BA   0.995
295          LG    0.21    0.19    6.60    0.18      27
296          UI       0      94     174     388     510     626     795    1151     988     786
297          UI     624     502     363     200     159     108      86      30      28      29
298          UI      29      29       0       0       0       0       0       0       0       0
299          UI       0       0       0       0       0       0       0       0       0       0
300          UI       0       0       0       0       0       0       0       0       0       0
             *

301          KK  DN05REDIVERT
302          KM        First flush volume estimated based on aerial and Preliminary
303          KM        Plat Final Drainage Report for Corte Bella Country Club Phase II
304          KM        Route through Corte Bella
305          DT    RN05    15.6     0.0
306          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
307          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

308          KK   DN07ARETRIEVE
309          DR  DN07AS
             *

310          KK  N7AN05ROUTE
311          KM        Route through Corte Bella
312          RS      16    FLOW
313          RC   0.035   0.030   0.035   10408  0.0050    0.00
314          RX  1000.0 1004.00 1262.00 1272.00 1282.00 1290.00 1296.00 1300.00
315          RY  1288.0 1286.00 1286.00 1284.00 1283.90 1286.00 1286.00 1288.00
             *

316          KK   DN07BRETRIEVE
317          DR  DN07BS
             *

318          KK  N7BN05ROUTE
319          KM        Route through Corte Bella
320          RS      21    FLOW
321          RC   0.035   0.030   0.035    8067  0.0067    0.00
322          RX  100.00  120.00  196.00  200.00  300.00  301.00  380.00  400.00
323          RY  1285.0 1284.00 1281.00 1280.00 1279.90 1281.00 1284.00 1285.00
             *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 324          KK   DN07CRETRIEVE
 325          DR  DN07CS
              *

 326          KK  N7CN05ROUTE
 327          KM        Route through Corte Bella
 328          RS       1    FLOW
 329          RC   0.035   0.030   0.035    6212  0.0050    0.00
 330          RX  1000.0 1004.00 1264.00 1272.00 1282.00 1290.00 1296.00 1300.00
 331          RY  1279.0 1277.00 1277.00 1275.00 1274.90 1277.00 1277.00 1279.00
              *

 332          KK   CPN05COMBINE
 333          HC       5   4.533
              *

 334          KK  N05N06ROUTE
 335          KM        Cross-section:  / Manning's N Value: clean earth, earth
 336          KM        with sparse trees and shrubs, and pavement
 337          RS       2    FLOW
 338          RC   0.032   0.022   0.013    2139  0.0010    0.00
 339          RX  100.00  250.00  306.00  326.00  338.00  360.00  414.00  415.00
 340          RY  1001.0  999.50  999.00  996.00  996.10  999.00  999.50 1002.00
              *

 341          KK     N06BASIN
 342          KM        BASIN BOUNDARY FROM CORTE BELLA,
 343          KM        SUN CITY WEST AND MCMICKEN DAM
 344          BA   0.219
 345          LG    0.25    0.25    4.40    0.45      26
 346          UI       0      34     134     202     304     380     256     178      94      52
 347          UI      30      10      10      11       0       0       0       0       0       0
 348          UI       0       0       0       0       0       0       0       0       0       0
 349          UI       0       0       0       0       0       0       0       0       0       0
 350          UI       0       0       0       0       0       0       0       0       0       0
              *

 351          KK  DN06REDIVERT
 352          KM        Additional Retention based on 100yr 2hr retention.
 353          KM        C value is based on future land use, P=2.7, A=acres
 354          DT    RN06    14.3     0.0
 355          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 356          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 357          KK   CPN06COMBINE
 358          HC       3   4.752
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 359          KK     N08BASIN
 360          KM        BASIN BOUNDARY FROM SUN CITY WEST
 361          BA   1.723
 362          LG    0.21    0.23    6.20    0.21      26
 363          UI       0     137     157     482     653     788     924    1129    1601    1617
 364          UI    1248    1089     868     725     591     341     238     226     137     129
 365          UI      42      42      42      42      42      42       0       0       0       0
 366          UI       0       0       0       0       0       0       0       0       0       0
 367          UI       0       0       0       0       0       0       0       0       0       0
              *

 368          KK     N10BASIN
 369          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 370          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 371          BA   0.638
 372          LG    0.21    0.25    4.60    0.43      24
 373          UI       0      82     259     433     568     882     875     636     474     314
 374          UI     150     111      65      25      26      25       0       0       0       0
 375          UI       0       0       0       0       0       0       0       0       0       0
 376          UI       0       0       0       0       0       0       0       0       0       0
 377          UI       0       0       0       0       0       0       0       0       0       0
              *

 378          KK  N10N11ROUTE
 379          KM        Cross-section:  / Manning's N Value: Golf course channel, Section E
 380          RS       5    FLOW
 381          RC   0.025   0.025   0.025    5755  0.0023    0.00
 382          RX  100.00  110.00  120.00  140.00  280.00  300.00  310.00  320.00
 383          RY  1000.0  999.00  998.00  996.00  996.10  998.00  999.00 1000.00
              *

 384          KK     N11BASIN
 385          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 386          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 387          BA   0.699
 388          LG    0.22    0.25    5.10    0.33      25
 389          UI       0      95     338     534     733    1142     888     651     464     225
 390          UI     147      91      29      30      29       0       0       0       0       0
 391          UI       0       0       0       0       0       0       0       0       0       0
 392          UI       0       0       0       0       0       0       0       0       0       0
 393          UI       0       0       0       0       0       0       0       0       0       0
              *

 394          KK   CPN11COMBINE
 395          HC       2   1.337
              *

 396          KK  N11N09ROUTE
 397          KM        Cross-section: cross section determined from aerial
 398          KM        street section / Manning's N Value: Street
 399          RS       3    FLOW
 400          RC   0.032   0.013   0.032    9488  0.0029    0.00
 401          RX  100.00  100.50  106.00  106.10  150.00  150.10  155.50  156.00
 402          RY  1003.0  999.90  999.90  999.30  999.30  999.80 1000.00 1003.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 403          KK     N09BASIN
 404          KM        BASIN BOUNDARY FROM SUN CITY WEST
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 405          BA   0.877
 406          LG    0.19    0.25    5.20    0.33      30
 407          UI       0      87     178     377     484     616     825    1063     834     662
 408          UI     517     405     241     150     120      87      33      27      27      26
 409          UI      27       0       0       0       0       0       0       0       0       0
 410          UI       0       0       0       0       0       0       0       0       0       0
 411          UI       0       0       0       0       0       0       0       0       0       0
              *

 412          KK     N14BASIN
 413          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 414          KM        MODIFIED FOR AS-BUILT CONDITIONS. APPROXIMATED ON-SITE RETENTION
 415          KM        NO TOPO AVAILABLE
 416          BA   0.509
 417          LG    0.14    0.23    5.40    0.31      18
 418          UI       0     110     399     604     993     787     512     268     134      66
 419          UI      27      28       0       0       0       0       0       0       0       0
 420          UI       0       0       0       0       0       0       0       0       0       0
 421          UI       0       0       0       0       0       0       0       0       0       0
 422          UI       0       0       0       0       0       0       0       0       0       0
              *

 423          KK  DN14REDIVERT
 424          KM        Hillcrest Golf Course and Lake
 425          KM        No topo available
 426          KM        Additional Retention based on 100yr 2hr retention.
 427          KM        C value is based on future land use, P=2.7, A=acres
 428          DT    RN14   224.8     0.0
 429          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 430          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

 431          KK   CPN09COMBINE
 432          HC       3   2.723
              *

 433          KK  N09N18ROUTE
 434          KM        Cross-section: Street section
 435          RS       1    FLOW
 436          RC   0.032   0.013   0.032    4145  0.0072    0.00
 437          RX  100.00  100.50  105.00  105.50  132.50  133.00  137.50  138.00
 438          RY  1004.0  999.90  999.80  999.30  999.29  999.80  999.90 1004.00
              *

 439          KK     N18BASIN
 440          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 441          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 442          BA   0.441
 443          LG    0.24    0.25    5.40    0.27      37
 444          UI       0     121     413     650     950     623     367     151      77      25
 445          UI      26       0       0       0       0       0       0       0       0       0
 446          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 447          UI       0       0       0       0       0       0       0       0       0       0
 448          UI       0       0       0       0       0       0       0       0       0       0
              *

 449          KK   CPN18COMBINE
 450          HC       2   3.164
              *

 451          KK  N18N15ROUTE
 452          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
 453          RS       1    FLOW
 454          RC   0.016   0.016   0.016    6125  0.0039    0.00
 455          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
 456          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
              *

 457          KK     N12BASIN
 458          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 459          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 460          BA   0.782
 461          LG    0.17    0.15    8.40    0.10      28
 462          UI       0      66      91     245     325     398     475     610     837     672
 463          UI     550     460     370     297     193     115     109      67      58      20
 464          UI      21      20      20      20       0       0       0       0       0       0
 465          UI       0       0       0       0       0       0       0       0       0       0
 466          UI       0       0       0       0       0       0       0       0       0       0
              *

 467          KK  N12N13ROUTE
 468          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section H
 469          RS       1    FLOW
 470          RC   0.016   0.016   0.016    1089  0.0055    0.00
 471          RX  100.00  101.00  102.00  109.00  131.00  140.00  141.00  142.00
 472          RY  1000.2 1000.10 1000.00  993.50  993.60 1000.00 1000.10 1000.20
              *

 473          KK     N13BASIN
 474          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 475          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 476          BA   0.724
 477          LG    0.22    0.23    6.20    0.20      38
 478          UI       0      58      73     211     286     342     408     500     727     654
 479          UI     518     445     359     294     220     128     100      82      59      39
 480          UI      18      18      18      19      18       0       0       0       0       0
 481          UI       0       0       0       0       0       0       0       0       0       0
 482          UI       0       0       0       0       0       0       0       0       0       0
              *

 483          KK   CPN13COMBINE
 484          HC       2   1.506
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 485          KK  N13N15ROUTE
 486          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
 487          RS       2    FLOW
 488          RC   0.016   0.016   0.016    7633  0.0039    0.00
 489          RX  100.00  101.00  102.00  112.00  150.00  160.00  161.00  162.00
 490          RY  1180.2 1180.10 1180.00 1173.00 1172.90 1180.00 1180.10 1180.20
              *
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 491          KK     N16BASIN
 492          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 493          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 494          BA   0.285
 495          LG    0.14     0.25     5.10     0.36       49
 496          UI       0      109      349      628      569      331      127       55       19       20
 497          UI       0        0        0        0        0        0        0        0        0        0
 498          UI       0        0        0        0        0        0        0        0        0        0
 499          UI       0        0        0        0        0        0        0        0        0        0
 500          UI       0        0        0        0        0        0        0        0        0        0
              *

 501          KK  DN16REDIVERT
 502          KM        Additional Retention based on 100yr 2hr retention.
 503          KM        C value is based on future land use, P=2.7, A=acres
 504          DT    RN16     14.2      0.0
 505          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 506          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 507          KK  N16N15ROUTE
 508          KM        Cross-section:  / Manning's N Value: Concrete Channel, Section I
 509          RS       1    FLOW
 510          RC   0.016    0.016    0.016     1241   0.0012     0.00
 511          RX  100.00   101.00   102.00   112.00   150.00   160.00   161.00   162.00
 512          RY  1180.2  1180.10  1180.00  1173.00  1172.90  1180.00  1180.10  1180.20
              *

 513          KK     N15BASIN
 514          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 515          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 516          BA   0.852
 517          LG    0.23     0.25     5.40     0.27       37
 518          UI       0      106      324      548      727     1066     1212      871      655      458
 519          UI     226      164      106       35       33       32       33        0        0        0
 520          UI       0        0        0        0        0        0        0        0        0        0
 521          UI       0        0        0        0        0        0        0        0        0        0
 522          UI       0        0        0        0        0        0        0        0        0        0
              *

 523          KK   CPN15COMBINE
 524          HC       4    5.807
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 525          KK  N15N17ROUTE
 526          KM        Cross-section: From Sun City West Development Master Plan
 527          RS       1    FLOW
 528          RC   0.016    0.016    0.016     3182   0.0031     0.00
 529          RX  100.00   101.00   101.50   108.00   140.00   147.50   149.00   150.00
 530          RY  1000.0   999.90   999.80   993.00   992.90   999.80   999.90  1000.00
              *

 531          KK     N17BASIN
 532          KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 533          KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 534          BA   1.291
 535          LG    0.22     0.25     5.40     0.28       29
 536          UI       0      125      245      530      691      855     1107     1555     1250      998
 537          UI     790      631      417      221      198      126       79       39       38       38
 538          UI      39        0        0        0        0        0        0        0        0        0
 539          UI       0        0        0        0        0        0        0        0        0        0
 540          UI       0        0        0        0        0        0        0        0        0        0
              *

 541          KK   CPN17COMBINE
 542          HC       2    7.098
              *

 543          KK     N20BASIN
 544          KM        BASIN BOUNDARY FROM APS YARD AND ATSF RR ALIGNMENT
 545          BA   0.088
 546          LG    0.12     0.25     5.40     0.31       50
 547          UI       0       78      249      237       86       22        8        0        0        0
 548          UI       0        0        0        0        0        0        0        0        0        0
 549          UI       0        0        0        0        0        0        0        0        0        0
 550          UI       0        0        0        0        0        0        0        0        0        0
 551          UI       0        0        0        0        0        0        0        0        0        0
              *

 552          KK  DN20REDIVERT
 553          KM        Additional Retention based on 100yr 2hr retention.
 554          KM        C value is based on future land use, P=2.7, A=acres
 555          DT    RN20      2.2      0.0
 556          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 557          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

 558          KK  N20N21ROUTE
 559          KM        Cross-section: estimated from aerial
 560          KM        Manning's N Value: clean earth
 561          RS       4    FLOW
 562          RC   0.022    0.022    0.022     5119   0.0043     0.00
 563          RX  100.00   101.00   102.00   114.00   188.00   200.00   203.00   206.00
 564          RY  1000.2  1000.10  1000.00   998.00   997.90  1000.00  1000.50  1001.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 565          KK     N21BASIN
 566          KM        BASIN BOUNDARY FROM VASQUEZ CRT AND ATSF RR ALIGNMENT
 567          BA   0.193
 568          LG    0.22     0.17     6.80     0.16       35
 569          UI       0       60      198      330      415      257      132       56       24       12
 570          UI       0        0        0        0        0        0        0        0        0        0
 571          UI       0        0        0        0        0        0        0        0        0        0
 572          UI       0        0        0        0        0        0        0        0        0        0
 573          UI       0        0        0        0        0        0        0        0        0        0
              *

 574          KK  DN21REDIVERT
 575          KM        Additional Retention based on 100yr 2hr retention.
 576          KM        C value is based on future land use, P=2.7, A=acres
 577          DT    RN21      0.2      0.0
 578          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
```

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579          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

580          KK   CPN21COMBINE
581          HC       2   0.281
             *

582          KK  DN21SEDIVERT
583          KM        Split based on ADMS for Old Town Site and
584          KM        30% ADMP dated 7-24-07 prepared by Neals Engineering
585          DT   DN21S     0.0     0.0
586          DI     0.0   688.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
587          DQ     0.0   255.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

588          KK  N21N25ROUTE
589          KM        Cross-section: cross section based on aerial
590          KM        Manning's N Value: earth with sparse trees and shrubs
591          RS       5    FLOW
592          RC   0.032   0.032   0.032    7742  0.0057    0.00
593          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
594          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

595          KK     N22BASIN
596          KM        BASIN BOUNDRY FROM NORTH EL MIRAGE AND NORTH SURPRISE DEV
597          BA   0.108
598          LG    0.25    0.25    6.00    0.21      31
599          UI       0      75     219     317     155      48      14       0       0       0
600          UI       0       0       0       0       0       0       0       0       0       0
601          UI       0       0       0       0       0       0       0       0       0       0
602          UI       0       0       0       0       0       0       0       0       0       0
603          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

604          KK  DN21SERETRIEVE
605          DR   DN21S
             *

606          KK  N21N22ROUTE
607          KM        Cross-section: cross section estimated from aerial
608          KM        Manning's N Value: street, clean earth
609          RS       1    FLOW
610          RC   0.022   0.013   0.022    1624  0.0062    0.00
611          RX  100.00  105.00  115.00  115.10  155.00  155.10  165.00  170.00
612          RY  1000.0  999.60  999.50  999.00  999.10  999.50  999.60 1000.00
             *

613          KK   CPN22COMBINE
614          HC       2   0.389
             *

615          KK  N22N25ROUTE
616          KM        Cross-section: cross section based on aerial
617          KM        Manning's N Value: earth with sparse trees and shrubs
618          RS       4    FLOW
619          RC   0.032   0.032   0.032    6306  0.0056    0.00
620          RX  100.00  101.00  102.00  110.00  132.00  142.00  143.00  144.00
621          RY  1000.2 1000.10 1000.00  998.00  997.90 1000.00 1000.10 1000.20
             *

622          KK     N25BASIN
623          KM        BASIN BOUNDARY FROM THOMPSON RANCH
624          KM        BNSF RAIL YARD AND ATSF RR ALIGNMENT
625          BA   0.491
626          LG    0.17    0.25    4.15    0.58      62
627          UI       0     134     460     724    1058     694     408     168      85      29
628          UI      29       0       0       0       0       0       0       0       0       0
629          UI       0       0       0       0       0       0       0       0       0       0
630          UI       0       0       0       0       0       0       0       0       0       0
631          UI       0       0       0       0       0       0       0       0       0       0
             *

632          KK  DN25REDIVERT
633          KM        Additional Retention based on 100yr 2hr retention.
634          KM        C value is based on future land use, P=2.7, A=acres
635          DT    RN25    22.9     0.0
636          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
637          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

638          KK   CPN25COMBINE
639          HC       3    0.88
             *
1                                          HEC-1 INPUT                                          PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

640          KK  N25N26ROUTE
641          KM        Cross-section:Based on aerial and site visit
642          KM        Manning's N Value: Clean earth
643          RS       3    FLOW
644          RC   0.022   0.022   0.022    2815  0.0010    0.00
645          RX  100.00  103.00  105.00  120.00  200.00  206.00  220.00  250.00
646          RY  1116.2 1116.10 1116.00 1106.00 1105.90 1116.00 1116.50 1120.00
             *

647          KK     N26BASIN
648          KM        BASIN BOUNDARY FROM ROCK QUARY,
649          KM        AGUA FRIA RIVER AND ATSF RR ALIGNMENT
650          BA   0.257
651          LG    0.10    0.28    2.86    0.86      53
652          UI       0      38     145     222     322     445     310     221     134      65
653          UI      40      17      12      12       0       0       0       0       0       0
654          UI       0       0       0       0       0       0       0       0       0       0
655          UI       0       0       0       0       0       0       0       0       0       0
656          UI       0       0       0       0       0       0       0       0       0       0
             *

657          KK  DN26REDIVERT
658          KM        Additional Retention based on 100yr 2hr retention.
659          KM        C value is based on future land use, P=2.7, A=acres
660          DT    RN26    26.0     0.0
661          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
662          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                *

 663            KK   CPN26COMBINE
 664            HC       2   1.137
                *

 665            KK     N19BASIN
 666            KM        SUBBASIN BOUNDARY PER 1977 SUN CITY WEST DEVELOPMENT MASTER PLAN,
 667            KM        MODIFIED FOR AS-BUILT CONDITIONS. NO ON-SITE RETENTION PER REPORT
 668            BA   0.176
 669            LG    0.22     0.15     9.70     0.06      40
 670            UI       0      164      517      464     162       39        0        0        0        0
 671            UI       0        0        0        0       0        0        0        0        0        0
 672            UI       0        0        0        0       0        0        0        0        0        0
 673            UI       0        0        0        0       0        0        0        0        0        0
 674            UI       0        0        0        0       0        0        0        0        0        0
                *

 675            KK     N23BASIN
 676            KM        BASIN BOUNDARY FROM BELL RD TOWN CENTER
 677            KM        NORTH SURPRISE, BELL COMMERC DEVLP
 678            BA   0.517
 679            LG    0.19     0.25     5.70     0.26      46
 680            UI       0      156      529      863    1117      698      358      154       66       32
 681            UI       0        0        0        0       0        0        0        0        0        0
 682            UI       0        0        0        0       0        0        0        0        0        0
 683            UI       0        0        0        0       0        0        0        0        0        0
1                                                HEC-1 INPUT                                                PAGE 18

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 684            UI       0        0        0        0       0        0        0        0        0        0
                *

 685            KK  DN23REDIVERT
 686            KM        Additional Retention based on 100yr 2hr retention.
 687            KM        C value is based on future land use, P=2.7, A=acres
 688            DT    RN23      9.4      0.0
 689            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 690            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 691            KK  N23N24ROUTE
 692            KM        Cross-section:  / Manning's N Value: Grouted rip rap bottom
 693            KM        earth with sparse trees and shrubs (sideslopes)
 694            RS       1     FLOW
 695            RC   0.032    0.032    0.032     4874  0.0041     0.00
 696            RX  100.00   143.80   154.00   162.60  181.30   201.40   228.20   229.00
 697            RY  1154.0  1152.00  1150.00  1148.00 1147.90  1150.00  1152.00  1152.20
                *

 698            KK     N24BASIN
 699            KM        BASIN BOUNDARY FROM MOBILE HOME PARK
 700            KM        3J'S COUNTRY ESTATES, ROCK QUARY AND AGUA FRIA RIVER
 701            BA   0.254
 702            LG    0.17     0.24     4.45     0.47      35
 703            UI       0       97      311      559     509      294      112       50       18       17
 704            UI       0        0        0        0       0        0        0        0        0        0
 705            UI       0        0        0        0       0        0        0        0        0        0
 706            UI       0        0        0        0       0        0        0        0        0        0
 707            UI       0        0        0        0       0        0        0        0        0        0
                *

 708            KK  DN24REDIVERT
 709            KM        Additional Retention based on 100yr 2hr retention.
 710            KM        C value is based on future land use, P=2.7, A=acres
 711            DT    RN24     12.3      0.0
 712            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 713            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 714            KK   CPN24COMBINE
 715            HC       2   0.771
                *

 716            KK     N27BASIN
 717            KM        BASIN BOUNDARY FROM ROCK QUARY,
 718            KM        AGUA FRIA RIVER AND ATSF RR ALIGNMENT
 719            BA   0.126
 720            LG    0.10     0.29     2.80     0.90      37
 721            UI       0       51      159      289     247      141       52       20        9        0
 722            UI       0        0        0        0       0        0        0        0        0        0
 723            UI       0        0        0        0       0        0        0        0        0        0
 724            UI       0        0        0        0       0        0        0        0        0        0
 725            UI       0        0        0        0       0        0        0        0        0        0
                *
1                                                HEC-1 INPUT                                                PAGE 19

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 726            KK  DN27REDIVERT
 727            KM        Additional Retention based on 100yr 2hr retention.
 728            KM        C value is based on future land use, P=2.7, A=acres
 729            DT    RN27     12.5      0.0
 730            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 731            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 732            KK   DUMMYCOMBINE
 733            HC       4
                *

 734            KK   DUMMYCOMBINE
 735            HC       4
                *

 736            KK     D03BASIN
 737            KM        BASIN BOUNDARY FROM KINGSWOOD PARKE
 738            BA   0.723
 739            LG    0.23     0.25     4.80     0.37      35
 740            UI       0      121      484      719    1140     1220      811      548      245      149
 741            UI      70       36       35        0       0        0        0        0        0        0
 742            UI       0        0        0        0       0        0        0        0        0        0
 743            UI       0        0        0        0       0        0        0        0        0        0
 744            UI       0        0        0        0       0        0        0        0        0        0
                *

 745            KK  DD03REDIVERT
 746            KM        Master Drainage Report Update for Kingswood Parke Phase One
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```
KM        (excess retention provided for future development was
KM        subtracted from total retenttion provided)
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RD03    51.7     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK  D03D04ROUTE
KM        Cross-section: Cross-section determined from aerial
KM        Manning's N Value: street and earth with sparse trees and shrubs
RS       4    FLOW
RC   0.032   0.013   0.032    4458  0.0038    0.00
RX  100.00  108.00  119.00  119.10  155.00  155.10  160.00  165.00
RY  1000.3 1000.00  999.50  999.00  999.70 1000.20 1000.30 1000.40
*

KK     D04BASIN
KM        BASIN BOUNDARY FROM GRAND VILLAGE NORTH/SOUTH, BELLAZANO CONDOS,
KM        HOPI VILLAGE, PIMA VILLAGE, SUN VILLAGE, ZUNI VILLAGE, PUEBLO VILLAGE,
KM        GRAND AVE PROFF PLAZA AND GRAND AVE CHANNEL
BA   0.891
LG    0.22    0.27    5.70    0.25      36
UI       0     122     430     681     934    1456    1132     830     591     287
```



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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

UI     186     117      37      38      38       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*

KK  DD04REDIVERT
KM        Master Drainage Report Update for Kingswood Parke Phase One (Sun Village
KM        Final Drainage Report for Grand Village Center Phase 6, Drainage Report
KM        Grand Point Plaza, Final Drainage Report -Revised  For Grand Pointe
KM        Plaza Montessori of Surprise SP06-41
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RD04    46.9     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPD04COMBINE
HC       2   1.614
*

KK  DD04SEDIVERT
KM        Split flow Bell Rd at Litchfield Rd intersection
DT   DD04S     0.0     0.0
DI     0.0    86.1   158.5   512.0   904.0  1940.0     0.0     0.0     0.0     0.0
DQ     0.0     0.0    42.4   259.0   534.0  1278.0     0.0     0.0     0.0     0.0
*

KK  D04D05ROUTE
KM        Cross-section: Cross-section determined from aerial
KM        Manning's N Value: street and earth with sparse trees and shrubs
RS       3    FLOW
RC   0.032   0.013   0.013    2993  0.0027    0.00
RX  100.00  119.00  135.00  135.10  180.00  180.10  181.00  182.00
RY  1000.0  999.80  999.50  999.00  999.80 1000.30 1000.40 1000.50
*

KK     D05BASIN
KM        BASIN BOUNDARY FROM WAL MART STORE
KM        SURPRISE TOWN CENTER AND GRAND AVE CHANNEL
BA   0.163
LG    0.11    0.25    4.90    0.39      73
UI       0     126     392     467     196      58      15       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
UI       0       0       0       0       0       0       0       0       0       0
*
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  DD05REDIVERT
KM        West Point Towne Center Final Master Infrastructure Drainage Report
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RD05     8.2     0.0
DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPD05COMBINE
HC       2   1.777
*

KK  D05D14ROUTE
KM        Cross-section: Cross-section determined from aerial, assumed
KM        3' depth / Manning's N Value: earth with grass and forbs
RS       2    FLOW
RC   0.032   0.032   0.032    3385  0.0053    0.00
RX  100.00  101.00  102.00  122.00  142.00  162.00  163.00  164.00
RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
*

KK   DD141DIVERT
KM        Culvert crossing under Dysart Road - once capacity is reached
KM        under the road,  flow will split with some continuing under
KM        the road and some will go south along the roadway
DT  DD141S     0.0     0.0
DI     0.0   122.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0     0.0   378.0   878.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK  D05D15ROUTE
KM        Cross-section: Cross-section determined from aerial, assumed
KM        3' depth  / Manning's N Value: concrete
RS       4    FLOW
RC   0.016   0.016   0.016    4588  0.0044    0.00
RX  100.00  101.00  102.00  127.00  131.00  140.00  141.00  142.00
```

```
835          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
             *

836          KK     D11BASIN
837          KM        BASIN BOUNDARY FROM ORCHIDS DEVELOPMENT
838          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
839          BA   0.662
840          LG    0.24    0.25    5.60    0.26      38
841          UI       0      84     256     432     569     864     927     669     505     345
842          UI     173     121      81      25      26      26       0       0       0       0
843          UI       0       0       0       0       0       0       0       0       0       0
844          UI       0       0       0       0       0       0       0       0       0       0
845          UI       0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

846          KK  DD11REDIVERT
847          KM        Final Drainage Report for Parkway Bank, Drainage Report for Deer Valley
848          KM        Credit Union Final Drainage Report for Jiffy Lube at Bell and Reems
849          KM        for The Orchard Estates Apartments, Drainage Report
850          KM        for Mountainside Fitness Center Lot 7 a
851          KM        Additional Retention based on 100yr 2hr retention.
852          KM        C value is based on future land use, P=2.7, A=acres
853          DT    RD11    35.6     0.0
854          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
855          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

856          KK   DD111DIVERT
857          KM        Greenway at Parkview intersection split flow
858          DT  DD111S     0.0     0.0
859          DI     0.0    33.8   453.4  1486.3  2998.5     0.0     0.0     0.0     0.0     0.0
860          DQ     0.0    25.6   376.5  1210.3  2419.3     0.0     0.0     0.0     0.0     0.0
             *

861          KK   DD112DIVERT
862          KM        Greenway at Parkview intersection split flow
863          DT  DD112S     0.0     0.0
864          DI     0.0     8.2    77.0   276.0   579.1     0.0     0.0     0.0     0.0     0.0
865          DQ     0.0     5.4    35.1    78.9   133.0     0.0     0.0     0.0     0.0     0.0
             *

866          KK  D11D12ROUTE
867          KM        Cross-section: Cross-section determined from aerial
868          KM        Manning's N Value: clean earth; straight
869          RS       3    FLOW
870          RC   0.022   0.022   0.022    2668  0.0037    0.00
871          RX  100.00  124.00  154.00  155.00  156.00  157.00  158.00  159.00
872          RY  1208.0 1203.00 1208.00 1208.10 1208.20 1208.30 1208.40 1208.50
             *

873          KK     D12BASIN
874          KM        BASIN BOUNDARY FROM ORCHIDS PARK
875          KM        AND  GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
876          BA   0.347
877          LG    0.14    0.25    5.80    0.26      47
878          UI       0      44     132     225     298     443     490     352     265     184
879          UI      93      65      42      14      13      13      14       0       0       0
880          UI       0       0       0       0       0       0       0       0       0       0
881          UI       0       0       0       0       0       0       0       0       0       0
882          UI       0       0       0       0       0       0       0       0       0       0
             *

883          KK  DD12REDIVERT
884          KM        Final Drainage Report for Residence Inn by Marriot
885          KM        Final Drainage Report for The Orchards Parcel 5
886          KM        (Includes Parcels 9,11,12 and 1/2 of 8), Final Drainage Report for
887          KM        Stadium Village (South) Residences
888          KM        Final Drainage Report for Stadium Village Residences
889          KM        Additional Retention based on 100yr 2hr retention.
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

890          KM        C value is based on future land use, P=2.7, A=acres
891          DT    RD12    25.6     0.0
892          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
893          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

894          KK   CPD12COMBINE
895          HC       2   1.009
             *

896          KK   DD121DIVERT
897          KM        Greenway at Bullard intersection split flow
898          DT  DD121S     0.0     0.0
899          DI     0.0    68.7   371.0  1186.5  2407.4     0.0     0.0     0.0     0.0     0.0
900          DQ     0.0    19.7   166.4   705.0  1553.4     0.0     0.0     0.0     0.0     0.0
             *

901          KK   DD122DIVERT
902          KM        Greenway at Bullard intersection split flow
903          DT  DD122S     0.0     0.0
904          DI     0.0    48.9   204.6   481.5   854.0     0.0     0.0     0.0     0.0     0.0
905          DQ     0.0    24.3    82.0   159.0   251.4     0.0     0.0     0.0     0.0     0.0
             *

906          KK  D12D13ROUTE
907          KM        Cross-section: determined from aerial and contours
908          KM        Manning's N Value: earth with sparse trees and shrubs for left
909          KM        overbank and main channel, right overbank is pavement
910          RS      12    FLOW
911          RC   0.032   0.032   0.013    5345  0.0031    0.00
912          RX  100.00  100.10  100.20  155.00  198.00  205.00  215.00  220.00
913          RY  1000.2 1000.10 1000.00  998.00  998.40  998.50  998.60  998.70
             *

914          KK     D13BASIN
915          KM        BASIN BOUNDARY FROM GREENWAY ROAD DRAINAGE REPORT BY CMX (2008)
916          BA   1.030
917          LG    0.10    0.25    4.90    0.41      36
918          UI       0     158     631     953    1429    1790    1199     841     439     244
919          UI     141      48      48      48       0       0       0       0       0       0
920          UI       0       0       0       0       0       0       0       0       0       0
921          UI       0       0       0       0       0       0       0       0       0       0
922          UI       0       0       0       0       0       0       0       0       0       0
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                *
 923            KK  DD13REDIVERT
 924            KM        Final Drainage Report for Surprise Festival, Final Drainage Report
 925            KM        for The City at Surprise Office Building, Final Drainage Report for
 926            KM        Surprise Tennis Center, Final Drainage Report for City of Surprise
 927            KM        Central Utility Plant, Final Drainage Report for Hear
 928            KM        Additional Retention based on 100yr 2hr retention.
 929            KM        C value is based on future land use, P=2.7, A=acres
 930            DT    RD13   103.4     0.0
 931            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 932            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                          PAGE 24

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 933            KK  DD04SERETRIEVE
 934            DR   DD04S
                *

 935            KK  D04D13ROUTE
 936            KM        Cross-section: Cross-section determined from aerial
 937            KM        Manning's N Value: Natural desert wash, sheet flow
 938            RS      13    FLOW
 939            RC   0.040   0.040   0.040    5483  0.0031    0.00
 940            RX  100.00  101.00  102.00  150.00  155.00  700.00  710.00  720.00
 941            RY  1000.0  999.90  999.80  997.80  997.90  999.80  999.90 1000.00
                *

 942            KK   CPD13COMBINE
 943            HC       3   3.653
                *

 944            KK   DD131DIVERT
 945            KM        Greenway at Litchfield intersection split flow
 946            DT  DD131S     0.0     0.0
 947            DI     0.0   519.2   917.3  1650.7  2842.4     0.0     0.0     0.0     0.0     0.0
 948            DQ     0.0    18.8   121.1   423.4   996.3     0.0     0.0     0.0     0.0     0.0
                *

 949            KK   DD132DIVERT
 950            KM        Greenway at Litchfield intersection split flow
 951            DT  DD132S     0.0     0.0
 952            DI     0.0   500.4   796.2  1227.2  1846.1     0.0     0.0     0.0     0.0     0.0
 953            DQ     0.0   112.4   318.0   584.2   899.4     0.0     0.0     0.0     0.0     0.0
                *

 954            KK  D13D14ROUTE
 955            KM        Cross-section: Cross-section determined from FCDMC 69
 956            KM        Manning's N Value: earth with grass and forbs
 957            RS       6    FLOW
 958            RC   0.025   0.025   0.025    5304  0.0015    0.00
 959            RX  100.00  120.00  122.40  140.40  158.40  176.40  176.80  196.80
 960            RY  1175.5 1175.40 1175.00 1172.00 1171.90 1175.00 1175.40 1175.50
                *

 961            KK     D14BASIN
 962            KM        BASIN BOUNDARY FROM WEST POINT DEVELOPMENT AND GRANDE AVE CHANNEL
 963            BA   0.942
 964            LG   0.23    0.25    5.10    0.32      43
 965            UI      0     114     330     577     752    1087    1356     973     755     543
 966            UI    302     194     122      65      36      35      35       0       0       0
 967            UI      0       0       0       0       0       0       0       0       0       0
 968            UI      0       0       0       0       0       0       0       0       0       0
 969            UI      0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE 25

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 970            KK  DD14REDIVERT
 971            KM        West Point Towne Center Final Master Infrastructure Drainage Report
 972            KM        Additional Retention based on 100yr 2hr retention.
 973            KM        C value is based on future land use, P=2.7, A=acres
 974            DT    RD14    81.6     0.0
 975            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 976            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 977            KK   DD141RETRIEVE
 978            DR  DD141S
                *

 979            KK  D0514AROUTE
 980            KM        Cross-section: Cross-section determined from aerial
 981            KM        Manning's N Value: street and ROW
 982            KM        Route is from DD141 diversion to CPD14
 983            RS       3    FLOW
 984            RC   0.032   0.013   0.032    3147  0.0051    0.00
 985            RX  100.00  120.00  140.00  140.10  200.00  200.10  220.00  240.00
 986            RY  1000.0  999.50 1000.00  999.50  999.50 1000.00  999.50 1000.00
                *

 987            KK   CPD14COMBINE
 988            HC       3   4.758
                *

 989            KK   SRD14STORAGE
 990            KM        Storage in basin at Greenway and Dysart
 991            KM        Volume estimated from topo
 992            KO
 993            RS       1    STOR
 994            SV            0.30    4.10   17.00   40.40   95.20
 995            SQ           23.60   83.80  162.00  645.50 2369.50
 996            SE  1164.0 1165.00 1166.00 1167.00 1168.00 1169.00
 997            ST
                *

 998            KK   DD142DIVERT
 999            KM        Greenway at Dysart intersection split flow
1000            DT  DD142S     0.0     0.0
1001            DI     0.0   295.5   693.0  1325.3  2531.5     0.0     0.0     0.0     0.0     0.0
1002            DQ     0.0   269.3   457.1   770.3  1405.9     0.0     0.0     0.0     0.0     0.0
                *

1003            KK  D14D15ROUTE
1004            KM        Cross section: Cross-section determined from  aerial, 1/2 street section
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1005          KM        Manning's N Value: street, clean earth
1006          RS       5    FLOW
1007          RC   0.022   0.013   0.013    3351  0.0029    0.00
1008          RX  100.00  100.10  110.00  110.10  120.00  125.00  133.90  134.00
1009          RY  1003.0  999.80  999.70  999.20  999.40  999.50  999.70 1000.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1010          KK     D15BASIN
1011          KM        BASIN BOUNDARY FROM SUCCESS SCHOOL
1012          BA   0.220
1013          LG    0.19    0.15    7.00    0.15      54
1014          UI       0     100     309     559     405     208      75      26      16       0
1015          UI       0       0       0       0       0       0       0       0       0       0
1016          UI       0       0       0       0       0       0       0       0       0       0
1017          UI       0       0       0       0       0       0       0       0       0       0
1018          UI       0       0       0       0       0       0       0       0       0       0
              *

1019          KK  DD15REDIVERT
1020          KM        Additional Retention based on 100yr 2hr retention.
1021          KM        C value is based on future land use, P=2.7, A=acres
1022          DT    RD15     0.6     0.0
1023          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1024          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1025          KK   CPD15COMBINE
1026          HC       3   4.978
              *

1027          KK  D15D26ROUTE
1028          KM        Cross-section: Concrete channel along Grand Ave, assumed slope
1029          KM        2:1 slide slopes, width and geometry based on aerial
1030          RS       1    FLOW
1031          RC   0.016   0.016   0.016    2959  0.0068    0.00
1032          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1033          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
              *

1034          KK  D15D28ROUTE
1035          KM        Channel along Grand Avenue
1036          KM        Flow in basin D26 does not enter channel
1037          RS       1    FLOW
1038          RC   0.016   0.016   0.016    4040  0.0040    0.00
1039          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1040          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
              *

1041          KK     D28BASIN
1042          KM        BASIN BOUNDARY FROM EL MIRAGE TR 1-3 AND GRAND AVE CHANNEL
1043          BA   0.255
1044          LG    0.21    0.25    4.50    0.44      38
1045          UI       0     121     375     665     462     221      83      25      19       0
1046          UI       0       0       0       0       0       0       0       0       0       0
1047          UI       0       0       0       0       0       0       0       0       0       0
1048          UI       0       0       0       0       0       0       0       0       0       0
1049          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1050          KK  DD28REDIVERT
1051          KM        Additional Retention based on 100yr 2hr retention.
1052          KM        C value is based on future land use, P=2.7, A=acres
1053          DT    RD28     0.8     0.0
1054          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1055          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1056          KK   CPD28COMBINE
1057          HC       2   5.233
              *

1058          KK  D28AFRROUTE
1059          KM        Direct discharge into Agua Fria River, field verified by FCDMC
1060          RS       1    FLOW
1061          RC   0.016   0.016   0.016    2990  0.0050    0.00
1062          RX  100.00  112.00  122.00  134.00  145.00  157.00  169.00  185.00
1063          RY  1040.4 1040.20 1040.00 1034.00 1034.00 1040.00 1040.24 1040.56
              *

1064          KK   DUMMYCOMBINE
1065          HC       2
              *

1066          KK     L01BASIN
1067          KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
1068          BA   0.162
1069          LG    0.26    0.26    5.20    0.29      33
1070          UI       0      65     205     372     317     181      66      27      12       0
1071          UI       0       0       0       0       0       0       0       0       0       0
1072          UI       0       0       0       0       0       0       0       0       0       0
1073          UI       0       0       0       0       0       0       0       0       0       0
1074          UI       0       0       0       0       0       0       0       0       0       0
              *

1075          KK  DL01REDIVERT
1076          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1077          KM        Additional Retention based on 100yr 2hr retention.
1078          KM        C value is based on future land use, P=2.7, A=acres
1079          DT    RL01     9.9     0.0
1080          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1081          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1082          KK  L01L03ROUTE
1083          KM        Cross-section: From Arizona Traditions Report
1084          KM        Manning's N Value: Channel along Arizona Traditons
1085          KM        Manning's for earth with grass and forbs
1086          RS       5    FLOW
1087          RC   0.025   0.025   0.025    5547  0.0032    0.00
1088          RX  100.00  114.00  116.00  118.00  120.00  122.00  124.00  138.00
1089          RY  1000.0  995.40  995.30  995.20  995.10  995.20  995.30 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1090          KK     L03BASIN
1091          KM        BASIN BOUNDARY FROM ARIZONA TRADITIONS NORTH AND SOUTH
1092          BA   0.786
1093          LG    0.20    0.25    5.80    0.25      27
1094          UI       0     102     333     547     722    1142    1060     769     572     362
1095          UI     174     127      70      31      32      31       0       0       0       0
1096          UI       0       0       0       0       0       0       0       0       0       0
1097          UI       0       0       0       0       0       0       0       0       0       0
1098          UI       0       0       0       0       0       0       0       0       0       0
              *

1099          KK  DL03REDIVERT
1100          KM        Master Drainage Study for Arizona Traditions
1101          KM        Additional Retention based on 100yr 2hr retention.
1102          KM        C value is based on future land use, P=2.7, A=acres
1103          DT    RL03    68.1     0.0
1104          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1105          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1106          KK     L20BASIN
1107          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST
1108          KM        BEARDSLEY CSR ON THE EAST AND BELL POINT I
1109          BA   0.347
1110          LG    0.27    0.28    5.60    0.24      20
1111          UI       0      42     117     211     271     391     493     364     281     204
1112          UI     118      72      48      27      13      13      13       0       0       0
1113          UI       0       0       0       0       0       0       0       0       0       0
1114          UI       0       0       0       0       0       0       0       0       0       0
1115          UI       0       0       0       0       0       0       0       0       0       0
              *

1116          KK  DL20REDIVERT
1117          KM        Bell Pointe I and II, Arizona Traditions Parcel XIV
1118          DT    RL20    21.3     0.0
1119          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1120          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1121          KK  L20L03ROUTE
1122          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
1123          KM        width based on aerial
1124          KM        Manning's N Value: earth w/ sparse trees and shrubs
1125          RS       6    FLOW
1126          RC   0.032   0.032   0.032    5440  0.0055    0.00
1127          RX  100.00  106.00  112.00  124.00  136.00  148.00  168.00  188.00
1128          RY  1310.5 1310.30 1310.00 1307.00 1307.10 1310.00 1310.25 1310.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1129          KK   CPL03COMBINE
1130          HC       3   1.295
              *

1131          KK  DL03SEDIVERT
1132          KM        Diversion at Bell Rd near Citrus
1133          KM        Culverts under Bell Rd to south
1134          DT   DL03S     0.0     0.0
1135          DI     0.0    37.0   237.0   537.0  1037.0     0.0     0.0     0.0     0.0     0.0
1136          DQ     0.0    37.0    37.0   337.0   837.0     0.0     0.0     0.0     0.0     0.0
              *

1137          KK  L03L04ROUTE
1138          KM        Cross-section: Cross section estimated from aerial for 1/2 street sectio
1139          KM        Manning's N Value: street, earth with sparse trees and shrubs
1140          RS       8    FLOW
1141          RC   0.032   0.013   0.013    3413  0.0046    0.00
1142          RX  100.00  103.00  123.00  123.10  162.00  162.10  165.00  169.00
1143          RY  1000.2 1000.10  999.50  999.00  999.80 1000.30 1000.40 1000.50
              *

1144          KK     L04BASIN
1145          KM        BASIN BOUNDARY FROM HAPPY TRAILS DEVLP
1146          BA   0.631
1147          LG    0.18    0.25    5.00    0.38      22
1148          UI       0      74     199     362     466     640     898     677     528     391
1149          UI     261     128     100      68      22      23      22      23       0       0
1150          UI       0       0       0       0       0       0       0       0       0       0
1151          UI       0       0       0       0       0       0       0       0       0       0
1152          UI       0       0       0       0       0       0       0       0       0       0
              *

1153          KK  DL04REDIVERT
1154          KM        Retention volume estimated based on aerial, Happy Trails
1155          DT    RL04    44.0     0.0
1156          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1157          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1158          KK   CPL04COMBINE
1159          HC       2   1.926
              *

1160          KK  DL04SEDIVERT
1161          KM        Intersection diversion Bell Rd at Cotton Ln
1162          DT   DL04S     0.0     0.0
1163          DI     0.0     0.0    56.3   171.0  1026.0  1998.0  4546.0     0.0     0.0     0.0
1164          DQ     0.0     0.0     0.0    36.0   526.0  1058.0  2453.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1165          KK  L04L05ROUTE
1166          KM        Cross-section: Cross-section determined from aerial
1167          KM        Manning's N Value: retention basins, earth w/ grass
1168          RS       1    FLOW
1169          RC   0.025   0.025   0.025    2571  0.0024    0.00
1170          RX  100.00  109.00  109.10  121.50  209.50  209.60  211.00  215.00
1171          RY  1283.3 1282.80 1282.30 1282.50 1282.60 1283.00 1283.10 1283.30
              *
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1172        KK     L05BASIN
1173        KM        BASIN BOUNDARY FROM COMM DEVLP AND BELL WEST RANCH
1174        BA   0.486
1175        LG    0.23     0.25     5.70     0.24       43
1176        UI       0       68      250      386      542      820      606      439      299      141
1177        UI      92       53       21       21       22        0        0        0        0        0
1178        UI       0        0        0        0        0        0        0        0        0        0
1179        UI       0        0        0        0        0        0        0        0        0        0
1180        UI       0        0        0        0        0        0        0        0        0        0
            *

1181        KK  DL05REDIVERT
1182        KM        Final Drainage Report for Cotton Lane Professional Park, Drainage Report
1183        KM        Bell West Ranch Shops, Final Drainage Report - Bell West Ranch Parcel 4
1184        KM        Master Drainage Report - Bell West Ranch
1185        DT    RL05     33.2      0.0
1186        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1187        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

1188        KK   CPL05COMBINE
1189        HC        2   2.412
            *

1190        KK   DL051DIVERT
1191        KM        Diversion at L303 and Bell
1192        DT  DL051S      0.0      0.0
1193        DI     0.0    302.2   1308.0  3126.8  6532.9      0.0      0.0      0.0      0.0      0.0
1194        DQ     0.0      1.9    103.3   562.9  1938.1      0.0      0.0      0.0      0.0      0.0
            *

1195        KK   DL052DIVERT
1196        KM        Diversion at L303 and Bell
1197        DT  DL052S      0.0      0.0
1198        DI     0.0    300.3   1204.7  2563.8  4594.8      0.0      0.0      0.0      0.0      0.0
1199        DQ     0.0      7.6     25.6    49.7    78.6      0.0      0.0      0.0      0.0      0.0
            *

1200        KK  L05D06ROUTE
1201        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1202        KM        on aerial / Manning's N Value: half street and ROW
1203        RS        1    FLOW
1204        RC   0.032    0.013    0.032     3272  0.0062     0.00
1205        RX  100.00   101.00   102.00   114.00  153.00   165.00   166.00   167.00
1206        RY  1000.2  1000.10  1000.00   997.00  996.90  1000.00  1000.10  1000.20
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1207        KK     L02BASIN
1208        KM        BASIN BOUNDARY FROM SUN CITY GRAND AND BEARSLEY CSR
1209        BA   1.884
1210        LG    0.22     0.26     5.20     0.31       31
1211        UI       0      162      240      615      821      991     1195     1610     2036     1581
1212        UI    1309     1077      863      670      386      277      230      164       99       50
1213        UI      50       50       49       51        0        0        0        0        0        0
1214        UI       0        0        0        0        0        0        0        0        0        0
1215        UI       0        0        0        0        0        0        0        0        0        0
            *

1216        KK  DL02REDIVERT
1217        KM        Master Drainage Report for Del Webb's Grand Avenue Property
1218        DT    RL02    117.2      0.0
1219        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1220        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

1221        KK  L02D06ROUTE
1222        KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1223        KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
1224        KM        exist conditions: outfall to south into L303 ROW
1225        RS        6    FLOW
1226        RC   0.032    0.032    0.013     8306  0.0043     0.00
1227        RX  100.00   101.00   102.00   114.00  153.00   165.00   166.00   167.00
1228        RY  1000.4   999.90   999.80   997.00  997.10   999.80   999.90  1000.35
            *

1229        KK     D06BASIN
1230        KM        BASIN BOUNDARY FROM SUN CITY GRAND
1231        BA   0.463
1232        LG    0.22     0.19     6.60     0.18       32
1233        UI       0       62      202      329      441      705      609      449      329      192
1234        UI     104       70       34       18       19       19        0        0        0        0
1235        UI       0        0        0        0        0        0        0        0        0        0
1236        UI       0        0        0        0        0        0        0        0        0        0
1237        UI       0        0        0        0        0        0        0        0        0        0
            *

1238        KK  DD06REDIVERT
1239        KM        Master Drainage Report for Del Webb's Grand Avenue Property
1240        DT    RD06     32.0      0.0
1241        DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1242        DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
            *

1243        KK   CPD06COMBINE
1244        HC        3   4.759
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1245        KK  DD06SEDIVERT
1246        KM        Divert based on capacity at Bell Road. Bell Rd section from
1247        KM        Final Drainage Report for Westfield Commons Jan 2008
1248        DT   DD06S      0.0      0.0
1249        DI     0.0    100.0    200.0    300.0    370.0    400.0    800.0   1000.0  10000.0      0.0
1250        DQ     0.0      0.0      0.0      0.0      0.0     30.0    430.0    630.0   9630.0      0.0
            *

1251        KK  D06D07ROUTE
1252        KM        Cross-section: Cross-section determined from aerial
1253        KM        Manning's N Value: street and ROW, left overbank is
1254        KM        earth with sparse trees and shrubs
1255        RS       12    FLOW
1256        RC   0.013    0.013    0.013     2785  0.0052     0.00
```

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1257          RX  100.00  100.10  118.70  118.80  165.00  211.10  211.20  230.00
1258          RY  1266.0 1264.00 1263.74 1263.24 1264.00 1263.50 1264.00 1264.38
              *

1259          KK     D07BASIN
1260          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1261          BA   0.886
1262          LG    0.21    0.23    6.20    0.22      27
1263          UI       0      85     162     361     465     582     741    1047     875     683
1264          UI     548     437     297     162     142      85      62      26      27      26
1265          UI      26       0       0       0       0       0       0       0       0       0
1266          UI       0       0       0       0       0       0       0       0       0       0
1267          UI       0       0       0       0       0       0       0       0       0       0
              *

1268          KK  DD07REDIVERT
1269          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1270          DT    RD07    61.2     0.0
1271          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1272          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1273          KK   CPD07COMBINE
1274          HC       2   5.645
              *

1275          KK  D07D02ROUTE
1276          KM        Cross-section: Estimated 3' deep, side slopes and width based
1277          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
1278          RS       2    FLOW
1279          RC   0.032   0.032   0.032    1520  0.0013    0.00
1280          RX  100.00  100.10  100.20  133.00  156.00  174.80  174.90  175.00
1281          RY  1001.0  999.90  999.80  997.00  997.10  999.80  999.90 1001.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1282          KK     D01BASIN
1283          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1284          BA   1.564
1285          LG    0.21    0.26    5.10    0.33      24
1286          UI       0     130     179     482     645     784     929    1194    1657    1358
1287          UI    1107     924     751     601     413     231     214     143     128      40
1288          UI      41      40      40      40      41       0       0       0       0       0
1289          UI       0       0       0       0       0       0       0       0       0       0
1290          UI       0       0       0       0       0       0       0       0       0       0
              *

1291          KK  DD01REDIVERT
1292          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1293          DT    RD01    97.0     0.0
1294          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1295          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1296          KK  D01D02ROUTE
1297          KM        Cross-section: Golf course, assumed 0.5% side slopes, V-ditch
1298          KM        Manning's N Value: golf course
1299          RS      17    FLOW
1300          RC   0.025   0.025   0.025    9289  0.0038    0.00
1301          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1302          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

1303          KK     D02BASIN
1304          KM        BASIN BOUNDARY FROM SUN CITY GRAND
1305          BA   1.844
1306          LG    0.21    0.26    5.40    0.29      28
1307          UI       0     170     295     687     895    1095    1371    1978    1914    1473
1308          UI    1195     973     750     439     296     239     169      91      52      52
1309          UI      53      52       0       0       0       0       0       0       0       0
1310          UI       0       0       0       0       0       0       0       0       0       0
1311          UI       0       0       0       0       0       0       0       0       0       0
              *

1312          KK  DD02REDIVERT
1313          KM        Master Drainage Report for Del Webb's Grand Avenue Property
1314          DT    RD02   125.6     0.0
1315          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1316          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1317          KK   CPD02COMBINE
1318          HC       3   9.053
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1319          KK  D02D10ROUTE
1320          KM        Cross-section: Channel is 2.5' deep with 25' bottom width
1321          KM        and has 4:1 side slopes per Mountain Vista Ranch Drainage Proposal
1322          KM        for Reems Road  / Manning's N Value: earth w/ sparse trees and brush
1323          RS       8    FLOW
1324          RC   0.032   0.032   0.032    5395  0.0037    0.00
1325          RX  100.00  102.50  105.00  110.00  120.00  125.00  127.50  130.00
1326          RY  1242.0 1241.00 1240.00 1238.00 1237.90 1240.00 1241.00 1242.00
              *

1327          KK     D09BASIN
1328          KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
1329          BA   0.265
1330          LG    0.25    0.25    5.70    0.24      35
1331          UI       0      39     152     229     337     460     321     222     136      67
1332          UI      42      16      12      12       0       0       0       0       0       0
1333          UI       0       0       0       0       0       0       0       0       0       0
1334          UI       0       0       0       0       0       0       0       0       0       0
1335          UI       0       0       0       0       0       0       0       0       0       0
              *

1336          KK  DD09REDIVERT
1337          KM        Drainage Report for Montain Vista Ranch
1338          KM        Additional Retention based on 100yr 2hr retention.
1339          KM        C value is based on future land use, P=2.7, A=acres
1340          DT    RD09    15.9     0.0
1341          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1342          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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1343            KK  D09D10ROUTE
1344            KM        Cross-section: Estimated V-ditch w/ 4:1 side slopes
1345            KM        Manning's N Value: earth with grass, sparse trees and shrubs
1346            RS       1    FLOW
1347            RC   0.025   0.025   0.032    1657  0.0043    0.00
1348            RX  100.00  105.00  110.00  130.00  150.00  160.00  165.00  167.00
1349            RY  1000.0  999.90  999.80  996.80  996.70  998.70  999.80 1000.00
                *

1350            KK  DD06SERETRIEVE
1351            DR   DD06S
                *

1352            KK  D06D10ROUTE
1353            KM        Cross-section: From Final Drainage Report for Westfield Commons
1354            RS      13    FLOW
1355            RC   0.030   0.030   0.030    8002  0.0044    0.00
1356            RX  100.00  109.00  113.00  118.00  125.00  131.00  137.00  142.00
1357            RY  1240.0 1239.82 1238.04 1236.26 1236.16 1238.04 1239.60 1240.82
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1358            KK     D10BASIN
1359            KM        BASIN BOUNDARY FROM MOUNTAIN VISTA RANCH
1360            KM        COMMERCIAL DEVLP AND AG LANG
1361            BA   0.628
1362            LG    0.23     0.25     5.80     0.23       38
1363            UI       0       80      252      417      553      850      871      628      468      316
1364            UI     155      112       69       24       25       24        0        0        0        0
1365            UI       0        0        0        0        0        0        0        0        0        0
1366            UI       0        0        0        0        0        0        0        0        0        0
1367            UI       0        0        0        0        0        0        0        0        0        0
                *

1368            KK  DD10REDIVERT
1369            KM        Mountain Vista Ranch Drainage Proposal for Reems Road
1370            KM        Drainage Report for Montain Vista Ranch, Final Drainage Report Westfiel
1371            KM        Commons Final Drainage Report for Greenway & Reems, Final Drainage
1372            KM        Report for the Interim Condition for Westfield Commons Subd
1373            KM        Additional Retention based on 100yr 2hr retention.
1374            KM        C value is based on future land use, P=2.7, A=acres
1375            DT    RD10     44.8      0.0
1376            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1377            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

1378            KK   CPD10COMBINE
1379            HC       4    9.946
                *

1380            KK  D10D19ROUTE
1381            KM        Cross-section: Cross-section from Drainage Report for Channelization
1382            KM        of Reems Road (Report 691) / Manning's N Value: channel w/ grass
1383            KM        bottom and riprap sides
1384            RS       6    FLOW
1385            RC   0.022   0.022   0.022    5364  0.0027    0.00
1386            RX  100.00  107.60  115.20  122.80  130.80  138.40  146.00  153.60
1387            RY  1220.0 1218.00 1216.00 1214.00 1213.90 1216.00 1218.00 1220.00
                *

1388            KK     L09BASIN
1389            KM        BASIN BOUNDARY FROM SURPRISE FARMS
1390            BA   0.489
1391            LG    0.22     0.25     5.70     0.25       44
1392            UI       0       68      243      376      518      815      618      448      319      151
1393            UI      99       60       21       21       21        0        0        0        0        0
1394            UI       0        0        0        0        0        0        0        0        0        0
1395            UI       0        0        0        0        0        0        0        0        0        0
1396            UI       0        0        0        0        0        0        0        0        0        0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1397            KK  DL09REDIVERT
1398            KM        Final Drainage Report for Parcels 2-7 of Surprise Farms, Parcel 8 (Basin
1399            KM        Final Drainage Report for Safeway Store #1997, Retention Calculations fo
1400            KM        New Dysart Elementary School No. 9 at Site J (excess of 3.30 ac-ft)
1401            KM        Additional Retention based on 100yr 2hr retention.
1402            KM        C value is based on future land use, P=2.7, A=acres
1403            DT    RL09     51.4      0.0
1404            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1405            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

1406            KK   DL051RETRIEVE
1407            DR  DL051S
                *

1408            KK  L05L09ROUTE
1409            KM        Cross-section: Cross-section determined from aerial
1410            KM        Manning's N Value: earth w/ sparse trees and brush
1411            RS      15    FLOW
1412            RC   0.032   0.032   0.032    5376  0.0045    0.00
1413            RX  100.00  240.00  280.00  400.00  440.00  480.00  500.00  550.00
1414            RY  1258.0 1254.00 1253.00 1253.00 1253.00 1254.00 1255.00 1257.00
                *

1415            KK   CPL09COMBINE
1416            HC       2    2.901
                *

1417            KK   DL091DIVERT
1418            KM        L303 at Greenway intersection split flow
1419            DT  DL091S      0.0      0.0
1420            DI     0.0    139.8    574.5   1711.2   3567.8      0.0      0.0      0.0      0.0      0.0
1421            DQ     0.0     14.8    433.6   1380.6   2769.3      0.0      0.0      0.0      0.0      0.0
                *

1422            KK   DL092DIVERT
1423            KM        L303 at Greenway intersection split flow
1424            DT  DL092S      0.0      0.0
1425            DI     0.0    125.0    140.9    330.6    798.6      0.0      0.0      0.0      0.0      0.0
1426            DQ     0.0      0.0     15.9    177.9    429.6      0.0      0.0      0.0      0.0      0.0
```

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                *
1427            KK  L09D08ROUTE
1428            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1429            KM        on aerial / Manning's N Value: retention basins, earth w/ grass
1430            RS       1    FLOW
1431            RC   0.025   0.025   0.025    2922  0.0014    0.00
1432            RX  100.00  101.00  102.00  114.00  133.00  145.00  146.00  147.00
1433            RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.10 1000.20
                *
1                                    HEC-1 INPUT                                          PAGE 37

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1434            KK     D08BASIN
1435            KM        BASIN BOUNDARY FROM LOOP 303 AND NORTHWEST RANCH
1436            BA   0.514
1437            LG    0.20    0.25    5.40    0.28      47
1438            UI       0      67     217     358     473     746     693     503     374     237
1439            UI     114      83      46      20      20      21       0       0       0       0
1440            UI       0       0       0       0       0       0       0       0       0       0
1441            UI       0       0       0       0       0       0       0       0       0       0
1442            UI       0       0       0       0       0       0       0       0       0       0
                *

1443            KK  DD08REDIVERT
1444            KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
1445            KM        Basin B/C same as Tract O), Final Drainage Report for Parcel 13 of
1446            KM        Surprise Farms (Tract O, P), Final Drainage Report for Surprise Farms
1447            KM        Parcel 9 (Tract K and 9), Final Drainage R
1448            KM        Additional Retention based on 100yr 2hr retention.
1449            KM        C value is based on future land use, P=2.7, A=acres
1450            DT    RD08    39.7     0.0
1451            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1452            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1453            KK   DL052RETRIEVE
1454            DR  DL052S
                *

1455            KK  L05D08ROUTE
1456            KM        Cross-section: Estimated V ditch 2' deep , width based on aerial
1457            KM        Manning's N Value:  earth w/ grass
1458            RS      19    FLOW
1459            RC   0.022   0.022   0.022    7790  0.0039    0.00
1460            RX  100.00  120.00  130.00  150.00  151.00  170.00  180.00  200.00
1461            RY  1000.0  999.20  998.80  998.00  997.90  998.80  999.20 1000.00
                *

1462            KK   CPD08COMBINE
1463            KM        Sarival at Greenway
1464            HC       3   3.415
                *

1465            KK  D08D16ROUTE
1466            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1467            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1468            RS       7    FLOW
1469            RC   0.035   0.035   0.035    7113  0.0053    0.00
1470            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1471            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *
1                                    HEC-1 INPUT                                          PAGE 38

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1472            KK     L06BASIN
1473            KM        BASIN BOUNDARY FROM SURPRISE FARMS AND SF SCHOOL DISTRICT
1474            BA   0.696
1475            LG    0.25    0.25    5.30    0.29      34
1476            UI       0     103     394     599     875    1203     839     597     364     176
1477            UI     111      46      32      31       0       0       0       0       0       0
1478            UI       0       0       0       0       0       0       0       0       0       0
1479            UI       0       0       0       0       0       0       0       0       0       0
1480            UI       0       0       0       0       0       0       0       0       0       0
                *

1481            KK  DL06REDIVERT
1482            KM        Final Drainage Report for Surprise Farms Phase 5 (Tracts A1, B, C1, G, K
1483            KM        O, P, Q S1N, S1S, Z), Drainage Report for Surprise Farms
1484            KM        Phase 4 Parcel 1 (TR-1D, 1F, 3A1,  & 3A2 (3As in Parcel 4B)),
1485            KM        Drainage Report for City of Surprise Surprise Farms Park (Basins 1, 2, 5
1486            KM        Drainage Report for Surprise Farms Phase 4B Infrastructure (Retention
1487            KM        in Surrounding Basins except for missing reports: TR-2B1, 2B2, 3N,
1488            KM        3H, 3K, 4J), Drainage Report for Surprise Farms Phase 4 Parcel 5
1489            KM        (TR-5A1, 5A2, 5B West, 5B East, 5D), Drainage Report for
1490            KM        Surprise Farms Phase 4 Parcel 6 (TR 6J), Drainage Report for
1491            KM        Surprise Farms Phase III Parcel 1 (Retention Basin 1,2,3,4)
1492            KM        Drainage Report for Surprise Farms Phase III Parcel 2
1493            KM        (Basins 1,2,3,4,5), Drainage Report for Surprise Farms Phase III Parcel
1494            KM        for Surprise Farms Phase III Parcel  4 (Basin 1,3,6), Drainage Report
1495            KM        for Surprise Farms Phase III Parcel 5 (Basin 1), Drainage
1496            KM        Report for Surprise Farms Phase III Parcel 3
1497            KM        (Basin 1, 2, 3, 4), Drainage Report for New
1498            KM        Dysart Preschool (One basin on N Corner), Drainage Report for
1499            KM        Dysart Elementary School No 15 and Preschool
1500            KM        Additional Retention based on 100yr 2hr retention.
1501            KM        C value is based on future land use, P=2.7, A=acres
1502            DT    RL06    81.3     0.0
1503            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1504            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1505            KK  DL06SEDIVERT
1506            KM        179th at Greeway split flow
1507            DT   DL06S     0.0     0.0
1508            DI     0.0   125.4   973.2  2548.4  5028.3     0.0     0.0     0.0     0.0     0.0
1509            DQ     0.0   125.4   973.2  2275.2  4106.2     0.0     0.0     0.0     0.0     0.0
                *

1510            KK  L06L07ROUTE
1511            KM        Cross-section: Cross-section determined from A-team survey
1512            KM        / Manning's N Value: street and earth channel with sparse trees and shru
1513            RS       1    FLOW
1514            RC   0.032   0.013   0.013    2771  0.0031    0.00
1515            RX  100.00  100.10  100.20  122.00  126.00  133.00  146.00  159.00
1516            RY  1286.2 1286.10 1286.00 1282.00 1282.00 1283.00 1283.00 1283.80
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1517            KK     L07BASIN
1518            KM        BASIN BOUNDARY FROM SURPRISE FARMS
1519            BA   0.632
1520            LG    0.25    0.25    5.30    0.29      37
1521            UI       0      88     314     493     682    1054     795     581     404     190
1522            UI     126      75      27      27      28       0       0       0       0       0
1523            UI       0       0       0       0       0       0       0       0       0       0
1524            UI       0       0       0       0       0       0       0       0       0       0
1525            UI       0       0       0       0       0       0       0       0       0       0
                *

1526            KK  DL07REDIVERT
1527            KM        Drainage Report for Surprise Farms Phase II Infrastructure, Drainage
1528            KM        Report for Surprise Farms Community Park (Community Parks Basin A, B)
1529            KM        Pavement Drainage Report for Surprise Farms School Site
1530            KM        (High School Basin A, B1, C1, D, E, F1), Drainage Report for
1531            KM        Surprise Farms Phase 2 Parcel 6, Drainage Report for Surprise
1532            KM        Farms Phase III Parcel 6 (Basins 1,2,3,4,5), Drainage Report for Surpris
1533            KM        Farms Phase 2 Parcel 1, Drainage Report for Surprise Farms
1534            KM        Phase 2 Parcel 5, Drainage Report for Surprise Farms Phase 2 Parcel 2,
1535            KM        Drainage Report for Surprise Farms Phase 2 Parcel 4,
1536            KM        Drainage Report for Surprise Farms
1537            KM        Phase 2 Parcel 3, Drainage Report for City of Surprise Surprise Farms Pa
1538            KM        Drainage Report for Surprise Farms Phase 2 Parcel 1
1539            KM        Additional Retention based on 100yr 2hr retention.
1540            KM        C value is based on future land use, P=2.7, A=acres
1541            DT    RL07     66.6     0.0
1542            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1543            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1544            KK  DL03SERETRIEVE
1545            DR   DL03S
                *

1546            KK  L0307AROUTE
1547            KM        Cross-section: Channel is 16' wide and 2' deep with 4: side slopes per
1548            KM        Surprise Farms Phase II Infrastructure Report (Report 287)
1549            KM        Manning's N Value: riprap and pavement
1550            RS      11     FLOW
1551            RC   0.013   0.032   0.032    3088  0.0052    0.00
1552            RX  100.00  119.00  119.50  155.00  163.00  171.00  172.00  173.00
1553            RY  1000.0  999.60 1000.10  999.50  997.50  999.50  999.70 1000.00
                *

1554            KK  L0307BROUTE
1555            KM        Cross-section: Cross section determined from aerial, 1/2 street section
1556            KM        Manning's N Value: pavement, earth with sparse trees and shrubs
1557            RS       4     FLOW
1558            RC   0.013   0.013   0.032    2848  0.0018    0.00
1559            RX  100.00  100.10  105.00  115.00  115.10  115.50  132.00  134.00
1560            RY  1001.0 1000.00  999.90  999.60 1000.10 1000.20 1000.30 1000.40
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1561            KK   CPL07COMBINE
1562            HC       3   2.623
                *

1563            KK  DL07SEDIVERT
1564            KM        Paradise at Greenway split flow
1565            DT   DL07S     0.0     0.0
1566            DI     0.0   233.4   660.0  1459.1  2912.5     0.0     0.0     0.0     0.0     0.0
1567            DQ     0.0    47.7   135.0   309.0   902.5     0.0     0.0     0.0     0.0     0.0
                *

1568            KK  L07L08ROUTE
1569            KM        Cross-section: Cross-section determined from A-team survey
1570            KM        Manning's N Value: clean earth; straight
1571            RS       2     FLOW
1572            RC   0.022   0.022   0.022    2557  0.0041    0.00
1573            RX  100.00  100.90  101.00  115.00  127.00  150.00  151.00  152.00
1574            RY  1279.6 1279.50 1277.50 1275.50 1278.50 1279.50 1279.60 1279.70
                *

1575            KK     L08BASIN
1576            KM        BASIN BOUNDARY FROM SURPRISE FARMS
1577            BA   0.485
1578            LG    0.25    0.15    7.30    0.13      36
1579            UI       0      60     185     312     414     606     690     496     373     261
1580            UI     128      94      61      19      19      18      19       0       0       0
1581            UI       0       0       0       0       0       0       0       0       0       0
1582            UI       0       0       0       0       0       0       0       0       0       0
1583            UI       0       0       0       0       0       0       0       0       0       0
                *

1584            KK  DL08REDIVERT
1585            KM        Final Drainage Report for Surprise Farms Parcel 12 (Parcel 12 Basin A on
1586            KM        same as Tract O), Final Drainage Report for Parcel 13 of Surprise Farms
1587            KM        Drainage Report for Surprise Farms Parcel 9 (Tract K and 9), Final Drai
1588            KM        Parcel 10 & 11 of Surprise Farms (Tract L, M, N), Drainage Report for S
1589            KM        Parcel 15 (Basins A & B only, Basin C in School Site), Drainage Report f
1590            KM        Elementary School No 18, Remaining retention volume estimated based on a
1591            KM        Additional Retention based on 100yr 2hr retention.
1592            KM        C value is based on future land use, P=2.7, A=acres
1593            DT    RL08     46.6     0.0
1594            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1595            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

1596            KK  DL04SERETRIEVE
1597            DR   DL04S
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1598            KK  L04L08ROUTE
1599            KM        Cross-section: Cross-section determined from aerial
1600            KM        Manning's N Value: street and earth with sparse trees and shrubs
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1601          RS       1    FLOW
1602          RC   0.013   0.013   0.032    5352  0.0042    0.00
1603          RX  100.00  100.10  100.20  115.20  115.30  115.40  145.00  153.00
1604          RY  1000.0  999.90  999.80  999.50 1000.00 1000.10 1000.20 1000.30
              *

1605          KK   CPL08COMBINE
1606          HC       3   3.739
              *

1607          KK  L08L12ROUTE
1608          KM        Cross-section: Cross-section determined from aerial
1609          KM        Manning's N Value: street, earth with grass and forbs
1610          RS      10    FLOW
1611          RC   0.013   0.025   0.025    5397  0.0031    0.00
1612          RX  100.00  107.00  112.00  116.00  122.00  126.00  165.00  280.00
1613          RY  1248.5 1248.50 1248.00 1247.50 1247.51 1248.00 1248.20 1248.50
              *

1614          KK     L10BASIN
1615          KM        BASIN BOUNDARY FROM SIERRA MONTANA
1616          KM        WADDELL HACIENDAS AND BEARDSLEY CSR
1617          BA   0.844
1618          LG    0.27    0.25    4.55    0.38      18
1619          UI       0      95     240     449     577     766    1141     935     733     554
1620          UI     408     214     156      97      57      29      29      29       0       0
1621          UI       0       0       0       0       0       0       0       0       0       0
1622          UI       0       0       0       0       0       0       0       0       0       0
1623          UI       0       0       0       0       0       0       0       0       0       0
              *

1624          KK  DL10REDIVERT
1625          KM        Final Drainage Report for Sierra Montana Parcel 4 (Basins 1, 2), Drainag
1626          KM        Sierra Montana Parcel 1 (Basins 1,2,3,3A,3B), Drainage Report for Sierra
1627          KM        Parcel 3 (Basins 3,3A,3B,3C), Drainage Report for Sierra Montana Infastr
1628          KM        Phase II (P2 Retention), Sierra Montana Final Drainage Report Parcel 5 (
1629          KM        Sierra Montana Final Drainage Report Parcel 6 (Basins 1,2,3,4,6)
1630          KM        Additional Retention based on 100yr 2hr retention.
1631          KM        C value is based on future land use, P=2.7, A=acres
1632          DT    RL10    34.3     0.0
1633          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1634          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1635          KK  L10L11ROUTE
1636          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1637          KM        on aerial / Manning's N Value: earth with sparse trees and shrubs
1638          RS       3    FLOW
1639          RC   0.032   0.032   0.032    3249  0.0031    0.00
1640          RX  100.00  100.10  100.20  112.00  154.00  166.00  183.00  185.00
1641          RY  1000.2 1000.10 1000.00  997.00  997.00 1000.00 1000.30 1000.40
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1642          KK  DL06SERETRIEVE
1643          DR   DL06S
              *

1644          KK  L06L11ROUTE
1645          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
1646          KM        on aerial / Manning's N Value: earth w/ sparse trees and shrubs
1647          RS       1    FLOW
1648          RC   0.032   0.032   0.032    8226  0.0043    0.00
1649          RX  100.00  106.00  112.00  124.00  154.00  166.00  172.00  178.00
1650          RY  1290.5 1290.30 1290.00 1287.00 1287.10 1290.00 1290.25 1290.50
              *

1651          KK     L11BASIN
1652          KM        BASIN BOUNDARY FROM SIERRA MONTANA
1653          KM        WADDELL CHANNEL DESIGNED FOR 512 CFS PER DEVELOPMENT RPT
1654          BA   0.622
1655          LG    0.25    0.25    4.90    0.34      34
1656          UI       0      80     264     433     572     903     839     608     452     287
1657          UI     139     100      55      25      25      25       0       0       0       0
1658          UI       0       0       0       0       0       0       0       0       0       0
1659          UI       0       0       0       0       0       0       0       0       0       0
1660          UI       0       0       0       0       0       0       0       0       0       0
              *

1661          KK  DL11REDIVERT
1662          KM        Sierra Montana Parcel 8 (Basins 8, 8A, 8B), Parcel 9 (Basins 9, 9A, 8C),
1663          KM        Parcel 12 (included in Parcel 14 report), Parcel 14 (Basins 1,2,3a,3b,4a
1664          KM        OS4,OS5 (Includes Retention for P14 &12)), Parcel 20 (Basins R20C, R20,
1665          KM        1S and 1N estimated from aerial, Infrastructure Phase I (Retention from
1666          KM        Additional Retention based on 100yr 2hr retention.
1667          KM        C value is based on future land use, P=2.7, A=acres
1668          DT    RL11    47.7     0.0
1669          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1670          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1671          KK  DL07SERETRIEVE
1672          DR   DL07S
              *

1673          KK  L07L11ROUTE
1674          KM        Cross-section: 3' deep, 6:1 side slope and 6' bottom width per
1675          KM        Drainage Report for Sierra Montana Infrastructure Phase I (Report 909)
1676          KM        Manning's N Value: earth with sparse trees and shrubs
1677          RS      16    FLOW
1678          RC   0.032   0.032   0.032    8463  0.0026    0.00
1679          RX  100.00  101.00  102.00  120.00  126.00  144.00  145.00  146.00
1680          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1681          KK   CPL11COMBINE
1682          HC       4   4.089
              *

1683          KK  DL11SEDIVERT
1684          KM        Waddell at 173rd alignment split flow
1685          DT   DL11S     0.0     0.0
1686          DI     0.0   309.0  1207.7  2631.3  4439.4     0.0     0.0     0.0     0.0     0.0
```

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1687          DQ     0.0     0.0    22.5   147.6   353.8     0.0     0.0     0.0     0.0     0.0
              *

1688          KK  L11L12ROUTE
1689          KM        Cross-section: Cross-section determined from aerial
1690          KM        Manning's N Value: earth with grass and forbs
1691          RS       2    FLOW
1692          RC   0.025   0.025   0.025    2002  0.0032    0.00
1693          RX  100.00  110.00  180.00  190.00  200.00  220.00  240.00  240.10
1694          RY  1249.5 1249.00 1248.50 1247.00 1248.50 1248.70 1248.80 1249.50
              *

1695          KK     L12BASIN
1696          KM        BASIN BOUNDARY FROM SIERRA MONTANA, AG LAND AND 1990 TOPO
1697          BA   0.358
1698          LG    0.18    0.23    6.20    0.21      52
1699          UI       0      95     326     506     764     512     313     129      73      20
1700          UI      21       0       0       0       0       0       0       0       0       0
1701          UI       0       0       0       0       0       0       0       0       0       0
1702          UI       0       0       0       0       0       0       0       0       0       0
1703          UI       0       0       0       0       0       0       0       0       0       0
              *

1704          KK  DL12REDIVERT
1705          KM        Sierra Montana Parcel 16 (Basins 10A, 16B), Parcel 15 (Basins 15A, 15B,
1706          KM        Parcel 18 (Basins 18A-D), Sierra Montana Crossings
1707          KM        Additional Retention based on 100yr 2hr retention.
1708          KM        C value is based on future land use, P=2.7, A=acres
1709          DT    RL12    32.7     0.0
1710          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1711          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1712          KK   CPL12COMBINE
1713          HC       3   5.563
              *

1714          KK   DL121DIVERT
1715          KM        Waddell at Cotton split flow
1716          DT  DL121S     0.0     0.0
1717          DI     0.0  3141.9  7409.3 13063.4 20317.2     0.0     0.0     0.0     0.0     0.0
1718          DQ     0.0   550.7  2126.5  4314.6  7195.9     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1719          KK   DL122DIVERT
1720          KM        Waddell at Cotton split flow
1721          DT  DL122S     0.0     0.0
1722          DI     0.0  2591.2  5282.9  8748.8 13121.3     0.0     0.0     0.0     0.0     0.0
1723          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *

1724          KK  L12L13ROUTE
1725          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1726          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1727          RS       2    FLOW
1728          RC   0.035   0.035   0.035    3374  0.0051    0.00
1729          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1730          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1731          KK     L13BASIN
1732          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
1733          KM        EASTERN BOUNDARY LOOP 303
1734          BA   0.483
1735          LG    0.10    0.25    4.90    0.41      80
1736          UI       0     169     542     950    1004     609     260     125      36      31
1737          UI       0       0       0       0       0       0       0       0       0       0
1738          UI       0       0       0       0       0       0       0       0       0       0
1739          UI       0       0       0       0       0       0       0       0       0       0
1740          UI       0       0       0       0       0       0       0       0       0       0
              *

1741          KK  DL13REDIVERT
1742          KM        Additional Retention based on 100yr 2hr retention.
1743          KM        C value is based on future land use, P=2.7, A=acres
1744          DT    RL13    51.0     0.0
1745          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1746          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1747          KK   DL091RETRIEVE
1748          DR  DL091S
              *

1749          KK  L09L13ROUTE
1750          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1751          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1752          RS      79    FLOW
1753          RC   0.035   0.035   0.035    7072  0.0039    0.00
1754          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1755          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1756          KK   CPL13COMBINE
1757          HC       3   7.021
              *

1758          KK   DL131DIVERT
1759          KM        L303 at Waddell split flow
1760          KM        Orig calc's by KHA, 2008. Modified for SE component
1761          DT  DL131S     0.0     0.0
1762          DI     0.0   100.5   491.9  1284.7  2545.0     0.0     0.0     0.0     0.0     0.0
1763          DQ     0.0    99.9   470.6  1082.3  1928.4     0.0     0.0     0.0     0.0     0.0
              *

1764          KK   DL132DIVERT
1765          KM        L303 at Waddell split flow
1766          KM        Orig calc's by KHA, 2008. Modified for SE component
1767          DT  DL132S     0.0     0.0
1768          DI     0.0     0.6    21.3   202.4   616.6     0.0     0.0     0.0     0.0     0.0
1769          DQ     0.0     0.6    14.2    36.5    64.9     0.0     0.0     0.0     0.0     0.0
              *
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1770          KK  L13D16ROUTE
1771          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1772          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1773          RS      12    FLOW
1774          RC   0.035   0.035   0.035    3699  0.0033    0.00
1775          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1776          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1777          KK     D16BASIN
1778          KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
1779          BA   0.517
1780          LG    0.11    0.25    4.90    0.41      79
1781          UI       0     181     588    1033    1071     644     272     132      36      34
1782          UI       0       0       0       0       0       0       0       0       0       0
1783          UI       0       0       0       0       0       0       0       0       0       0
1784          UI       0       0       0       0       0       0       0       0       0       0
1785          UI       0       0       0       0       0       0       0       0       0       0
              *

1786          KK  DD16REDIVERT
1787          KM        Additional Retention based on 100yr 2hr retention.
1788          KM        C value is based on future land use, P=2.7, A=acres
1789          DT    RD16    52.6     0.0
1790          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1791          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1792          KK   DL092RETRIEVE
1793          DR  DL092S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1794          KK  L09D16ROUTE
1795          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
1796          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
1797          RS       1    FLOW
1798          RC   0.035   0.035   0.035    7927  0.0045    0.00
1799          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1800          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1801          KK   CPD16COMBINE
1802          HC       4   8.052
              *

1803          KK   DD161DIVERT
1804          KM        Waddell at Sarival split flow
1805          DT  DD161S     0.0     0.0
1806          DI     0.0    52.0   492.4  1578.2  3317.0     0.0     0.0     0.0     0.0     0.0
1807          DQ     0.0    38.3   403.6  1166.1  2341.9     0.0     0.0     0.0     0.0     0.0
              *

1808          KK   DD162DIVERT
1809          KM        Waddell at Sarival split flow
1810          DT  DD162S     0.0     0.0
1811          DI     0.0    13.7    88.8   412.0   975.1     0.0     0.0     0.0     0.0     0.0
1812          DQ     0.0     7.4    32.2    66.7   108.7     0.0     0.0     0.0     0.0     0.0
              *

1813          KK  D16D18ROUTE
1814          KM        Cross-section: Cross-section determined from aerial
1815          KM        Manning's N Value: street and ROW
1816          RS      14    FLOW
1817          RC   0.032   0.013   0.013    2183  0.0035    0.00
1818          RX  100.00  101.00  102.00  148.00  148.10  176.00  177.00  178.00
1819          RY  1000.0  999.90  999.80  999.70  999.20  999.80  999.90 1000.00
              *

1820          KK     D18BASIN
1821          KM        BASIN BOUNDARY FROM LEGACY PARK
1822          BA   0.199
1823          LG    0.25    0.25    4.60    0.39      30
1824          UI       0      83     260     477     382     211      74      30      15       0
1825          UI       0       0       0       0       0       0       0       0       0       0
1826          UI       0       0       0       0       0       0       0       0       0       0
1827          UI       0       0       0       0       0       0       0       0       0       0
1828          UI       0       0       0       0       0       0       0       0       0       0
              *

1829          KK  DD18REDIVERT
1830          KM        Master Drainage Report for Legacy Parc (has excess retention)
1831          DT    RD18    17.2     0.0
1832          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1833          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1834          KK   CPD18COMBINE
1835          HC       2   8.251
              *

1836          KK  D18D19ROUTE
1837          KM        Cross-section: Cross-section determined from aerial
1838          KM        Manning's N Value: street and ROW
1839          RS       3    FLOW
1840          RC   0.032   0.013   0.013    2766  0.0024    0.00
1841          RX  100.00  101.00  132.50  133.00  133.10  151.00  152.00  153.00
1842          RY  1000.1 1000.00  999.50  999.40  998.90  999.30  999.40  999.50
              *

1843          KK     D17BASIN
1844          KM        BASIN BOUNDARY FROM LEGACY PARK
1845          BA   0.197
1846          LG    0.25    0.25    3.95    0.40      30
1847          UI       0      88     269     487     369     197      69      25      15       0
1848          UI       0       0       0       0       0       0       0       0       0       0
1849          UI       0       0       0       0       0       0       0       0       0       0
1850          UI       0       0       0       0       0       0       0       0       0       0
1851          UI       0       0       0       0       0       0       0       0       0       0
              *

1852          KK  DD17REDIVERT
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1853          KM        Master Drainage Report for Kenly Farms Subdivision, Master Drainage Repo
1854          KM        Legacy Parc (has excess retention)
1855          DT    RD17     16.5      0.0
1856          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1857          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1858          KK  D17D19ROUTE
1859          KM        Cross-section: Cross-section from Drainage Report for Channelization of
1860          KM        Reems Road (Report 691) / Manning's N Value: channel w/ grass
1861          KM        bottom and riprap sides
1862          RS      17     FLOW
1863          RC   0.032    0.025    0.032     5422  0.0042     0.00
1864          RX  100.00   101.00   102.00   125.00  133.00   156.00   157.00   159.00
1865          RY  1000.0   999.90   999.80   993.80  993.70   999.80   999.90  1000.00
              *

1866          KK     D19BASIN
1867          KM        BASIN BOUNDARY FROM TASH, WADDEL SQUARE, LME,  AND SCHOOL
1868          BA   0.506
1869          LG    0.25     0.25     4.65     0.38      28
1870          UI       0       65      209      348     457      723      684      502      370      242
1871          UI     115       84       48       20      21       19        0        0        0        0
1872          UI       0        0        0        0       0        0        0        0        0        0
1873          UI       0        0        0        0       0        0        0        0        0        0
1874          UI       0        0        0        0       0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1875          KK  DD19REDIVERT
1876          KM        Drainage Report for Greenway Parc at Surprise One, Final Drainage Report
1877          KM        Retail Center for Venture Development  SP06-411, Stormwater Management R
1878          KM        Jack in the Box, Final Drainage Report for Greenway Parc at Surprise Th
1879          KM        Report for Greenway Parc at Surprise Two, Drainage Report for Walgreens
1880          KM        Waddell & Reems Case # SPA04-297, Drainage Report for Waddell Square, F
1881          KM        Drainage Report for Waddell Square Phase 2-Wells Fargo, Final Drainage R
1882          KM        Waddell Square NWC Reems and Waddell, Final Drainage Report for Tash
1883          KM        Additional Retention based on 100yr 2hr retention.
1884          KM        C value is based on future land use, P=2.7, A=acres
1885          DT    RD19     40.2      0.0
1886          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1887          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1888          KK   CPD19COMBINE
1889          HC       4  16.488
              *

1890          KK   DD191DIVERT
1891          KM        Waddell at Reems split flow
1892          DT  DD191S      0.0      0.0
1893          DI     0.0    107.6    404.8   1261.9  2553.0      0.0      0.0      0.0      0.0      0.0
1894          DQ     0.0     58.0    241.1    802.7  1649.6      0.0      0.0      0.0      0.0      0.0
              *

1895          KK   DD192DIVERT
1896          KM        Waddell at Reems split flow
1897          DT  DD192S      0.0      0.0
1898          DI     0.0     49.6    163.7    459.2   903.4      0.0      0.0      0.0      0.0      0.0
1899          DQ     0.0     27.9     69.2    121.4   182.6      0.0      0.0      0.0      0.0      0.0
              *

1900          KK  D19D20ROUTE
1901          KM        Cross-section: Cross-section determined from aerial
1902          KM        Manning's N Value: street and earth with sparse trees and shrubs
1903          RS       3     FLOW
1904          RC   0.032    0.013    0.013     2674  0.0050     0.00
1905          RX  100.00   101.00   125.00   150.00  150.10   175.00   189.90   190.00
1906          RY  1003.0   999.90   998.90   999.90  999.40   999.60   999.80  1000.25
              *

1907          KK     D20BASIN
1908          KM        BASIN BOUNDARY FROM COUNTRYSIDE UNITS 1-4 AND COTTON GIN
1909          BA   0.498
1910          LG    0.25     0.25     4.65     0.39      32
1911          UI       0       67      234      367     503      791      641      472      341      178
1912          UI     111       68       25       20      21        0        0        0        0        0
1913          UI       0        0        0        0       0        0        0        0        0        0
1914          UI       0        0        0        0       0        0        0        0        0        0
1915          UI       0        0        0        0       0        0        0        0        0        0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1916          KK  DD20REDIVERT
1917          KM        Final Drainage Report Greenway Marketplace Wal-mart Neighborhood
1918          KM        Market #4218-00, Drainage Report for Countryside Elementary School, Ash
1919          KM        Ranch Water Supply Facility Expansion, Countryside - Preliminary Drainag
1920          KM        Report, Final Drainage Report for Cotton Gin
1921          KM        Additional Retention based on 100yr 2hr retention.
1922          KM        C value is based on future land use, P=2.7, A=acres
1923          DT    RD20     41.6      0.0
1924          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
1925          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

1926          KK   DD111RETRIEVE
1927          DR  DD111S
              *

1928          KK  D11D20ROUTE
1929          KM        Cross-section: Cross-section determined from aerial
1930          KM        Manning's N Value: retention basins, earth w/ grass
1931          RS       5     FLOW
1932          RC   0.025    0.025    0.025     6256  0.0032     0.00
1933          RX  100.00   101.00   102.00   114.00  190.00   202.00   203.00   204.00
1934          RY  1000.2  1000.10  1000.00   997.00  996.90  1000.00  1000.10  1000.20
              *

1935          KK   CPD20COMBINE
1936          HC       3  17.648
              *

1937          KK  D20D21ROUTE
1938          KM        Cross-section:  / Manning's N Value: street and earth with sparse
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1939          KM        trees and shrubs
1940          RS       6    FLOW
1941          RC   0.032   0.032   0.013    5323  0.0023    0.00
1942          RX  100.00  100.50  112.00  150.00  162.00  198.00  198.00  220.00
1943          RY  1000.1 1000.00  997.00  997.00 1000.00  999.46  998.90  999.40
              *

1944          KK     D21BASIN
1945          KM        BASIN BOUNDARY FROM ASHTON RANCH MULTI UNITS
1946          BA   0.496
1947          LG    0.25    0.25    4.65    0.39      32
1948          UI       0      63     199     330     436     672     687     496     370     250
1949          UI     123      87      55      19      20      19       0       0       0       0
1950          UI       0       0       0       0       0       0       0       0       0       0
1951          UI       0       0       0       0       0       0       0       0       0       0
1952          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                        HEC-1 INPUT                                          PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1953          KK  DD21REDIVERT
1954          KM        Final Drainage Report for Ashton Ranch Unit 3, Final Drainage Report for
1955          KM        Ashton Ranch Unit 1, Final Drainage Report for Ashton Ranch Unit 2, Fina
1956          KM        Drainage Report for Ashton Ranch Unit 4
1957          DT    RD21    39.9     0.0
1958          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1959          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1960          KK   DD112RETRIEVE
1961          DR  DD112S
              *

1962          KK  D11D21ROUTE
1963          KM        Cross-section: determined from aerial, street section through subdivisio
1964          KM        Manning's N Value: street, earth with sparse trees and shrubs
1965          RS      11    FLOW
1966          RC   0.032   0.013   0.032    8031  0.0035    0.00
1967          RX  100.00  106.00  115.00  115.10  167.00  167.10  174.00  179.00
1968          RY  1000.0  999.80  999.50  999.00  998.90  999.50  999.80 1000.00
              *

1969          KK   DD121RETRIEVE
1970          DR  DD121S
              *

1971          KK  D12D21ROUTE
1972          KM        Cross-section: Cross-section determined from aerial
1973          KM        Manning's N Value: street and earth with sparse trees and shrubs
1974          RS       2    FLOW
1975          RC   0.013   0.013   0.032    2810  0.0078    0.00
1976          RX  100.00  105.00  110.00  115.00  140.00  140.10  176.00  177.00
1977          RY  1000.0  999.90  999.80  999.70  999.20  999.70  999.80 1000.00
              *

1978          KK   CPD21COMBINE
1979          HC       4  18.491
              *

1980          KK   DD211DIVERT
1981          KM        Waddell at Bullard split flow
1982          DT  DD211S     0.0     0.0
1983          DI     0.0   184.9   770.2  1884.9  3510.6     0.0     0.0     0.0     0.0     0.0
1984          DQ     0.0   139.4   462.9  1049.1  1871.4     0.0     0.0     0.0     0.0     0.0
              *

1985          KK   DD212DIVERT
1986          KM        Waddell at Bullard split flow
1987          DT  DD212S     0.0     0.0
1988          DI     0.0    45.5   307.3   835.8  1639.2     0.0     0.0     0.0     0.0     0.0
1989          DQ     0.0    36.2   111.1   209.5   326.8     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE 51

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1990          KK  D21D22ROUTE
1991          KM        Cross-section: Cross-section determined from aerial
1992          KM        Manning's N Value: earth with grass and forbs (main channel)
1993          KM        earth with sparse trees and shrubs (overbanks)
1994          RS       4    FLOW
1995          RC   0.032   0.025   0.032    2720  0.0029    0.00
1996          RX  100.00  103.00  105.00  116.00  151.00  160.00  165.00  170.00
1997          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

1998          KK     D22BASIN
1999          KM        BASIN BOUNDARY FROM ROYAL RANCH UNIT I AND II
2000          BA   0.454
2001          LG    0.24    0.25    4.70    0.37      32
2002          UI       0      63     233     357     500     764     567     411     284     135
2003          UI      87      50      20      20      20       0       0       0       0       0
2004          UI       0       0       0       0       0       0       0       0       0       0
2005          UI       0       0       0       0       0       0       0       0       0       0
2006          UI       0       0       0       0       0       0       0       0       0       0
              *

2007          KK  DD22REDIVERT
2008          KM        Drainage Report for Royal Ranch Unit 2 (Basins P1&N in D23), Final Drain
2009          KM        Report for Royal Ranch Unit 2, Parcel 5, Final Drainage Report for Royal
2010          KM        Unit 2 Parcel 8, portion estimated by aerial for Del Webb
2011          DT    RD22    37.5     0.0
2012          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2013          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2014          KK   DD122RETRIEVE
2015          DR  DD122S
              *

2016          KK  D12D22ROUTE
2017          KM        Cross-section: Cross section determined from aerial
2018          KM        Manning's N Value: street and earth with sparse trees and shrubs
2019          RS       8    FLOW
2020          RC   0.032   0.013   0.013    7744  0.0040    0.00
2021          RX  100.00  105.00  145.00  145.10  160.00  174.00  178.00  180.00
2022          RY  1000.0  999.90  999.50  999.00  999.20  999.50  999.60  999.65
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2023            KK   CPD22COMBINE
2024            HC       3  18.945
                *

2025            KK  D22D23ROUTE
2026            KM        Cross-section: Cross-section determined from aerial
2027            KM        Manning's N Value: earth with sparse trees and shrubs/ riprap
2028            RS       2    FLOW
2029            RC   0.032   0.032   0.032    2705  0.0037    0.00
2030            RX  100.00  104.00  106.00  110.00  118.00  122.00  126.00  138.00
2031            RY  1161.0 1160.00 1159.00 1158.00 1158.10 1159.00 1160.00 1161.00
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2032            KK     D23BASIN
2033            KM        BASIN BOUNDARY FROM SIERRA VERDE
2034            BA   0.541
2035            LG    0.21    0.25    5.00    0.34      34
2036            UI       0      70     229     376     498     786     729     530     393     249
2037            UI     121      87      48      21      22      21       0       0       0       0
2038            UI       0       0       0       0       0       0       0       0       0       0
2039            UI       0       0       0       0       0       0       0       0       0       0
2040            UI       0       0       0       0       0       0       0       0       0       0
                *

2041            KK  DD23REDIVERT
2042            KM        Final Drainage Report for Sierra Verde Parcel 5, Infrastructure Drainage
2043            KM        Sierra Verde (temporary basins removed), Final Drainage Report for Sierr
2044            KM        Final Drainage Report for Harmony Apartments, Drainage Report for Royal
2045            KM        Final Drainage Report for Sierra Verde Parcel 9, Final Drainage Report f
2046            KM        Parcel 3, Final Drainage Report for Sierra Verde Parcel 2, Final Drainag
2047            KM        Sierra Verde Parcel 1, Drainage Report for Fry's at Waddell and Litchfie
2048            KM        Additional Retention based on 100yr 2hr retention.
2049            KM        C value is based on future land use, P=2.7, A=acres
2050            DT    RD23     49.6     0.0
2051            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2052            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2053            KK   DD131RETRIEVE
2054            DR  DD131S
                *

2055            KK  D13D23ROUTE
2056            KM        Cross-section: Cross-section determined from aerial 1/2 street section
2057            KM        Manning's N Value: street, earth with sparse trees and shrubs
2058            RS       7    FLOW
2059            RC   0.032   0.013   0.032    5460  0.0044    0.00
2060            RX  100.00  100.00  109.00  109.00  148.00  148.00  197.00  198.00
2061            RY  1180.0 1176.28 1176.28 1175.78 1175.00 1175.50 1177.00 1177.10
                *

2062            KK   CPD23COMBINE
2063            HC       3   22.13
                *

2064            KK   DD231DIVERT
2065            KM        Waddell at Litchfield split flow
2066            DT  DD231S     0.0     0.0
2067            DI     0.0   518.8   867.4  1680.6  2985.0     0.0     0.0     0.0     0.0     0.0
2068            DQ     0.0    51.3   223.3   727.6  1503.5     0.0     0.0     0.0     0.0     0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2069            KK   DD232DIVERT
2070            KM        Waddell at Litchfield split flow
2071            DT  DD232S     0.0     0.0
2072            DI     0.0   467.5   644.1   953.0  1481.6     0.0     0.0     0.0     0.0     0.0
2073            DQ     0.0    55.8   138.4   242.9   365.2     0.0     0.0     0.0     0.0     0.0
                *

2074            KK  D23D24ROUTE
2075            KM        Manning's N Value: Litchfield Manor, CS 400 HDR 896
2076            RS       3    FLOW
2077            RC   0.025   0.025   0.025    2496  0.0020    0.00
2078            RX  100.00  100.10  104.10  108.10  112.10  123.70  143.60  151.60
2079            RY  1157.0 1155.00 1154.00 1153.00 1153.10 1155.00 1156.00 1157.00
                *

2080            KK     D24BASIN
2081            KM        BASIN BOUNDARY FROM LITCHFIELD MANOR
2082            BA   0.492
2083            LG    0.27    0.25    5.10    0.31      28
2084            UI       0      56     145     267     346     467     677     539     421     315
2085            UI     227     116      89      56      26      17      17      17       0       0
2086            UI       0       0       0       0       0       0       0       0       0       0
2087            UI       0       0       0       0       0       0       0       0       0       0
2088            UI       0       0       0       0       0       0       0       0       0       0
                *

2089            KK  DD24REDIVERT
2090            KM        Final Drainage Report for Litchfield Manor (excess retention per report)
2091            DT    RD24     40.9     0.0
2092            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2093            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

2094            KK   DD132RETRIEVE
2095            DR  DD132S
                *

2096            KK  D13D24ROUTE
2097            KM        Cross-section: Cross-section determined from aerial 1/2 street section
2098            KM        Manning's N Value: street, earth with sparse trees and shrubs
2099            RS       5    FLOW
2100            RC   0.032   0.013   0.013    5460  0.0044    0.00
2101            RX  100.00  100.10  145.00  145.10  175.00  175.10  184.90  185.00
2102            RY  1178.0 1176.50 1175.50 1175.00 1175.78 1176.28 1176.28 1180.00
                *

2103            KK   CPD24COMBINE
2104            HC       3  22.622
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1                                   HEC-1 INPUT                                                    PAGE 54

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

              KK  DD24SEDIVERT
              KM        Waddell near Dysart split flow (subdivision boundary)
              DT   DD24S     0.0     0.0
              DI     0.0    55.3   366.8  1137.9  2658.6     0.0     0.0     0.0     0.0     0.0
              DQ     0.0     0.0    81.5   397.9  1115.4     0.0     0.0     0.0     0.0     0.0
              *

              KK  D24D25ROUTE
              KM        Cross-section: Cross-section determined from aerial
              KM        Manning's N Value: Grass, earth with sparse trees and shrubs
              RS       5    FLOW
              RC   0.032   0.025   0.032    2701  0.0017    0.00
              RX  100.00  105.00  120.00  130.00  150.00  165.00  200.00  210.00
              RY  1000.0  999.50  997.20  996.00  995.90  997.20  999.50 1000.00
              *

              KK     D25BASIN
              KM        BASIN BOUNDARY FROM ROSEVIEW MULTI PHASE
              BA   0.497
              LG    0.25    0.25    4.80    0.35      30
              UI       0      63     200     335     439     678     685     499     371     247
              UI     120      87      53      19      20      19       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              *

              KK  DD25REDIVERT
              KM        Drainage Report for Roseview - Parcels 1-6, Master Drainage
              KM        Report for Roseview, Retention for Parcels 7 and 8 were estimated
              KM        based on aerial, Parcel 5a has no retention
              DT    RD25    37.1     0.0
              DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

              KK   CPD25COMBINE
              HC       2  23.119
              *

              KK   SRD25STORAGE
              KM        Storage in basin behind Waddell/Dysart/RR Tracks
              KO
              RS       1    STOR
              SV            7.32   20.24   39.02   58.47
              SQ                          780.00 4053.00
              SE  1146.0 1148.00 1150.00 1152.00 1154.00
              ST
              *
1                                   HEC-1 INPUT                                                    PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

              KK   DD251DIVERT
              KM        Waddell/Dysart/RR split flow
              DT  DD251S     0.0     0.0
              DI     0.0    69.9  1206.6  4171.1  8464.1     0.0     0.0     0.0     0.0     0.0
              DQ     0.0    69.9  1097.4  3288.4  6292.9     0.0     0.0     0.0     0.0     0.0
              *

              KK   DD252DIVERT
              KM        Waddell/Dysart/RR split flow
              DT  DD252S     0.0     0.0
              DI     0.0     0.0   109.3   882.7  2171.2     0.0     0.0     0.0     0.0     0.0
              DQ     0.0     0.0   109.3   363.0   701.2     0.0     0.0     0.0     0.0     0.0
              *

              KK  D2542AROUTE
              KM        Cross-section: Cross-section estimated from aerial, estimated 3' deep
              KM        Manning's N Value: earth with sparse trees and shrubs
              KM        Route is from D25 to D42 (broken into 2 routes, 1st route)
              RS       1    FLOW
              RC   0.032   0.032   0.032    2090  0.0057    0.00
              RX  100.00  101.00  102.00  122.00  128.00  145.00  146.00  147.00
              RY  1000.0  999.90  999.80  997.00  997.10  999.80  999.90 1000.00
              *

              KK  D2542BROUTE
              KM        Cross-section: Cross-section from Lower El Mirage Channelization
              KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
              KM        Route is from D25 to D42 (broken into 2 routes, 2nd route)
              RS       1    FLOW
              RC   0.022   0.022   0.022    4791  0.0042    0.00
              RX  100.00  103.00  105.50  137.50  187.50  219.50  222.00  225.00
              RY  1000.0  999.50  998.50  990.50  990.40  998.50  999.50 1000.00
              *

              KK     D37BASIN
              KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
              BA   0.197
              LG    0.10    0.25    5.60    0.30      40
              UI       0     174     558     530     193      49      20       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              UI       0       0       0       0       0       0       0       0       0       0
              *

              KK  DD37REDIVERT
              KM        Additional Retention based on 100yr 2hr retention.
              KM        C value is based on future land use, P=2.7, A=acres
              DT    RD37    21.2     0.0
              DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                   HEC-1 INPUT                                                    PAGE 56

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

              KK   DD232RETRIEVE
              DR  DD232S
              *
```

```
2186          KK  D23D37ROUTE
2187          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2188          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2189          RS      16    FLOW
2190          RC   0.035   0.035   0.035    4432  0.0024    0.00
2191          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2192          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2193          KK   DD251RETRIEVE
2194          DR  DD251S
              *

2195          KK  D25D37ROUTE
2196          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
2197          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
2198          RS       1    FLOW
2199          RC   0.032   0.032   0.032    2711  0.0007    0.00
2200          RX  100.00  115.00  130.00  138.00  144.00  152.00  165.00  185.00
2201          RY  1000.0  999.50  999.00  996.00  996.10  999.00  999.50 1000.00
              *

2202          KK  DD24SERETRIEVE
2203          DR   DD24S
              *

2204          KK  D24D37ROUTE
2205          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2206          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2207          RS       5    FLOW
2208          RC   0.035   0.035   0.035    1891  0.0028    0.00
2209          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2210          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2211          KK   CPD37COMBINE
2212          HC       4  23.316
              *

2213          KK  DD37SEDIVERT
2214          KM        split flow across low point in RR tracks
2215          DT   DD37S     0.0     0.0
2216          DI     0.0  1457.6  3118.3  5527.2  9114.3     0.0     0.0     0.0     0.0     0.0
2217          DQ     0.0     0.0     4.6   291.9  1203.2     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 57

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2218          KK  D37D39ROUTE
2219          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2220          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2221          RS       1    FLOW
2222          RC   0.035   0.035   0.035    3516  0.0030    0.00
2223          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2224          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2225          KK     D35BASIN
2226          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
2227          BA   0.254
2228          LG    0.18    0.25    4.55    0.45      37
2229          UI       0     153     457     735     406     142      46      21       0       0
2230          UI       0       0       0       0       0       0       0       0       0       0
2231          UI       0       0       0       0       0       0       0       0       0       0
2232          UI       0       0       0       0       0       0       0       0       0       0
2233          UI       0       0       0       0       0       0       0       0       0       0
              *

2234          KK  DD35REDIVERT
2235          KM        Additional Retention based on 100yr 2hr retention.
2236          KM        C value is based on future land use, P=2.7, A=acres
2237          DT    RD35    27.2     0.0
2238          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2239          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2240          KK   DD231RETRIEVE
2241          DR  DD231S
              *

2242          KK  D23D35ROUTE
2243          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2244          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2245          RS      10    FLOW
2246          RC   0.035   0.035   0.035    3580  0.0037    0.00
2247          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2248          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2249          KK   CPD35COMBINE
2250          HC       2  22.384
              *

2251          KK  DD35SEDIVERT
2252          KM        Litchfield at 1/2 mi S. of Waddell split flow
2253          DT   DD35S     0.0     0.0
2254          DI     0.0   112.5   584.6  1947.2  4136.3     0.0     0.0     0.0     0.0     0.0
2255          DQ     0.0    18.8    97.4   368.7   900.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 58

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2256          KK  D35D38ROUTE
2257          KM        Cross-section: Cross-section from Surprise Pointe Master
2258          KM        Drainage Report / Manning's N Value: riprap
2259          RS       8    FLOW
2260          RC   0.032   0.032   0.032    2588  0.0023    0.00
2261          RX  100.00  105.00  110.00  125.50  131.50  151.00  155.00  160.00
2262          RY  1000.0  999.90  999.80  996.10  996.00  999.80  999.90 1000.00
              *

2263          KK     D38BASIN
2264          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2265          BA   0.124
2266          LG    0.10    0.25    4.45    0.53      40
```

```
2267          UI       0     112     362     327     117      29      13       0       0       0
2268          UI       0       0       0       0       0       0       0       0       0       0
2269          UI       0       0       0       0       0       0       0       0       0       0
2270          UI       0       0       0       0       0       0       0       0       0       0
2271          UI       0       0       0       0       0       0       0       0       0       0
              *

2272          KK  DD38REDIVERT
2273          KM        Additional Retention based on 100yr 2hr retention.
2274          KM        C value is based on future land use, P=2.7, A=acres
2275          DT    RD38    13.6     0.0
2276          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2277          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2278          KK  DD37SERETRIEVE
2279          DR   DD37S
              *

2280          KK  D37D38ROUTE
2281          KM        Cross-section: Cross-section estimated from aerial and topo-railroad
2282          KM       Manning's N Value: earth w/ sparse trees and brush
2283          RS       1    FLOW
2284          RC   0.032   0.032   0.032    1505  0.0040    0.00
2285          RX  100.00  120.00  127.00  134.00  155.00  170.00  190.00  290.00
2286          RY  1148.1 1148.00 1147.00 1146.00 1146.10 1147.00 1148.00 1148.10
              *

2287          KK   CPD38COMBINE
2288          HC       3  23.694
              *

2289          KK   DD381DIVERT
2290          KM        RR tracks btwn Cactus and Waddell split flow
2291          DT  DD381S     0.0     0.0
2292          DI     0.0   178.5  1607.5  4129.9  7990.7     0.0     0.0     0.0     0.0     0.0
2293          DQ     0.0   156.9  1414.9  3582.1  6821.6     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE 59

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2294          KK   DD382DIVERT
2295          KM        RR tracks btwn Cactus and Waddell split flow
2296          DT  DD382S     0.0     0.0
2297          DI     0.0    21.7   192.6   547.8  1169.1     0.0     0.0     0.0     0.0     0.0
2298          DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
              *

2299          KK  D38D39ROUTE
2300          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2301          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2302          RS      19    FLOW
2303          RC   0.035   0.035   0.035    3985  0.0013    0.00
2304          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2305          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2306          KK     D39BASIN
2307          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
2308          BA   0.182
2309          LG    0.10    0.25    5.60    0.31      40
2310          UI       0     178     574     460     148      34       0       0       0       0
2311          UI       0       0       0       0       0       0       0       0       0       0
2312          UI       0       0       0       0       0       0       0       0       0       0
2313          UI       0       0       0       0       0       0       0       0       0       0
2314          UI       0       0       0       0       0       0       0       0       0       0
              *

2315          KK  DD39REDIVERT
2316          KM        Additional Retention based on 100yr 2hr retention.
2317          KM        C value is based on future land use, P=2.7, A=acres
2318          DT    RD39    19.9     0.0
2319          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2320          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2321          KK   DD252RETRIEVE
2322          DR  DD252S
              *

2323          KK  D25D39ROUTE
2324          KM        Cross-section: Cross-section from Surprise Pointe Master
2325          KM        Drainage Report / Manning's N Value: clean earth
2326          RS       1    FLOW
2327          RC   0.022   0.022   0.022    2101  0.0029    0.00
2328          RX  100.00  101.00  102.00  120.00  120.50  132.20  133.00  134.00
2329          RY  1000.0  999.90  999.80  996.80  996.90  999.80  999.90 1000.00
              *

2330          KK   CPD39COMBINE
2331          HC       4  23.876
              *
1                                          HEC-1 INPUT                                          PAGE 60

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2332          KK  D39D42ROUTE
2333          KM        Cross-section: Cross-section from Lower El Mirage Channelization
2334          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2335          RS       9    FLOW
2336          RC   0.022   0.022   0.022    5691  0.0035    0.00
2337          RX  100.00  103.00  105.50  137.50  187.50  219.50  222.00  225.00
2338          RY  1000.0  999.50  998.50  990.50  990.40  998.50  999.50 1000.00
              *

2339          KK     D26BASIN
2340          KM        BASIN BOUNDARY FROM RACHO EL MIRAGE, SCHOOL
2341          KM        MOBILE HOME PARK, SUNWEST CEMETARY AND GRAND AVE CHANNEL
2342          BA   0.642
2343          LG    0.21    0.24    5.80    0.24      39
2344          UI       0     256     801    1469    1252     726     272     111      45       0
2345          UI       0       0       0       0       0       0       0       0       0       0
2346          UI       0       0       0       0       0       0       0       0       0       0
2347          UI       0       0       0       0       0       0       0       0       0       0
2348          UI       0       0       0       0       0       0       0       0       0       0
              *
```

```
2349          KK  DD26REDIVERT
2350          KM        Retention volume estimated based on aerial
2351          DT    RD26     60.5      0.0
2352          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2353          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2354          KK   DD142RETRIEVE
2355          DR  DD142S
              *

2356          KK  D14D26ROUTE
2357          KM        Cross-section: Cross-section from Lower El Mirage Channelization
2358          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2359          RS       3    FLOW
2360          RC   0.022   0.022   0.022    5050  0.0048    0.00
2361          RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2362          RY  1000.0  999.50  999.00  991.00  991.10  999.00  999.80 1000.00
              *

2363          KK   CPD26COMBINE
2364          HC       2     5.4
              *

2365          KK  D26D27ROUTE
2366          KM        Cross-section: Cross-section determined from FCDMC 18
2367          KM        Manning's N Value: Clean earth
2368          RS       2    FLOW
2369          RC   0.022   0.022   0.022    2050  0.0039    0.00
2370          RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2371          RY  1000.0  999.50  999.00  991.00  991.00  999.00  999.50 1000.00
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2372          KK     D27BASIN
2373          KM        BASIN BOUNDARY FROM RANCHO EL MIRAGE
2374          KM        WEST EL MIRAGE AND BNSF RR ALIGNMENT
2375          BA   0.316
2376          LG    0.20     0.24     4.90     0.35       42
2377          UI       0      101      334      573      674      411      197       89       33       20
2378          UI       0        0        0        0        0        0        0        0        0        0
2379          UI       0        0        0        0        0        0        0        0        0        0
2380          UI       0        0        0        0        0        0        0        0        0        0
2381          UI       0        0        0        0        0        0        0        0        0        0
              *

2382          KK  DD27REDIVERT
2383          KM        Retention volume estimated based on aerial
2384          DT    RD27      8.2      0.0
2385          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2386          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2387          KK   CPD27COMBINE
2388          HC       2   5.716
              *

2389          KK   SRD27STORAGE
2390          KM        Storage at culvert under TB Road
2391          KO
2392          RS       1    STOR
2393          SV                                                  22.80    51.41
2394          SQ            52.00   202.00   415.00   658.00   906.00  1127.00  2999.00
2395          SE  1140.0  1142.00  1144.00  1146.00  1148.00  1150.00  1152.00  1154.00
2396          ST
              *

2397          KK  D27D42ROUTE
2398          KM        Cross-section: Cross-section from Lower El Mirage Channelization
2399          KM        (Report FCDMC 18-198B) / Manning's N Value: clean earth; straight
2400          RS       3    FLOW
2401          RC   0.022   0.022   0.022    5598  0.0032    0.00
2402          RX  100.00  102.50  105.50  137.50  187.50  219.50  222.00  225.00
2403          RY  1000.0  999.50  999.00  991.00  991.10  999.00  999.50 1000.00
              *

2404          KK     D42BASIN
2405          KM        BASIN BOUNDARY FROM PARQUE VERDE MULTI PHASE
2406          KM        DYSART SCHOOL DISTRICT, AND BUENA VISTA
2407          BA   0.994
2408          LG    0.23     0.24     5.20     0.30       35
2409          UI       0      154      637      944     1472     1702     1142      782      387      222
2410          UI     118       47       48        0        0        0        0        0        0        0
2411          UI       0        0        0        0        0        0        0        0        0        0
2412          UI       0        0        0        0        0        0        0        0        0        0
2413          UI       0        0        0        0        0        0        0        0        0        0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2414          KK  DD42REDIVERT
2415          KM        Retention volume estimated based on aerial, Cactus and Dysart
2416          KM        Subdivision and Parque Verde - No Reports available
2417          DT    RD42     76.2      0.0
2418          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2419          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2420          KK   CPD42COMBINE
2421          HC       4  26.933
              *

2422          KK   SRD42STORAGE
2423          KM        Storage behind Cactus Road
2424          KO
2425          RS       1    STOR
2426          SV            0.64     4.60    17.30    27.60    56.00
2427          SQ                   139.00   426.00   827.00  1295.00
2428          SE  1105.3  1108.00  1110.00  1112.00  1114.00  1116.00
2429          ST
              *

2430          KK  D42D53ROUTE
2431          KM        Cross-section: Cross-section estimated from aerial and topo data
2432          KM        from West Cactus Basin CAR (with average width of 2 channel segments)
```

```
2433          KM        Manning's N Value: clean earth; straight
2434          RS       2    FLOW
2435          RC   0.022   0.022   0.022    1558  0.0026    0.00
2436          RX  100.00  103.00  105.00  145.00  271.00  311.00  313.00  315.00
2437          RY  1000.0  999.90  999.80  995.80  995.90  999.80  999.90 1000.00
              *

2438          KK     D53BASIN
2439          KM        BASIN BOUNDARY FROM EL MIRAGE MARKET PLACE, RANCHO MIRAGE UNIT 3
2440          BA   0.118
2441          LG    0.14    0.25    4.60    0.47      27
2442          UI       0      65     191     329     203      81      29       9       0       0
2443          UI       0       0       0       0       0       0       0       0       0       0
2444          UI       0       0       0       0       0       0       0       0       0       0
2445          UI       0       0       0       0       0       0       0       0       0       0
2446          UI       0       0       0       0       0       0       0       0       0       0
              *

2447          KK  DD53REDIVERT
2448          KM        Retention volume estimated based on aerial
2449          DT    RD53    14.4     0.0
2450          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2451          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2452          KK   CPD53COMBINE
2453          HC       2  27.051
              *

2454          KK   SRD53STORAGE
2455          KM        West Cactus Basin
2456          KM        Calculations based on field visit and existing topo
2457          KO
2458          RS       1    STOR
2459          SV            7.69   15.72   24.09   33.37   38.57   48.05   57.88   68.06
2460          SQ                                           106.00  329.00  547.00  731.00
2461          SE  1103.5 1104.50 1105.50 1106.50 1107.50 1109.00 1110.00 1111.00 1112.00
2462          ST
              *

2463          KK  D53D54ROUTE
2464          KM        Cross-section: golf course, Cross-section determined from
2465          KM        aerial-golf course / Manning's N Value: earth w/ grass
2466          RS       6    FLOW
2467          RC   0.025   0.025   0.025    3999  0.0045    0.00
2468          RX  100.00  174.00  228.00  298.00  357.50  413.00  468.00  486.00
2469          RY  1106.0 1104.00 1103.00 1102.00 1101.90 1103.00 1104.00 1104.10
              *

2470          KK     D43BASIN
2471          KM        BASIN BOUNDARY FROM MONTA BLANCA ESTATES, SUNNYVALE AND SUNDIAL
2472          BA   0.500
2473          LG    0.24    0.25    4.70    0.37      36
2474          UI       0      75     299     448     669     867     596     410     233     124
2475          UI      75      23      23      23       0       0       0       0       0       0
2476          UI       0       0       0       0       0       0       0       0       0       0
2477          UI       0       0       0       0       0       0       0       0       0       0
2478          UI       0       0       0       0       0       0       0       0       0       0
              *

2479          KK  DD43REDIVERT
2480          KM        Retention volume estimated based on aerial
2481          DT    RD43    38.6     0.0
2482          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2483          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2484          KK  D43D54ROUTE
2485          KM        Cross-section: golf course, assumed 0.5%
2486          KM        side slopes, V-ditch / Manning's N Value: grass - golf course
2487          RS      16    FLOW
2488          RC   0.025   0.025   0.025    3872  0.0023    0.00
2489          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2490          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE 64

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2491          KK     D54BASIN
2492          KM        BASIN BOUNDARY FROM FAIRWAYS GOLF COURSE DIVISION
2493          KM        AND PUEBLO EL MIRAGE RV RESORT
2494          BA   0.271
2495          LG    0.17    0.25    4.45    0.51      25
2496          UI       0      76     256     403     587     382     222      90      45      16
2497          UI      16       0       0       0       0       0       0       0       0       0
2498          UI       0       0       0       0       0       0       0       0       0       0
2499          UI       0       0       0       0       0       0       0       0       0       0
2500          UI       0       0       0       0       0       0       0       0       0       0
              *

2501          KK  DD54REDIVERT
2502          KM        NO REPORTS - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
2503          KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
2504          KM        Additional Retention based on 100yr 2hr retention.
2505          KM        C value is based on future land use, P=2.7, A=acres
2506          DT    RD54     9.1     0.0
2507          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2508          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2509          KK   CPD54COMBINE
2510          HC       3  27.822
              *

2511          KK     D44BASIN
2512          KM        BASIN BOUNDARY FROM SUNDIAL MULTI PHASE, AGULAR HOMES, TERROVES,
2513          KM        EL MIRAGE HOUSING, ARIZONA BRISAS, MOUNTAIN TRAILE DEVELPMENTS AND
2514          KM        AGUA FRIA RIVER
2515          BA   0.535
2516          LG    0.22    0.24    3.78    0.45      32
2517          UI       0      70     230     379     496     793     718     520     385     234
2518          UI     120      84      43      21      22      22       0       0       0       0
2519          UI       0       0       0       0       0       0       0       0       0       0
2520          UI       0       0       0       0       0       0       0       0       0       0
```

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2521          UI       0       0       0       0       0       0       0       0       0       0
              *

2522          KK  DD44REDIVERT
2523          KM        Retention volume estimated based on aerial
2524          DT    RD44    32.1     0.0
2525          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2526          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2527          KK     D55BASIN
2528          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
2529          BA   0.187
2530          LG    0.20    0.26    3.48    0.55      26
2531          UI       0      45     158     242     387     279     175      80      44      17
2532          UI      10      11       0       0       0       0       0       0       0       0
2533          UI       0       0       0       0       0       0       0       0       0       0
2534          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE 65

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2535          UI       0       0       0       0       0       0       0       0       0       0
              *

2536          KK  DD55REDIVERT
2537          KM        Retention volume estimated based on aerial
2538          DT    RD55    10.4     0.0
2539          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2540          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2541          KK     D56BASIN
2542          KM        BASIN BOUNDARY FROM SUNDIAL UNIT 1 & 2 AND AGUA FRIA RIVER
2543          BA   0.225
2544          LG    0.19    0.25    4.40    0.50      27
2545          UI       0      39     154     228     367     373     251     164      74      45
2546          UI      20      11      11       0       0       0       0       0       0       0
2547          UI       0       0       0       0       0       0       0       0       0       0
2548          UI       0       0       0       0       0       0       0       0       0       0
2549          UI       0       0       0       0       0       0       0       0       0       0
              *

2550          KK  DD56REDIVERT
2551          KM        NO REPORT - ESTIMATED FIRST FLUSH RETENTION FROM AERIAL
2552          KM        DUE TO LOCATION OF DEVELOPMENT TO THE RIVER
2553          KM        Additional Retention based on 100yr 2hr retention.
2554          KM        C value is based on future land use, P=2.7, A=acres
2555          DT    RD56     4.6     0.0
2556          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2557          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2558          KK   DUMMYCOMBINE
2559          HC       3
              *

2560          KK   DUMMYCOMBINE
2561          HC       3
              *

2562          KK     L14BASIN
2563          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
2564          BA   0.229
2565          LG    0.30    0.25    4.15    0.52      15
2566          UI       0      44     169     252     422     361     242     144      67      38
2567          UI      11      12       0       0       0       0       0       0       0       0
2568          UI       0       0       0       0       0       0       0       0       0       0
2569          UI       0       0       0       0       0       0       0       0       0       0
2570          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE 66

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2571          KK  DL14REDIVERT
2572          KM        Additional Retention based on 100yr 2hr retention.
2573          KM        C value is based on future land use, P=2.7, A=acres
2574          DT    RL14    15.6     0.0
2575          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2576          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2577          KK  L14L15ROUTE
2578          KM        Cross-section: Cross-section determined from aerial
2579          KM        Manning's N Value: earth w/ sparse trees and brush
2580          RS       1    FLOW
2581          RC   0.032   0.032   0.032    3624  0.0055    0.00
2582          RX  100.00  101.00  145.00  159.00  171.00  180.00  196.00  197.00
2583          RY  1295.0 1295.00 1294.00 1292.00 1292.00 1294.00 1295.00 1295.00
              *

2584          KK     L15BASIN
2585          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, AERIAL PHOTOGRAPHY AND 1990 TOPO
2586          BA   0.372
2587          LG    0.29    0.24    4.35    0.44      12
2588          UI       0      65     254     377     606     616     416     271     123      74
2589          UI      33      19      18       0       0       0       0       0       0       0
2590          UI       0       0       0       0       0       0       0       0       0       0
2591          UI       0       0       0       0       0       0       0       0       0       0
2592          UI       0       0       0       0       0       0       0       0       0       0
              *

2593          KK  DL15REDIVERT
2594          KM        Additional Retention based on 100yr 2hr retention.
2595          KM        C value is based on future land use, P=2.7, A=acres
2596          DT    RL15    24.3     0.0
2597          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2598          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2599          KK   CPL15COMBINE
2600          HC       2   0.601
              *

2601          KK  L15L16ROUTE
2602          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2603          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2604          RS       1    FLOW
```

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2605          RC   0.035   0.035   0.035    3540  0.0068    0.00
2606          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2607          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                   HEC-1 INPUT                                                    PAGE 67

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2608          KK     L16BASIN
2609          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND 1990 TOPO
2610          BA   0.502
2611          LG    0.29    0.25    4.25    0.49      19
2612          UI       0      81     329     488     761     852     571     389     185     109
2613          UI      55      24      24       0       0       0       0       0       0       0
2614          UI       0       0       0       0       0       0       0       0       0       0
2615          UI       0       0       0       0       0       0       0       0       0       0
2616          UI       0       0       0       0       0       0       0       0       0       0
              *

2617          KK  DL16REDIVERT
2618          KM        Additional Retention based on 100yr 2hr retention.
2619          KM        C value is based on future land use, P=2.7, A=acres
2620          DT    RL16    36.7     0.0
2621          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2622          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2623          KK   CPL16COMBINE
2624          HC       2   1.103
              *

2625          KK  L16L17ROUTE
2626          KM        Cross-section: Cross-section determined from Sarah Ann Ranch
2627          KM        report and aerial / Manning's N Value: earth w/grass and forbs
2628          RS       1    FLOW
2629          RC   0.025   0.025   0.025    2699  0.0067    0.00
2630          RX  100.00  101.00  102.00  118.00  138.00  154.00  154.50  155.00
2631          RY  1000.0  999.90  999.80  996.00  996.00  999.80  999.90 1000.00
              *

2632          KK     L17BASIN
2633          KM        BASIN BOUNDARY FROM SARAH ANN RANCH UNIT1 AND UNIT2
2634          BA   0.504
2635          LG    0.25    0.25    4.30    0.48      34
2636          UI       0      68     236     373     508     801     649     477     346     180
2637          UI     112      69      25      21      21       0       0       0       0       0
2638          UI       0       0       0       0       0       0       0       0       0       0
2639          UI       0       0       0       0       0       0       0       0       0       0
2640          UI       0       0       0       0       0       0       0       0       0       0
              *

2641          KK  DL17REDIVERT
2642          KM        Final Drainage Report for Sarah Ann Ranch
2643          DT    RL17    49.0     0.0
2644          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2645          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                   HEC-1 INPUT                                                    PAGE 68

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2646          KK   CPL17COMBINE
2647          HC       2   1.607
              *

2648          KK  DL17SEDIVERT
2649          KM        Cactus at 175th Ave split flow
2650          DT   DL17S     0.0     0.0
2651          DI     0.0   513.8   736.5  1344.5  2447.7     0.0     0.0     0.0     0.0     0.0
2652          DQ     0.0     8.1    70.1   289.8   732.1     0.0     0.0     0.0     0.0     0.0
              *

2653          KK  L17L18ROUTE
2654          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2655          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2656          RS       1    FLOW
2657          RC   0.035   0.035   0.035    3513  0.0047    0.00
2658          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2659          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2660          KK     L18BASIN
2661          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2662          BA   0.500
2663          LG    0.30    0.25    4.65    0.38      15
2664          UI       0      83     333     492     783     842     565     380     174     104
2665          UI      51      25      24       0       0       0       0       0       0       0
2666          UI       0       0       0       0       0       0       0       0       0       0
2667          UI       0       0       0       0       0       0       0       0       0       0
2668          UI       0       0       0       0       0       0       0       0       0       0
              *

2669          KK  DL18REDIVERT
2670          KM        Additional Retention based on 100yr 2hr retention.
2671          KM        C value is based on future land use, P=2.7, A=acres
2672          DT    RL18    34.5     0.0
2673          DI     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
2674          DQ     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2675          KK  DL11SERETRIEVE
2676          DR   DL11S
              *

2677          KK  L11L18ROUTE
2678          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2679          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2680          RS      17    FLOW
2681          RC   0.035   0.035   0.035    7488  0.0048    0.00
2682          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2683          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                   HEC-1 INPUT                                                    PAGE 69

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2684          KK   DL121RETRIEVE
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2685          DR  DL121S
              *

2686          KK  L12L18ROUTE
2687          KM        Cross-section: Cross-section determined from aerial
2688          KM        Manning's N Value: earth with grass and forbs, Ag field
2689          RS       7    FLOW
2690          RC   0.025   0.025   0.038    5298  0.0044    0.00
2691          RX  100.00  100.50  101.00  127.00  145.00  160.70  266.00  375.00
2692          RY  1245.0 1244.90 1244.80 1244.00 1243.90 1244.80 1244.60 1245.00
              *

2693          KK   CPL18COMBINE
2694          HC       4    7.67
              *

2695          KK   DL181DIVERT
2696          KM        Cactus at Cotton split flow
2697          DT  DL181S     0.0     0.0
2698          DI     0.0   266.3   983.8  2332.9  4215.1     0.0     0.0     0.0     0.0     0.0
2699          DQ     0.0     0.0    18.6    70.5   191.6     0.0     0.0     0.0     0.0     0.0
              *

2700          KK   DL182DIVERT
2701          KM        Cactus at Cotton split flow
2702          DT  DL182S     0.0     0.0
2703          DI     0.0   266.3   965.1  2262.4  4023.5     0.0     0.0     0.0     0.0     0.0
2704          DQ     0.0    12.7    36.0    66.1   101.8     0.0     0.0     0.0     0.0     0.0
              *

2705          KK  L18L19ROUTE
2706          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2707          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2708          RS       1    FLOW
2709          RC   0.035   0.035   0.035    3469  0.0042    0.00
2710          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2711          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2712          KK     L19BASIN
2713          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
2714          BA   0.487
2715          LG    0.10     0.25     4.45     0.53      80
2716          UI       0      181      573     1026      992      582      235      111       32       33
2717          UI       0        0        0        0        0        0        0        0        0        0
2718          UI       0        0        0        0        0        0        0        0        0        0
2719          UI       0        0        0        0        0        0        0        0        0        0
2720          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2721          KK  DL19REDIVERT
2722          KM        Additional Retention based on 100yr 2hr retention.
2723          KM        C value is based on future land use, P=2.7, A=acres
2724          DT    RL19     51.2     0.0
2725          DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2726          DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2727          KK   DL122RETRIEVE
2728          DR  DL122S
              *

2729          KK  L12L19ROUTE
2730          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2731          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2732          RS      21    FLOW
2733          RC   0.035   0.035   0.035    7816  0.0045    0.00
2734          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2735          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2736          KK   DL131RETRIEVE
2737          DR  DL131S
              *

2738          KK  L13L19ROUTE
2739          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2740          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2741          RS       5    FLOW
2742          RC   0.035   0.035   0.035    7057  0.0051    0.00
2743          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2744          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2745          KK   CPL19COMBINE
2746          HC       4   9.615
              *

2747          KK   DL191DIVERT
2748          KM        Cactus at L303 split. Orig Calcs by KHA, 2008
2749          KM        modified for SE flow component
2750          DT  DL191S     0.0     0.0
2751          DI     0.0   123.5   566.7  1449.9  2937.5     0.0     0.0     0.0     0.0     0.0
2752          DQ     0.0   123.5   564.7  1378.3  2622.8     0.0     0.0     0.0     0.0     0.0
              *

2753          KK   DL192DIVERT
2754          KM        Cactus at L303 split. Orig Calcs by KHA, 2008
2755          KM        modified for SE flow component
2756          DT  DL192S     0.0     0.0
2757          DI     0.0     0.0     2.0     71.6   314.7     0.0     0.0     0.0     0.0     0.0
2758          DQ     0.0     0.0     2.0     41.9   107.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2759          KK  L19D29ROUTE
2760          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
2761          KM        Manning's N Value: Ag field
2762          RS      18    FLOW
2763          RC   0.038   0.038   0.038    2728  0.0044    0.00
2764          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
2765          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *
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```
2766          KK     D29BASIN
2767          KM        BASIN BOUNDARY FROM LOOP 303, AERIAL PHOTOGRAPHY
2768          KM        OF AG LAND AND FROM 1990 TOPO
2769          BA   0.508
2770          LG    0.10    0.25    4.60    0.47      79
2771          UI       0     183     595    1052    1037     620     251     119      34      34
2772          UI       0       0       0       0       0       0       0       0       0       0
2773          UI       0       0       0       0       0       0       0       0       0       0
2774          UI       0       0       0       0       0       0       0       0       0       0
2775          UI       0       0       0       0       0       0       0       0       0       0
              *

2776          KK  DD29REDIVERT
2777          KM        Additional Retention based on 100yr 2hr retention.
2778          KM        C value is based on future land use, P=2.7, A=acres
2779          DT    RD29    52.4     0.0
2780          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2781          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2782          KK   DL132RETRIEVE
2783          DR  DL132S
              *

2784          KK  L13D29ROUTE
2785          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2786          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2787          RS      20    FLOW
2788          RC   0.035   0.035   0.035    7908  0.0048    0.00
2789          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2790          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2791          KK   DD161RETRIEVE
2792          DR  DD161S
              *

2793          KK  D16D29ROUTE
2794          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2795          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2796          RS      16    FLOW
2797          RC   0.035   0.035   0.035    7042  0.0038    0.00
2798          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2799          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2800          KK   CPD29COMBINE
2801          HC       4  11.154
              *

2802          KK  D29D30ROUTE
2803          KM        Cross-section: Cross-section determined from aerial
2804          KM        Manning's N Value: earth w/ grass
2805          RS      18    FLOW
2806          RC   0.025   0.025   0.025    4849  0.0054    0.00
2807          RX  100.00  103.00  106.00  108.00  112.00  114.00  135.50  153.50
2808          RY  1177.0 1176.50 1176.00 1175.00 1174.90 1176.00 1175.50 1176.86
              *

2809          KK     D30BASIN
2810          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT,
2811          KM        FCDMC, WESTERN BOUNDARY FROM LOOP 303
2812          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
2813          BA   0.914
2814          LG    0.10    0.25    4.80    0.42      78
2815          UI       0     249     845    1333    1961    1298     770     322     165      54
2816          UI      53       0       0       0       0       0       0       0       0       0
2817          UI       0       0       0       0       0       0       0       0       0       0
2818          UI       0       0       0       0       0       0       0       0       0       0
2819          UI       0       0       0       0       0       0       0       0       0       0
              *

2820          KK  DD30REDIVERT
2821          KM        Additional Retention based on 100yr 2hr retention.
2822          KM        C value is based on future land use, P=2.7, A=acres
2823          DT    RD30    97.3     0.0
2824          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2825          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2826          KK   DD162RETRIEVE
2827          DR  DD162S
              *

2828          KK  D16D30ROUTE
2829          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2830          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2831          RS      32    FLOW
2832          RC   0.035   0.035   0.035    9559  0.0052    0.00
2833          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
2834          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2835          KK   DD191RETRIEVE
2836          DR  DD191S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2837          KK  D19D30ROUTE
2838          KM        Cross-section: Cross-section determined from aerial
2839          KM        Manning's N Value: earth w/sparse trees and shrubs
2840          RS       1    FLOW
2841          RC   0.032   0.032   0.032    5320  0.0068    0.00
2842          RX  100.00  101.00  102.00  118.00  127.00  128.00  129.00  130.00
2843          RY  1179.2 1179.10 1179.00 1175.00 1179.00 1179.10 1179.20 1179.25
              *

2844          KK   CPD30COMBINE
2845          HC       4  20.504
              *

2846          KK  DD30SEDIVERT
```

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2847          KM        Cactus at Reems split flow
2848          DT   DD30S      0.0      0.0
2849          DI     0.0    807.4   1298.7   2155.5   3667.5      0.0      0.0      0.0      0.0      0.0
2850          DQ     0.0    786.2   1122.0   1715.2   2774.9      0.0      0.0      0.0      0.0      0.0
              *

2851          KK  D30D32ROUTE
2852          KM        Cross-section: Cross-section determined from aerial
2853          KM        Manning's N Value: earth w/sparse trees and shrubs
2854          RS       9    FLOW
2855          RC   0.032   0.032   0.032    2704  0.0015    0.00
2856          RX  100.00  101.00  102.00  114.00  156.00  168.00  169.00  170.00
2857          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.11 1000.20
              *

2858          KK     D32BASIN
2859          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
2860          BA   0.248
2861          LG    0.25     0.25     4.70     0.36       35
2862          UI       0       59      207      316      510      371      238      108       59       24
2863          UI      13       14        0        0        0        0        0        0        0        0
2864          UI       0        0        0        0        0        0        0        0        0        0
2865          UI       0        0        0        0        0        0        0        0        0        0
2866          UI       0        0        0        0        0        0        0        0        0        0
              *

2867          KK  DD32REDIVERT
2868          KM        Preliminary Drainage Report for Marley Park Phase II Parcel 6
2869          KM        Drainage Report for Marley Park Parcel 8 (almost 20ac-ft over
2870          KM        required, according to report)
2871          KM        Additional Retention based on 100yr 2hr retention.
2872          KM        C value is based on future land use, P=2.7, A=acres
2873          DT    RD32     33.5      0.0
2874          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2875          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
1                                          HEC-1 INPUT                                                PAGE 74

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2876          KK   CPD32COMBINE
2877          HC       2  20.752
              *

2878          KK  DD32SEDIVERT
2879          KM        Cactus at 150th Ln split flow
2880          DT   DD32S      0.0      0.0
2881          DI     0.0      7.4     28.9     41.0    151.6    527.0   1011.0   2605.0      0.0      0.0
2882          DQ     0.0      0.0      1.8      2.3     23.9    213.0    442.0   1123.0      0.0      0.0
              *

2883          KK  D32D33ROUTE
2884          KM        Cross-section: Cross-section determined from aerial
2885          KM        Manning's N Value: street, earth w/ grass
2886          RS       5    FLOW
2887          RC   0.032   0.013   0.013    2704  0.0055    0.00
2888          RX  100.00  102.00  138.00  138.10  160.00  168.50  171.90  172.00
2889          RY  999.70  999.60  999.00  998.50  998.90  999.10  999.20 1000.00
              *

2890          KK     D31BASIN
2891          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS
2892          BA   0.496
2893          LG    0.25     0.25     4.70     0.38       32
2894          UI       0       93      353      525      862      810      532      339      149       91
2895          UI      32       25       25        0        0        0        0        0        0        0
2896          UI       0        0        0        0        0        0        0        0        0        0
2897          UI       0        0        0        0        0        0        0        0        0        0
2898          UI       0        0        0        0        0        0        0        0        0        0
              *

2899          KK  DD31REDIVERT
2900          KM        Preliminary Drainage Report for Marley Park Plaza, Drainage
2901          KM        Report for Waddell Road at Marley Park, Final Drainage Report
2902          KM        Amended for Marley Park Heritage Club Site, Drainage Report for
2903          KM        Marley Park Parcel 11, Drainage Report for Marley Park Phase 2A Mass
2904          KM        Additional Retention based on 100yr 2hr retention.
2905          KM        C value is based on future land use, P=2.7, A=acres
2906          DT    RD31     74.2      0.0
2907          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
2908          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

2909          KK   DD192RETRIEVE
2910          DR  DD192S
              *

2911          KK  D19D31ROUTE
2912          KM        Cross-section: Cross-section determined from aerial
2913          KM        Manning's N Value: street, earth with sparse trees and shrubs
2914          RS       3    FLOW
2915          RC   0.032   0.013   0.032    7009  0.0054    0.00
2916          RX  100.00  105.00  110.00  110.10  134.00  134.10  140.00  146.00
2917          RY  1000.2  999.90  999.70  999.20  999.70 1000.20 1000.30 1000.40
              *
1                                          HEC-1 INPUT                                                PAGE 75

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2918          KK   DD211RETRIEVE
2919          DR  DD211S
              *

2920          KK  D21D31ROUTE
2921          KM        Cross-section: Cross-section determined from aerial
2922          KM        Manning's N Value: earth w/ grass (main channel),
2923          KM        earth with sparse trees and shrubs (left overbank)
2924          RS       2    FLOW
2925          RC   0.032   0.025   0.025    2676  0.0052    0.00
2926          RX  100.00  102.00  104.00  124.00  128.00  132.00  135.00  137.00
2927          RY  1170.0 1168.00 1167.00 1167.00 1168.00 1169.00 1169.50 1170.00
              *

2928          KK   CPD31COMBINE
2929          HC       3  18.987
              *

2930          KK  D31D33ROUTE
```

```
2931          KM        Cross-section: Cross-section determined from aerial
2932          KM        Manning's N Value: earth w/ grass
2933          RS       1    FLOW
2934          RC   0.025   0.025   0.025    2627  0.0042    0.00
2935          RX  100.00  100.50  105.00  113.00  116.00  125.00  129.00  130.00
2936          RY  1003.0  999.90  999.80  997.80  997.70  999.80 1000.00 1000.80
              *

2937          KK     D33BASIN
2938          KM        BASIN BOUNDARY FROM RANCHO GABRIELA PHASE 1
2939          BA   0.250
2940          LG    0.25    0.25    4.80    0.35      35
2941          UI       0      71     242     384     542     349     195      81      38      15
2942          UI      15       0       0       0       0       0       0       0       0       0
2943          UI       0       0       0       0       0       0       0       0       0       0
2944          UI       0       0       0       0       0       0       0       0       0       0
2945          UI       0       0       0       0       0       0       0       0       0       0
              *

2946          KK  DD33REDIVERT
2947          KM        Retention volume estimated based on aerial, Ranch Gabriella Phase I
2948          DT    RD33    18.8     0.0
2949          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2950          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2951          KK   CPD33COMBINE
2952          HC       3  23.501
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2953          KK   DD331DIVERT
2954          KM        Cactus at Bullard split flow
2955          DT  DD331S     0.0     0.0
2956          DI     0.0   136.2   690.5  2301.8  4749.1     0.0     0.0     0.0     0.0     0.0
2957          DQ     0.0    73.3   386.4  1268.6  2600.8     0.0     0.0     0.0     0.0     0.0
              *

2958          KK   DD332DIVERT
2959          KM        Cactus at Bullard split flow
2960          DT  DD332S     0.0     0.0
2961          DI     0.0    62.9   304.2  1033.1  2148.3     0.0     0.0     0.0     0.0     0.0
2962          DQ     0.0    31.8    90.0   165.3   254.6     0.0     0.0     0.0     0.0     0.0
              *

2963          KK  D33D34ROUTE
2964          KM        Cross-section: Cross-section determined from aerial
2965          KM        Manning's N Value: earth w/ grass
2966          RS       6    FLOW
2967          RC   0.025   0.025   0.025    5348  0.0030    0.00
2968          RX  100.00  105.00  123.00  127.00  133.00  139.00  141.00  152.00
2969          RY  1142.0 1141.00 1141.00 1140.00 1139.00 1140.00 1141.00 1141.50
              *

2970          KK     D34BASIN
2971          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
2972          BA   0.500
2973          LG    0.25    0.25    4.65    0.38      35
2974          UI       0     104     383     571     955     775     516     287     138      72
2975          UI      26      27       0       0       0       0       0       0       0       0
2976          UI       0       0       0       0       0       0       0       0       0       0
2977          UI       0       0       0       0       0       0       0       0       0       0
2978          UI       0       0       0       0       0       0       0       0       0       0
              *

2979          KK  DD34REDIVERT
2980          KM        Final Drainage Report for Marley Park Waddell Road, Phase 2
2981          KM        (Empty Lot except for retention for Waddell Rd-Future Marley Park)
2982          KM        Additional Retention based on 100yr 2hr retention.
2983          KM        C value is based on future land use, P=2.7, A=acres
2984          DT    RD34    55.9     0.0
2985          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
2986          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

2987          KK   DD212RETRIEVE
2988          DR  DD212S
              *

2989          KK  D21D34ROUTE
2990          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
2991          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
2992          RS       8    FLOW
2993          RC   0.035   0.035   0.035    5176  0.0057    0.00
2994          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2995          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

2996          KK   CPD34COMBINE
2997          HC       3  24.001
              *

2998          KK  D34D36ROUTE
2999          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
3000          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
3001          RS       6    FLOW
3002          RC   0.032   0.032   0.032    5236  0.0034    0.00
3003          RX  100.00  100.10  102.00  108.00  111.00  117.00  125.00  140.00
3004          RY  1000.0  998.00  997.90  996.50  996.40  998.00  999.00 1000.00
              *

3005          KK     D36BASIN
3006          KM        BASIN BOUNDARY FROM MARYVALE PARK PARCELS, AG LAND AND 1990 TOPO
3007          BA   0.246
3008          LG    0.21    0.25    4.80    0.37      36
3009          UI       0      99     311     566     480     276     100      41      18       0
3010          UI       0       0       0       0       0       0       0       0       0       0
3011          UI       0       0       0       0       0       0       0       0       0       0
3012          UI       0       0       0       0       0       0       0       0       0       0
3013          UI       0       0       0       0       0       0       0       0       0       0
              *

3014          KK  DD36REDIVERT
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3015          KM        Drainage Report for Veramonte Infrastructure
3016          KM        Prepared by DEA Jan 2004
3017          KM        Additional Retention based on 100yr 2hr retention.
3018          KM        C value is based on future land use, P=2.7, A=acres
3019          DT    RD36    18.7     0.0
3020          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3021          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3022          KK  DD35SERETRIEVE
3023          DR   DD35S
              *

3024          KK  D35D36ROUTE
3025          KM        Cross-section: Cross-section taken from Infrastructure Drainage Report f
3026          KM        Veramonte (Report 650) / Manning's N Value: earth w/ sparse trees and br
3027          RS      14    FLOW
3028          RC   0.032   0.032   0.032    2638  0.0038    0.00
3029          RX  100.00  103.00  108.00  126.00  130.00  142.00  143.00  144.00
3030          RY  1000.0  999.90  999.80  996.80  996.70  999.80  999.90 1000.00
              *
1                                          HEC-1 INPUT                                          PAGE 78

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3031          KK   CPD36COMBINE
3032          HC       3   28.14
              *

3033          KK   DD361DIVERT
3034          KM        Cactus at Litchfield split flow
3035          DT  DD361S     0.0     0.0
3036          DI     0.0     0.0    70.2   838.2  2790.2     0.0     0.0     0.0     0.0     0.0
3037          DQ     0.0     0.0    64.8   768.5  2105.4     0.0     0.0     0.0     0.0     0.0
              *

3038          KK   DD362DIVERT
3039          KM        Cactus at Litchfield split flow
3040          DT  DD362S     0.0     0.0
3041          DI     0.0     0.0     5.4    69.7   684.8     0.0     0.0     0.0     0.0     0.0
3042          DQ     0.0     0.0     5.4    35.1    78.9     0.0     0.0     0.0     0.0     0.0
              *

3043          KK  D36D40ROUTE
3044          KM        Cross-section: Estimated 1' deep and 4:1 side slopes, width based on
3045          KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
3046          RS       6    FLOW
3047          RC   0.032   0.032   0.032    2597  0.0023    0.00
3048          RX  100.00  135.00  170.00  176.00  177.00  183.00  190.00  205.00
3049          RY  1138.2 1138.10 1138.00 1137.00 1136.90 1138.00 1138.10 1138.20
              *

3050          KK     D40BASIN
3051          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
3052          BA   0.242
3053          LG    0.10    0.25    5.40    0.32      40
3054          UI       0     198     627     674     268      76      23       0       0       0
3055          UI       0       0       0       0       0       0       0       0       0       0
3056          UI       0       0       0       0       0       0       0       0       0       0
3057          UI       0       0       0       0       0       0       0       0       0       0
3058          UI       0       0       0       0       0       0       0       0       0       0
              *

3059          KK  DD40REDIVERT
3060          KM        Additional Retention based on 100yr 2hr retention.
3061          KM        C value is based on future land use, P=2.7, A=acres
3062          DT    RD40    26.4     0.0
3063          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3064          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3065          KK   DD381RETRIEVE
3066          DR  DD381S
              *
1                                          HEC-1 INPUT                                          PAGE 79

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3067          KK  D38D40ROUTE
3068          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3069          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3070          RS      12    FLOW
3071          RC   0.035   0.035   0.035    3499  0.0030    0.00
3072          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3073          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3074          KK   CPD40COMBINE
3075          HC       3  29.692
              *

3076          KK  DD40SEDIVERT
3077          KM        Cactus at RR tracks split flow
3078          DT   DD40S     0.0     0.0
3079          DI     0.0     4.7   423.7  1715.0  3501.5     0.0     0.0     0.0     0.0     0.0
3080          DQ     0.0     2.9   147.8   565.4  1138.2     0.0     0.0     0.0     0.0     0.0
              *

3081          KK  D40D41ROUTE
3082          KM        Cross-section: Cross-section estimated from aerial and topo-road
3083          KM        Manning's N Value: earth with sparse trees and shrubs
3084          RS       5    FLOW
3085          RC   0.032   0.032   0.032    1396  0.0043    0.00
3086          RX  100.00  101.00  102.00  110.00  145.00  155.00  156.00  157.00
3087          RY  1000.0  999.90  999.80  995.30  995.20  999.80  999.90 1000.00
              *

3088          KK     D41BASIN
3089          KM        BASIN BOUNDARY FROM  AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
3090          BA   0.253
3091          LG    0.10    0.15    7.30    0.15      40
3092          UI       0     329     974     515     109      32       0       0       0       0
3093          UI       0       0       0       0       0       0       0       0       0       0
3094          UI       0       0       0       0       0       0       0       0       0       0
3095          UI       0       0       0       0       0       0       0       0       0       0
3096          UI       0       0       0       0       0       0       0       0       0       0
              *
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3097          KK  DD41REDIVERT
3098          KM        Additional Retention based on 100yr 2hr retention.
3099          KM        C value is based on future land use, P=2.7, A=acres
3100          DT    RD41    27.1     0.0
3101          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3102          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3103          KK   DD382RETRIEVE
3104          DR  DD382S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3105          KK  D38D41ROUTE
3106          KM        Cross-section: Cross-section estimated from aerial and topo-road
3107          KM        Manning's N Value: earth with grass and forbs, Ag field (left overbank)
3108          RS      22    FLOW
3109          RC   0.038   0.025   0.025    3903  0.0026    0.00
3110          RX  100.00  130.00  170.00  190.00  194.00  204.00  205.00  206.00
3111          RY  1138.2 1138.10 1138.00 1136.00 1136.00 1138.00 1138.10 1138.20
              *

3112          KK   CPD41COMBINE
3113          HC       3  29.945
              *

3114          KK  D41D50ROUTE
3115          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3116          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3117          RS      46    FLOW
3118          RC   0.035   0.035   0.035    8970  0.0030    0.00
3119          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3120          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3121          KK     L23BASIN
3122          KM        BASIN BOUNDARY FROM BEARDSLEY CSR AND 1990 TOPO
3123          BA   0.905
3124          LG    0.29    0.25    4.30    0.48      17
3125          UI       0     117     380     624     819    1304    1228     891     664     424
3126          UI     201     148      83      36      36      36       0       0       0       0
3127          UI       0       0       0       0       0       0       0       0       0       0
3128          UI       0       0       0       0       0       0       0       0       0       0
3129          UI       0       0       0       0       0       0       0       0       0       0
              *

3130          KK  DL23REDIVERT
3131          KM        Additional Retention based on 100yr 2hr retention.
3132          KM        C value is based on future land use, P=2.7, A=acres
3133          DT    RL23    62.9     0.0
3134          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3135          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3136          KK  L23L24ROUTE
3137          KM        Cross-section: Cross-section determined from aerial
3138          KM        Manning's N Value: clean earth; straight
3139          RS       1    FLOW
3140          RC   0.022   0.022   0.022    2628  0.0080    0.00
3141          RX  100.00  101.00  161.00  175.00  189.00  203.00  228.00  229.00
3142          RY  1000.8 1000.30 1000.00  998.00  997.90 1000.00 1000.40 1000.80
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3143          KK     L24BASIN
3144          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
3145          BA   0.498
3146          LG    0.29    0.25    4.45    0.43      19
3147          UI       0      96     362     545     899     798     529     321     144      85
3148          UI      26      26      25       0       0       0       0       0       0       0
3149          UI       0       0       0       0       0       0       0       0       0       0
3150          UI       0       0       0       0       0       0       0       0       0       0
3151          UI       0       0       0       0       0       0       0       0       0       0
              *

3152          KK  DL24REDIVERT
3153          KM        Additional Retention based on 100yr 2hr retention.
3154          KM        C value is based on future land use, P=2.7, A=acres
3155          DT    RL24    37.3     0.0
3156          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3157          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3158          KK   CPL24COMBINE
3159          HC       2   1.403
              *

3160          KK  L24L26ROUTE
3161          KM        Cross-section: Cross-section determined from aerial
3162          KM        Manning's N Value: clean earth; straight
3163          RS       1    FLOW
3164          RC   0.022   0.022   0.022    5301  0.0074    0.00
3165          RX  100.00  200.00  279.00  286.00  289.00  295.00  311.00  315.00
3166          RY  1207.3 1206.50 1206.00 1204.00 1203.90 1206.50 1207.00 1207.25
              *

3167          KK     L25BASIN
3168          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
3169          KM        AG LAND, AND EASTERN AG CHANNEL
3170          BA   0.244
3171          LG    0.30    0.25    4.65    0.38      15
3172          UI       0      32     100     168     220     349     330     242     178     117
3173          UI      55      41      24       9      10      10       0       0       0       0
3174          UI       0       0       0       0       0       0       0       0       0       0
3175          UI       0       0       0       0       0       0       0       0       0       0
3176          UI       0       0       0       0       0       0       0       0       0       0
              *

3177          KK  DL25REDIVERT
3178          KM        Additional Retention based on 100yr 2hr retention.
3179          KM        C value is based on future land use, P=2.7, A=acres
3180          DT    RL25    16.8     0.0
3181          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3182          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3183            KK  L25L26ROUTE
3184            KM        Cross-section: Cross-section determined from aerial
3185            KM        Manning's N Value: clean earth; straight
3186            RS       1    FLOW
3187            RC   0.022   0.022   0.013    5339  0.0073    0.00
3188            RX  100.00  105.00  109.00  116.00  119.00  125.00  141.00  145.00
3189            RY  1206.2 1206.10 1206.00 1204.00 1203.90 1206.50 1207.00 1207.20
                *

3190            KK   DL181RETRIEVE
3191            DR  DL181S
                *

3192            KK  L18L26ROUTE
3193            KM        Cross-section: Cross-section determined from 1992 topo
3194            KM        Manning's N Value: half street, clean earth
3195            RS       8    FLOW
3196            RC   0.013   0.022   0.022    5297  0.0130    0.00
3197            RX  100.00  105.00  112.00  121.00  139.00  153.00  154.00  154.00
3198            RY  1206.7 1206.60 1206.50 1206.00 1206.00 1208.10 1208.20
                *

3199            KK  DL17SERETRIEVE
3200            DR   DL17S
                *

3201            KK  L17L26ROUTE
3202            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3203            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3204            RS       1    FLOW
3205            RC   0.035   0.035   0.035    8427  0.0059    0.00
3206            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3207            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

3208            KK     L26BASIN
3209            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND AND 1990 TOPO
3210            BA   0.757
3211            LG    0.26    0.25    4.55    0.42      28
3212            UI       0     141     539     801    1316    1236     813     517     228     139
3213            UI      48      39      38       0       0       0       0       0       0       0
3214            UI       0       0       0       0       0       0       0       0       0       0
3215            UI       0       0       0       0       0       0       0       0       0       0
3216            UI       0       0       0       0       0       0       0       0       0       0
                *

3217            KK  DL26REDIVERT
3218            KM        Additional Retention based on 100yr 2hr retention.
3219            KM        C value is based on future land use, P=2.7, A=acres
3220            DT    RL26    58.4     0.0
3221            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3222            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3223            KK   CPL26COMBINE
3224            HC       5  10.074
                *

3225            KK  DL26SEDIVERT
3226            KM        Peoria at Cotton Split flow
3227            DT   DL26S     0.0     0.0
3228            DI     0.0   190.7   867.7  2116.3  3794.4     0.0     0.0     0.0     0.0     0.0
3229            DQ     0.0     0.0     4.0    26.4    59.2     0.0     0.0     0.0     0.0     0.0
                *

3230            KK  L26L27ROUTE
3231            KM        Cross-section: Cross-section determined from aerial
3232            KM        Manning's N Value: clean earth, street
3233            RS       1    FLOW
3234            RC   0.022   0.022   0.013    2725  0.0070    0.00
3235            RX  100.00  100.50  363.00  373.00  378.00  388.00  400.00  401.00
3236            RY  1202.6 1202.10 1202.00 1200.00 1200.10 1202.00 1202.20 1205.55
                *

3237            KK     L27BASIN
3238            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
3239            KM        AG LAND, EASTERN BOUNDARY LOOP 303
3240            BA   0.508
3241            LG    0.11    0.25    4.65    0.46      78
3242            UI       0     183     595    1052    1037     620     251     119      34      34
3243            UI       0       0       0       0       0       0       0       0       0       0
3244            UI       0       0       0       0       0       0       0       0       0       0
3245            UI       0       0       0       0       0       0       0       0       0       0
3246            UI       0       0       0       0       0       0       0       0       0       0
                *

3247            KK  DL27REDIVERT
3248            KM        Additional Retention based on 100yr 2hr retention.
3249            KM        C value is based on future land use, P=2.7, A=acres
3250            DT    RL27    50.9     0.0
3251            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3252            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

3253            KK   DL182RETRIEVE
3254            DR  DL182S
                *

3255            KK  L18L27ROUTE
3256            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3257            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3258            RS      16    FLOW
3259            RC   0.035   0.035   0.035    7886  0.0046    0.00
3260            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3261            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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3262          KK   DL191RETRIEVE
3263          DR  DL191S
              *

3264          KK  L19L27ROUTE
3265          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3266          KM       6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3267          RS        3    FLOW
3268          RC   0.035   0.035   0.035    7093  0.0037    0.00
3269          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3270          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3271          KK   CPL27COMBINE
3272          HC       4  12.527
              *

3273          KK   DL271DIVERT
3274          KM        Peoria at L303 split flow
3275          DT  DL271S     0.0     0.0
3276          DI     0.0   133.3   620.9  2026.6  4234.5     0.0     0.0     0.0     0.0     0.0
3277          DQ     0.0    71.3   440.8  1073.7  1919.5     0.0     0.0     0.0     0.0     0.0
              *

3278          KK   DL272DIVERT
3279          KM        Peoria at L303 split flow
3280          DT  DL272S     0.0     0.0
3281          DI     0.0    62.0   180.1   952.9  2315.0     0.0     0.0     0.0     0.0     0.0
3282          DQ     0.0    22.2    96.6   200.1   326.0     0.0     0.0     0.0     0.0     0.0
              *

3283          KK  L27D45ROUTE
3284          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3285          KM       6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3286          RS        3    FLOW
3287          RC   0.035   0.035   0.035    3415  0.0070    0.00
3288          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3289          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3290          KK     D45BASIN
3291          KM        BASIN BOUNDARY FROM SYCAMORE FARMS PARCELS,  WESTERN BOUNDARY
3292          KM        FROM LOOP 303, FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
3293          BA   0.488
3294          LG    0.17    0.25    4.80    0.39      58
3295          UI       0     136     462     725    1058     686     400     162      81      29
3296          UI      28       0       0       0       0       0       0       0       0       0
3297          UI       0       0       0       0       0       0       0       0       0       0
3298          UI       0       0       0       0       0       0       0       0       0       0
3299          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3300          KK  DD45REDIVERT
3301          KM        Final Drainage Report for The Retreat at Sycamore Farms
3302          KM        Final Drainage Report for Sycamore Farms Parcel 13
3303          KM        Additional Retention based on 100yr 2hr retention.
3304          KM        C value is based on future land use, P=2.7, A=acres
3305          DT    RD45    43.6     0.0
3306          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3307          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3308          KK   DL192RETRIEVE
3309          DR  DL192S
              *

3310          KK  L19D45ROUTE
3311          KM        Cross-section: Cross-section determined from aerial
3312          KM        Manning's N Value: clean earth; straight
3313          RS        8    FLOW
3314          RC   0.022   0.022   0.022    7022  0.0061    0.00
3315          RX  100.00  100.10  100.20  128.00  158.00  180.00  181.00  182.00
3316          RY  1000.2 1000.10 1000.00  993.00  992.90 1000.00 1000.10 1000.20
              *

3317          KK   CPD45COMBINE
3318          HC       3  13.015
              *

3319          KK   DD451DIVERT
3320          KM        Peoria at Sarival split flow
3321          DT  DD451S     0.0     0.0
3322          DI     0.0   150.2   433.6   936.5  1656.8     0.0     0.0     0.0     0.0     0.0
3323          DQ     0.0    21.3    74.4   178.2   352.6     0.0     0.0     0.0     0.0     0.0
              *

3324          KK   DD452DIVERT
3325          KM        Peoria at Sarival split flow
3326          DT  DD452S     0.0     0.0
3327          DI     0.0   128.9   359.2   758.3  1304.2     0.0     0.0     0.0     0.0     0.0
3328          DQ     0.0    64.4   133.4   217.4   313.9     0.0     0.0     0.0     0.0     0.0
              *

3329          KK  D45D46ROUTE
3330          KM        Cross-section: Cross-section determined from aerial
3331          KM        Manning's N Value: earth w/ sparse trees and brush
3332          RS        7    FLOW
3333          RC   0.032   0.032   0.032    4898  0.0041    0.00
3334          RX  100.00  100.10  100.20  110.00  160.00  170.00  171.00  172.00
3335          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3336          KK     D46BASIN
3337          KM        BASIN BOUNDARY FROM REEMS RD CHANNEL AND BASIN PROJECT, FCDMC
3338          KM        GREER RANCH NORTH PHASES AND 1990 TOPO
3339          BA   0.918
3340          LG    0.23    0.24    4.70    0.36      34
3341          UI       0     100     241     463     594     779    1156    1053     821     628
3342          UI     471     283     170     126      88      30      31      30      31       0
3343          UI       0       0       0       0       0       0       0       0       0       0
3344          UI       0       0       0       0       0       0       0       0       0       0
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3345          UI       0       0       0       0       0       0       0       0       0       0
              *

3346          KK  DD46REDIVERT
3347          KM        Preliminary Drainage Report for Greer Ranch North
3348          KM        Remaining retention volume estimated based on aerial
3349          KM        Additional Retention based on 100yr 2hr retention.
3350          KM        C value is based on future land use, P=2.7, A=acres
3351          DT    RD46    83.4     0.0
3352          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3353          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3354          KK  DD30SERETRIEVE
3355          DR   DD30S
              *

3356          KK  D30D46ROUTE
3357          KM        Cross-section: Cross-section determined from aerial
3358          KM        Manning's N Value: earth w/ sparse trees and brush
3359          RS       3    FLOW
3360          RC   0.022   0.022   0.022    5376  0.0045    0.00
3361          RX  100.00  112.00  124.00  136.00  201.00  209.00  217.00  225.00
3362          RY  1158.0 1156.00 1154.00 1152.00 1151.90 1154.00 1156.00 1158.00
              *

3363          KK   CPD46COMBINE
3364          HC       3  24.822
              *

3365          KK   DD461DIVERT
3366          KM        Peoria at Reems split flow
3367          DT  DD461S     0.0     0.0
3368          DI     0.0  2358.7  2658.0  3619.4  5112.4     0.0     0.0     0.0     0.0     0.0
3369          DQ     0.0  2342.0  2534.6  3070.8  3928.1     0.0     0.0     0.0     0.0     0.0
              *

3370          KK   DD462DIVERT
3371          KM        Peoria at Reems split flow
3372          DT  DD462S     0.0     0.0
3373          DI     0.0    16.7   123.4   548.6  1184.2     0.0     0.0     0.0     0.0     0.0
3374          DQ     0.0    16.7    56.4   109.3   172.9     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3375          KK  D46D47ROUTE
3376          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3377          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3378          RS       1    FLOW
3379          RC   0.035   0.035   0.035    7037  0.0013    0.00
3380          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3381          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3382          KK     D47BASIN
3383          KM        BASIN BOUNDARY FROM RANCHO GABRIELA MULTI PHASE
3384          BA   0.997
3385          LG    0.21    0.25    4.65    0.40      36
3386          UI       0     109     277     518     667     876    1305    1130     877     663
3387          UI     496     273     186     123      80      34      34      34      34       0
3388          UI       0       0       0       0       0       0       0       0       0       0
3389          UI       0       0       0       0       0       0       0       0       0       0
3390          UI       0       0       0       0       0       0       0       0       0       0
              *

3391          KK  DD47REDIVERT
3392          KM        Drainage Report for Imagine Charter Schools, Retention
3393          KM        Calculations for Rancho Gabrialla Elementary School No 13,
3394          KM        Remaining retention volume estimated based on aerial
3395          KM        Additional Retention based on 100yr 2hr retention.
3396          KM        C value is based on future land use, P=2.7, A=acres
3397          DT    RD47   119.6     0.0
3398          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3399          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3400          KK  DD32SERETRIEVE
3401          DR   DD32S
              *

3402          KK  D3247AROUTE
3403          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3404          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3405          RS      21    FLOW
3406          RC   0.035   0.035   0.035    6247  0.0026    0.00
3407          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3408          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3409          KK  D3247BROUTE
3410          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3411          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3412          RS      18    FLOW
3413          RC   0.035   0.035   0.035    5287  0.0025    0.00
3414          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3415          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3416          KK   DD331RETRIEVE
3417          DR  DD331S
              *

3418          KK  D3347AROUTE
3419          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3420          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3421          RS       3    FLOW
3422          RC   0.035   0.035   0.035    2661  0.0023    0.00
3423          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3424          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3425          KK  D3347BROUTE
3426          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
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3427          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3428          RS       6    FLOW
3429          RC   0.035   0.035   0.035    3539  0.0023    0.00
3430          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3431          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3432          KK   CPD47COMBINE
3433          HC       4  28.816
              *

3434          KK  DD47SEDIVERT
3435          KM        Peoria at Bullard split flow
3436          DT   DD47S     0.0     0.0
3437          DI     0.0   692.3  2751.1  6693.8 12151.5     0.0     0.0     0.0     0.0     0.0
3438          DQ     0.0   609.8  2322.4  5410.8  9603.6     0.0     0.0     0.0     0.0     0.0
              *

3439          KK  D47D48ROUTE
3440          KM        Cross-section: Cross-section determined from aerial
3441          KM        Manning's N Value: earth w/ sparse trees and brush
3442          RS      23    FLOW
3443          RC   0.032   0.032   0.032    5328  0.0036    0.00
3444          RX  100.00  100.10  100.20  110.00  144.00  154.00  155.00  156.00
3445          RY  1000.2 1000.10 1000.00  997.00  996.90 1000.00 1000.10 1000.20
              *

3446          KK     D48BASIN
3447          KM        BASIN BOUNDARY FROM MOUNTAIN GATE MULIT PHASE, AG LAND AND 1990 TOPO
3448          BA   0.998
3449          LG    0.24    0.25    4.80    0.34      23
3450          UI       0     101     208     440     565     714     973    1220     938     744
3451          UI     583     447     249     170     128      96      30      32      30      31
3452          UI       0       0       0       0       0       0       0       0       0       0
3453          UI       0       0       0       0       0       0       0       0       0       0
3454          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3455          KK  DD48REDIVERT
3456          KM        Master Drainage Report for Mountain Gate,
3457          KM        Final Drainage Report for Kenly Farms Unit 1
3458          KM        Additional Retention based on 100yr 2hr retention.
3459          KM        C value is based on future land use, P=2.7, A=acres
3460          DT    RD48    79.3     0.0
3461          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3462          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3463          KK   DD332RETRIEVE
3464          DR  DD332S
              *

3465          KK  D33D48ROUTE
3466          KM        Cross-section: Cross-section determined from aerial
3467          KM        Manning's N Value: earth w/ sparse trees and shrubs
3468          RS      17    FLOW
3469          RC   0.032   0.032   0.032    9601  0.0031    0.00
3470          RX  100.00  101.00  102.00  114.00  138.00  150.00  151.00  152.00
3471          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *

3472          KK   DD361RETRIEVE
3473          DR  DD361S
              *

3474          KK  D3648AROUTE
3475          KM        Cross-section: Cross-section determined from aerial
3476          KM        Manning's N Value: clean earth (center), street (lt), and Ag field (rt)
3477          RS       5    FLOW
3478          RC   0.013   0.022   0.038    3335  0.0030    0.00
3479          RX  100.00  106.00  112.00  125.00  126.00  135.00  200.00  290.00
3480          RY  1000.0  999.85  999.70  999.00  998.90  999.10 1000.00 1001.00
              *

3481          KK  D3648BROUTE
3482          KM        Cross-section: Cross-section determined from aerial
3483          KM        Manning's N Value: clean earth; straight
3484          RS       2    FLOW
3485          RC   0.022   0.022   0.022    1965  0.0031    0.00
3486          RX  100.00  100.50  110.00  120.00  140.00  150.00  160.00  161.00
3487          RY  1003.0 1000.00  999.50  997.50  997.40  999.50  999.90 1000.00
              *

3488          KK   CPD48COMBINE
3489          HC       4  34.453
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3490          KK   DD481DIVERT
3491          KM        Peoria at Litchfield split flow
3492          DT  DD481S     0.0     0.0
3493          DI     0.0   624.6  2594.8  5787.1 10151.4     0.0     0.0     0.0     0.0     0.0
3494          DQ     0.0   532.1  1825.7  3708.3  6197.9     0.0     0.0     0.0     0.0     0.0
              *

3495          KK   DD482DIVERT
3496          KM        Peoria at Litchfield split flow
3497          DT  DD482S     0.0     0.0
3498          DI     0.0    92.5   769.1  2078.8  3953.5     0.0     0.0     0.0     0.0     0.0
3499          DQ     0.0    22.8    76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *

3500          KK  D48D49ROUTE
3501          KM        Cross-section: Cross-section determined from aerial
3502          KM        Manning's N Value: clean earth: straight and half street
3503          RS       3    FLOW
3504          RC   0.022   0.022   0.013    2623  0.0034    0.00
3505          RX  100.00  101.00  102.00  115.00  125.00  143.00  150.00  156.00
3506          RY  1000.2 1000.10 1000.00  998.00  998.10 1000.00 1000.40 1000.58
              *

3507          KK     D49BASIN
3508          KM        BASIN BOUNDARY FROM CITY OF SURPRISE WWTP
```

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3509          BA   0.489
3510          LG    0.12    0.25    4.90    0.40      37
3511          UI       0     130     448     699    1052     700     415     175      94      29
3512          UI      28       0       0       0       0       0       0       0       0       0
3513          UI       0       0       0       0       0       0       0       0       0       0
3514          UI       0       0       0       0       0       0       0       0       0       0
3515          UI       0       0       0       0       0       0       0       0       0       0
              *

3516          KK  DD49REDIVERT
3517          KM        City of Surprise Special Planning Area 1 16.3 MGD
3518          KM        Water Reclamation Facility (PROVIDED VOLUME
3519          KM        NOT IN PLANS, USED REQUIRED VOLUME)
3520          KM        Additional Retention based on 100yr 2hr retention.
3521          KM        C value is based on future land use, P=2.7, A=acres
3522          DT    RD49     7.5     0.0
3523          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3524          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3525          KK   DD362RETRIEVE
3526          DR  DD362S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3527          KK  D36D49ROUTE
3528          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
3529          KM        Manning's N Value: Ag field
3530          RS      44    FLOW
3531          RC   0.038   0.038   0.038    6555  0.0038    0.00
3532          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3533          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3534          KK  DD40SERETRIEVE
3535          DR   DD40S
              *

3536          KK  D40D49ROUTE
3537          KM        Cross-section: Cross-section estimated from aerial and topo-railroad
3538          KM        Manning's N Value: earth w/ sparse trees and shrubs; clean earth
3539          RS      18    FLOW
3540          RC   0.032   0.032   0.022    5333  0.0038    0.00
3541          RX  100.00  101.00  133.00  136.00  141.00  148.00  225.00  226.00
3542          RY  1124.3 1124.10 1124.00 1123.00 1123.10 1124.00 1124.10 1124.25
              *

3543          KK   CPD49COMBINE
3544          HC       4  36.494
              *

3545          KK   DD491DIVERT
3546          KM        Peoria at RR tracks split flow
3547          DT  DD491S     0.0     0.0
3548          DI     0.0    80.1  1017.8  3000.6  5982.2     0.0     0.0     0.0     0.0     0.0
3549          DQ     0.0    35.6   556.3  1576.1  3057.6     0.0     0.0     0.0     0.0     0.0
              *

3550          KK   DD492DIVERT
3551          KM        Peoria at RR tracks split flow
3552          DT  DD492S     0.0     0.0
3553          DI     0.0    44.6   461.5  1424.5  2924.7     0.0     0.0     0.0     0.0     0.0
3554          DQ     0.0     0.8    11.2    27.7    48.6     0.0     0.0     0.0     0.0     0.0
              *

3555          KK  D49D50ROUTE
3556          KM        Cross-section: Cross-section estimated from aerial and site visit
3557          KM        Manning's N Value: earth with sparse trees and shrubs
3558          RS       1    FLOW
3559          RC   0.022   0.013   0.022    2694  0.0022    0.00
3560          RX  100.00  102.00  104.00  114.00  134.00  145.00  147.00  148.00
3561          RY  1000.2 1000.10 1000.00  997.00  997.10 1000.00 1000.10 1000.20
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3562          KK     D50BASIN
3563          KM        BASIN BOUNDARY FROM AG LAND AND 1990 TOPO
3564          BA   0.505
3565          LG    0.10    0.15    7.00    0.17      41
3566          UI       0      88     350     515     833     834     563     362     164      99
3567          UI      42      25      25       0       0       0       0       0       0       0
3568          UI       0       0       0       0       0       0       0       0       0       0
3569          UI       0       0       0       0       0       0       0       0       0       0
3570          UI       0       0       0       0       0       0       0       0       0       0
              *

3571          KK  DD50REDIVERT
3572          KM        Additional Retention based on 100yr 2hr retention.
3573          KM        C value is based on future land use, P=2.7, A=acres
3574          DT    RD50    51.3     0.0
3575          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3576          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3577          KK   CPD50COMBINE
3578          HC       3  37.252
              *

3579          KK  D50D64ROUTE
3580          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3581          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3582          RS       5    FLOW
3583          RC   0.035   0.035   0.035    7041  0.0032    0.00
3584          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3585          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3586          KK     D60BASIN
3587          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
3588          KM        1990 TOPO, AND RR ALIGNMENT
3589          BA   0.404
3590          LG    0.11    0.25    4.55    0.48      74
3591          UI       0     146     473     836     826     492     199      96      27      27
3592          UI       0       0       0       0       0       0       0       0       0       0
```

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3593          UI       0       0       0       0       0       0       0       0       0       0
3594          UI       0       0       0       0       0       0       0       0       0       0
3595          UI       0       0       0       0       0       0       0       0       0       0
              *

3596          KK  DD60REDIVERT
3597          KM        Additional Retention based on 100yr 6hr retention.
3598          KM        C value is based on future land use, P=2.7, A=acres
3599          DT    RD60    39.4     0.0
3600          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3601          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3602          KK   DD481RETRIEVE
3603          DR  DD481S
              *

3604          KK  D48D60ROUTE
3605          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
3606          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush (main
3607          KM        channel), 1/2 street (left bank), Ag field (right bank)
3608          RS       2    FLOW
3609          RC   0.013   0.032   0.038    2425  0.0037    0.00
3610          RX  100.00  110.00  112.00  122.00  132.00  144.00  244.00  344.00
3611          RY  1120.4 1120.20 1120.00 1118.00 1118.10 1120.00 1120.10 1120.40
              *

3612          KK   CPD60COMBINE
3613          HC       2  34.857
              *

3614          KK   DD601DIVERT
3615          KM        Litchfield at RR tracks split flow
3616          DT  DD601S     0.0     0.0
3617          DI     0.0    92.0   818.4  2186.6  4218.6     0.0     0.0     0.0     0.0     0.0
3618          DQ     0.0    60.4   542.2  1412.2  2663.0     0.0     0.0     0.0     0.0     0.0
              *

3619          KK   DD602DIVERT
3620          KM        Litchfield at RR tracks split flow
3621          DT  DD602S     0.0     0.0
3622          DI     0.0    31.6   276.1   774.4  1555.6     0.0     0.0     0.0     0.0     0.0
3623          DQ     0.0     4.6    15.4    29.8    47.1     0.0     0.0     0.0     0.0     0.0
              *

3624          KK  D60D63ROUTE
3625          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3626          KM        aerial & topo / Manning's N Value: clean earth, straight; Ag field
3627          RS       2    FLOW
3628          RC   0.038   0.022   0.022    1984  0.0020    0.00
3629          RX  100.00  120.00  140.00  152.00  156.00  168.00  182.00  188.00
3630          RY  1111.3 1111.10 1111.00 1108.00 1107.90 1111.00 1111.20 1111.30
              *

3631          KK     D63BASIN
3632          KM        BASIN BOUNDARY FROM 1990 TOPO, AG LAND, AND SMALL AREA OF 2008 TOPO.
3633          KM        AERIAL CONFIRMS AREA OF OVERTOPPING ON RR TRACKS, EVIDENCE OF TRACK
3634          KM        REPLACEMENT
3635          BA   0.222
3636          LG    0.10    0.25    4.35    0.56      80
3637          UI       0     206     654     584     205      48       0       0       0       0
3638          UI       0       0       0       0       0       0       0       0       0       0
3639          UI       0       0       0       0       0       0       0       0       0       0
3640          UI       0       0       0       0       0       0       0       0       0       0
3641          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3642          KK  DD63REDIVERT
3643          KM        Additional Retention based on 100yr 2hr retention.
3644          KM        C value is based on future land use, P=2.7, A=acres
3645          DT    RD63    24.1     0.0
3646          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3647          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3648          KK   DD482RETRIEVE
3649          DR  DD482S
              *

3650          KK  D48D63ROUTE
3651          KM        Cross-section: cross-section estimated from aerial, estimated 1' depth
3652          KM        Manning's N Value: clean earth, straight
3653          RS      17    FLOW
3654          RC   0.013   0.022   0.022    5267  0.0015    0.00
3655          RX  100.00  110.00  115.00  130.00  140.00  160.00  161.00  162.00
3656          RY  1000.0  999.80  999.70  998.70  998.70  999.70  999.80 1000.00
              *

3657          KK   DD491RETRIEVE
3658          DR  DD491S
              *

3659          KK  D49D63ROUTE
3660          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3661          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3662          RS       1    FLOW
3663          RC   0.035   0.035   0.035    2779  0.0022    0.00
3664          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3665          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3666          KK   CPD63COMBINE
3667          HC       4   37.12
              *

3668          KK   SRD63STORAGE
3669          KM        Storage behind AT&SF Railroad tracks
3670          KO
3671          RS       1    STOR
3672          SV           89.25  182.89  281.00  483.41  742.12  908.61
3673          SQ           95.13  269.06  494.29  761.01 1034.31 1268.68
3674          SE  1096.0 1098.00 1100.00 1102.00 1104.00 1106.00 1108.00
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3675          ST
              *

3676          KK  D63D64ROUTE
3677          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3678          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3679          RS      10    FLOW
3680          RC   0.035   0.035   0.035    5812  0.0024    0.00
3681          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3682          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3683          KK     D62BASIN
3684          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3685          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3686          BA   0.250
3687          LG    0.11    0.25    4.40    0.53      75
3688          UI       0     181     545     729     336     102      26       0       0       0
3689          UI       0       0       0       0       0       0       0       0       0       0
3690          UI       0       0       0       0       0       0       0       0       0       0
3691          UI       0       0       0       0       0       0       0       0       0       0
3692          UI       0       0       0       0       0       0       0       0       0       0
              *

3693          KK  DD62REDIVERT
3694          KM        Additional Retention based on 100yr 2hr retention.
3695          KM        C value is based on future land use, P=2.7, A=acres
3696          DT    RD62    25.3     0.0
3697          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3698          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3699          KK   DD601RETRIEVE
3700          DR  DD601S
              *

3701          KK  D60D62ROUTE
3702          KM        Cross-section: Cross-section determined from aerial-road / Manning's
3703          KM        N Value: street (left bank), clean earth (main channel), and Ag field (r
3704          RS       3    FLOW
3705          RC   0.013   0.022   0.038    2883  0.0028    0.00
3706          RX  100.00  108.00  115.00  120.00  126.00  135.00  218.00  280.00
3707          RY  1000.0  999.75  999.50  999.30  999.50  999.70 1001.00 1002.00
              *

3708          KK   CPD62COMBINE
3709          HC       2  35.107
              *

3710          KK   DD621DIVERT
3711          KM        Olive at Litchfield Rd split flow
3712          DT  DD621S     0.0     0.0
3713          DI     0.0    67.0   812.8  2353.7  4689.4     0.0     0.0     0.0     0.0     0.0
3714          DQ     0.0    50.7   512.2  1401.2  2724.4     0.0     0.0     0.0     0.0     0.0
              *

3715          KK   DD622DIVERT
3716          KM        Olive at Litchfield Rd split flow
3717          DT  DD622S     0.0     0.0
3718          DI     0.0    16.3   300.6   952.6  1965.1     0.0     0.0     0.0     0.0     0.0
3719          DQ     0.0     8.1    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3720          KK  D62D64ROUTE
3721          KM        Cross-section: Estimated 3' deep and 5:1 side slopes, width based on aer
3722          KM        & topo / Manning's N Value: clean earth channel; street ROW
3723          RS       8    FLOW
3724          RC   0.022   0.022   0.013    5287  0.0019    0.00
3725          RX  100.00  120.00  140.00  156.00  160.00  176.00  183.00  210.00
3726          RY  1099.2 1099.10 1099.00 1096.00 1095.90 1099.00 1099.10 1099.20
              *

3727          KK   DD602RETRIEVE
3728          DR  DD602S
              *

3729          KK  D60D64ROUTE
3730          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3731          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3732          RS      28    FLOW
3733          RC   0.035   0.035   0.035    7993  0.0023    0.00
3734          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3735          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3736          KK   DD492RETRIEVE
3737          DR  DD492S
              *

3738          KK  D49D64ROUTE
3739          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3740          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3741          RS      24    FLOW
3742          RC   0.035   0.035   0.035    7890  0.0027    0.00
3743          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3744          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3745          KK     D64BASIN
3746          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3747          KM        1990 TOPO, AND BNSF RR ALIGNMENT
3748          BA   0.771
3749          LG    0.10    0.25    4.60    0.47      53
3750          UI       0     210     723    1137    1662    1088     642     264     133      46
3751          UI      45       0       0       0       0       0       0       0       0       0
3752          UI       0       0       0       0       0       0       0       0       0       0
3753          UI       0       0       0       0       0       0       0       0       0       0
3754          UI       0       0       0       0       0       0       0       0       0       0
              *

3755          KK  DD64REDIVERT
3756          KM        Additional Retention based on 100yr 2hr retention.
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3757          KM        C value is based on future land use, P=2.7, A=acres
3758          DT    RD64    81.0     0.0
3759          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3760          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3761          KK  CPD64ACOMBINE
3762          HC       5  38.141
              *

3763          KK  CPD64BCOMBINE
3764          HC       2  38.899
              *

3765          KK  D64D74ROUTE
3766          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3767          KM        aerial & topo / Manning's N Value: clean earth; straight, left LOB
3768          RS       4    FLOW
3769          RC   0.013   0.022   0.022    5291  0.0025    0.00
3770          RX  100.00  112.00  118.00  128.00  133.00  143.00  343.00  344.00
3771          RY  1090.7 1090.10 1090.00 1087.00 1087.10 1090.00 1090.40 1090.70
              *

3772          KK     D74BASIN
3773          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3774          BA   0.989
3775          LG    0.10    0.25    4.60    0.48      68
3776          UI       0     198     733    1106    1818    1567    1040     609     285     155
3777          UI      51      52       0       0       0       0       0       0       0       0
3778          UI       0       0       0       0       0       0       0       0       0       0
3779          UI       0       0       0       0       0       0       0       0       0       0
3780          UI       0       0       0       0       0       0       0       0       0       0
              *

3781          KK  DD74REDIVERT
3782          KM        Additional Retention based on 100yr 2hr retention.
3783          KM        C value is based on future land use, P=2.7, A=acres
3784          DT    RD74    94.5     0.0
3785          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3786          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3787          KK   DD622RETRIEVE
3788          DR  DD622S
              *

3789          KK  D62D74ROUTE
3790          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3791          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3792          RS      34    FLOW
3793          RC   0.035   0.035   0.035    9944  0.0026    0.00
3794          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3795          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE 98

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3796          KK   CPD74COMBINE
3797          HC       3  39.888
              *

3798          KK   DD741DIVERT
3799          KM        Northern at Dysart split flow
3800          DT  DD741S     0.0     0.0
3801          DI     0.0  1742.9  5091.4 10712.8 18740.6     0.0     0.0     0.0     0.0     0.0
3802          DQ     0.0  1490.1  4289.3  8437.4 14200.9     0.0     0.0     0.0     0.0     0.0
              *

3803          KK   DD742DIVERT
3804          KM        Northern at Dysart split flow
3805          DT  DD742S     0.0     0.0
3806          DI     0.0   252.8   802.1  2275.4  4539.6     0.0     0.0     0.0     0.0     0.0
3807          DQ     0.0    85.9   177.9   289.8   418.6     0.0     0.0     0.0     0.0     0.0
              *

3808          KK  D74D75ROUTE
3809          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3810          KM        aerial & topo / Manning's N Value: clean earth; straight, right ROB
3811          RS       8    FLOW
3812          RC   0.022   0.022   0.016    3213  0.0006    0.00
3813          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
3814          RY  1078.5 1078.25 1078.00 1075.00 1075.10 1078.00 1078.25 1078.50
              *

3815          KK    D79ABASIN
3816          KM        Basin boundary from topo
3817          BA   0.175
3818          LG    0.12    0.25    4.70    0.43      68
3819          UI       0      54     182     302     380     230     116      50      21      11
3820          UI       0       0       0       0       0       0       0       0       0       0
3821          UI       0       0       0       0       0       0       0       0       0       0
3822          UI       0       0       0       0       0       0       0       0       0       0
3823          UI       0       0       0       0       0       0       0       0       0       0
              *

3824          KK  DD79ARDIVERT
3825          KM        Additional Retention based on 100yr 2hr retention.
3826          KM        C value is based on future land use, P=2.7, A=acres
3827          DT   RD79A    19.1     0.0
3828          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3829          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3830          KK   DD742RETRIEVE
3831          DR  DD742S
              *
1                                        HEC-1 INPUT                                          PAGE 99

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3832          KK  D7479AROUTE
3833          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3834          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
```

```
3835          RS      15    FLOW
3836          RC   0.035   0.035   0.035    3459  0.0021    0.00
3837          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3838          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3839          KK  CPD79ACOMBINE
3840          HC       2   40.07
              *

3841          KK     D51BASIN
3842          KM        BASIN BOUNDARY FROM DYSART RANCHETTES AND DYSART HIGH SCHOOL
3843          BA   0.287
3844          LG    0.30    0.15    7.60    0.11      18
3845          UI       0      76     261     406     613     410     251     104      58      17
3846          UI      16       0       0       0       0       0       0       0       0       0
3847          UI       0       0       0       0       0       0       0       0       0       0
3848          UI       0       0       0       0       0       0       0       0       0       0
3849          UI       0       0       0       0       0       0       0       0       0       0
              *

3850          KK  DD51REDIVERT
3851          KM        Retention volume estimated based on aerial
3852          DT    RD51     5.9     0.0
3853          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3854          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3855          KK  D51D65ROUTE
3856          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
3857          KM        aerial & topo / Manning's N Value: clean earth; straight
3858          RS      10    FLOW
3859          RC   0.038   0.038   0.038    5303  0.0032    0.00
3860          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
3861          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

3862          KK     D65BASIN
3863          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
3864          BA   0.695
3865          LG    0.10    0.25    5.00    0.39      44
3866          UI       0     242     781    1367    1445     876     374     178      54      45
3867          UI       0       0       0       0       0       0       0       0       0       0
3868          UI       0       0       0       0       0       0       0       0       0       0
3869          UI       0       0       0       0       0       0       0       0       0       0
3870          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3871          KK  DD65REDIVERT
3872          KM        Additional Retention based on 100yr 6hr retention.
3873          KM        C value is based on future land use, P=2.7, A=acres
3874          DT    RD65    70.8     0.0
3875          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3876          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3877          KK   CPD65COMBINE
3878          HC       2   0.982
              *

3879          KK  D65D75ROUTE
3880          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3881          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3882          RS       9    FLOW
3883          RC   0.035   0.035   0.035    7942  0.0020    0.00
3884          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3885          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3886          KK     D75BASIN
3887          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3888          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CONTECT CONSTRUCTION PRODUCTS
3889          BA   0.883
3890          LG    0.11    0.25    4.80    0.42      47
3891          UI       0     203     720    1083    1784    1339     863     419     220      97
3892          UI      48      48       0       0       0       0       0       0       0       0
3893          UI       0       0       0       0       0       0       0       0       0       0
3894          UI       0       0       0       0       0       0       0       0       0       0
3895          UI       0       0       0       0       0       0       0       0       0       0
              *

3896          KK  DD75REDIVERT
3897          KM        Additional Retention based on 100yr 2hr retention.
3898          KM        C value is based on future land use, P=2.7, A=acres
3899          DT    RD75    70.4     0.0
3900          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
3901          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

3902          KK   CPD75COMBINE
3903          HC       4  41.928
              *

3904          KK  D7579BROUTE
3905          KM        Cross-section: Estimated 3' deep, width and side slopes based on
3906          KM        aerial & topo / Manning's N Value: natural desert wash w/ heavy vegetati
3907          RS      10    FLOW
3908          RC   0.045   0.045   0.045    4196  0.0038    0.00
3909          RX  100.00  115.00  130.00  154.00  434.00  449.00  469.00  489.00
3910          RY  1078.5 1078.25 1078.00 1075.00 1075.10 1078.00 1078.25 1078.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3911          KK     L33BASIN
3912          KM        BASIN BOUNDARY FROM LARGE LOT HOMES OF MARICOPA COUNTY
3913          BA   0.651
3914          LG    0.30    0.25    4.30    0.41       6
3915          UI       0      77     214     383     496     696     927     689     534     398
3916          UI     242     134      96      61      24      24      23       0       0       0
3917          UI       0       0       0       0       0       0       0       0       0       0
3918          UI       0       0       0       0       0       0       0       0       0       0
3919          UI       0       0       0       0       0       0       0       0       0       0
              *
```

```
3920          KK  DL33REDIVERT
3921          KM        Additional Retention based on 100yr 2hr retention.
3922          KM        C value is based on future land use, P=2.7, A=acres
3923          DT    RL33     10.9      0.0
3924          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3925          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3926          KK  DL33SEDIVERT
3927          KM        Olive at Cotton split flow
3928          DT   DL33S      0.0      0.0
3929          DI     0.0    200.5    987.1  2321.7  4115.6      0.0      0.0      0.0      0.0      0.0
3930          DQ     0.0      0.0      2.7    97.9   266.6      0.0      0.0      0.0      0.0      0.0
              *

3931          KK  L33L34ROUTE
3932          KM        Cross-section: Cross-section determined from 1991 topo and
3933          KM        aerial/ Manning's N Value: earth w/ sparse trees and brush
3934          RS       2    FLOW
3935          RC   0.032   0.032   0.032    2761  0.0051    0.00
3936          RX  100.00  106.00  112.00  124.00  130.00  142.00  162.00  182.00
3937          RY  1178.2 1178.10 1178.00 1174.00 1174.10 1176.00 1176.20 1176.30
              *

3938          KK     L34BASIN
3939          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
3940          KM        EASTERN BOUNDARY LOOP 303
3941          BA   0.515
3942          LG    0.10    0.25    4.40    0.54      80
3943          UI       0     185     589    1061    1046     639     261     128      34      34
3944          UI       0       0       0       0       0       0       0       0       0       0
3945          UI       0       0       0       0       0       0       0       0       0       0
3946          UI       0       0       0       0       0       0       0       0       0       0
3947          UI       0       0       0       0       0       0       0       0       0       0
              *

3948          KK  DL34REDIVERT
3949          KM        Additional Retention based on 100yr 2hr retention.
3950          KM        C value is based on future land use, P=2.7, A=acres
3951          DT    RL34     54.4      0.0
3952          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
3953          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3954          KK  DL26SERETRIEVE
3955          DR   DL26S
              *

3956          KK  L26L34ROUTE
3957          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
3958          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
3959          RS       1    FLOW
3960          RC   0.035   0.035   0.035    7895  0.0047    0.00
3961          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
3962          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

3963          KK   DL271RETRIEVE
3964          DR  DL271S
              *

3965          KK  L27L34ROUTE
3966          KM        Cross-section: Estimated 3' deep, side slopes and width based on
3967          KM        topo aerial / Manning's N Value: clean earth; straight
3968          RS       2    FLOW
3969          RC   0.013   0.022   0.022    5304  0.0034    0.00
3970          RX  100.00  125.00  146.00  154.00  164.00  172.00  470.00  472.00
3971          RY  1174.7 1174.10 1174.00 1171.00 1171.10 1174.00 1174.40 1174.70
              *

3972          KK   CPL34COMBINE
3973          HC       4  13.693
              *

3974          KK   DL341DIVERT
3975          KM        L303/Olive/RR tracks split flow
3976          DT  DL341S      0.0      0.0
3977          DI     0.0     13.8    681.8  2156.0  4356.0      0.0      0.0      0.0      0.0      0.0
3978          DQ     0.0      0.0    125.6   670.8  1612.6      0.0      0.0      0.0      0.0      0.0
              *

3979          KK   DL342DIVERT
3980          KM        L303/Olive/RR tracks split flow
3981          DT  DL342S      0.0      0.0
3982          DI     0.0    125.6    670.8  1612.6      0.0      0.0      0.0      0.0      0.0      0.0
3983          DQ     0.0     20.0    140.0   250.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

3984          KK  L34D57ROUTE
3985          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
3986          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
3987          RS       2    FLOW
3988          RC   0.032   0.032   0.032    2584  0.0066    0.00
3989          RX  100.00  112.00  124.00  136.00  142.00  154.00  169.00  184.00
3990          RY  1159.0 1158.50 1158.00 1155.00 1155.10 1158.00 1158.25 1158.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3991          KK     D57BASIN
3992          KM        BASIN BOUNDARYFROM LOOP 303
3993          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
3994          BA   0.480
3995          LG    0.10    0.25    4.35    0.56      82
3996          UI       0     218     674    1220     884     454     162      57      35       0
3997          UI       0       0       0       0       0       0       0       0       0       0
3998          UI       0       0       0       0       0       0       0       0       0       0
3999          UI       0       0       0       0       0       0       0       0       0       0
4000          UI       0       0       0       0       0       0       0       0       0       0
              *

4001          KK  DD57REDIVERT
4002          KM        Additional Retention based on 100yr 2hr retention.
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4003          KM        C value is based on future land use, P=2.7, A=acres
4004          DT    RD57     49.7      0.0
4005          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4006          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4007          KK   DL272RETRIEVE
4008          DR  DL272S
              *

4009          KK  L27D57ROUTE
4010          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4011          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4012          RS       9    FLOW
4013          RC   0.035    0.035    0.035     7699  0.0047     0.00
4014          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
4015          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
              *

4016          KK   DD451RETRIEVE
4017          DR  DD451S
              *

4018          KK  D45D57ROUTE
4019          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4020          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
4021          RS       7    FLOW
4022          RC   0.032    0.032    0.032     5208  0.0034     0.00
4023          RX  100.00   112.00   124.00   130.00  138.00   144.00   156.00   168.00
4024          RY  1156.0  1155.75  1155.50  1153.50 1153.60  1155.50  1155.75  1156.00
              *

4025          KK   CPD57COMBINE
4026          HC       4  14.661
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4027          KK  D57D58ROUTE
4028          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4029          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and shrubs; str
4030          RS       7    FLOW
4031          RC   0.032    0.032    0.013     4894  0.0047     0.00
4032          RX  100.00   101.00   324.00   340.00  348.00   360.00   375.00   390.00
4033          RY  1140.7  1140.30  1140.00  1137.00 1137.10  1140.00  1140.10  1140.70
              *

4034          KK     D58BASIN
4035          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4036          KM        AND TWELVE OAK ESTATES
4037          BA   0.918
4038          LG    0.21     0.25     4.70     0.39       42
4039          UI       0      153      611      903     1437     1545     1038      697      321      192
4040          UI      93       45       45        0        0        0        0        0        0        0
4041          UI       0        0        0        0        0        0        0        0        0        0
4042          UI       0        0        0        0        0        0        0        0        0        0
4043          UI       0        0        0        0        0        0        0        0        0        0
              *

4044          KK  DD58REDIVERT
4045          KM        Additional Retention based on 100yr 2hr retention.
4046          KM        C value is based on future land use, P=2.7, A=acres
4047          DT    RD58     68.5      0.0
4048          DI     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4049          DQ     0.0    500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4050          KK   DD452RETRIEVE
4051          DR  DD452S
              *

4052          KK  D45D58ROUTE
4053          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4054          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4055          RS      12    FLOW
4056          RC   0.035    0.035    0.035     9608  0.0055     0.00
4057          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
4058          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
              *

4059          KK   DD461RETRIEVE
4060          DR  DD461S
              *

4061          KK  D46D58ROUTE
4062          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
4063          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
4064          RS       2    FLOW
4065          RC   0.022    0.022    0.022     2200  0.0011     0.00
4066          RX    0.00     5.00    25.00    90.00  110.00   185.00   200.00   201.00
4067          RY  1146.0  1145.00  1144.50  1137.00 1136.90  1145.00  1145.00  1146.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4068          KK  RMSBSNDIVERT
4069          KM        Divet side weir flows into Reems Road Basin
4070          DT  SSPILL      0.0      0.0
4071          DI     0.0    371.0    512.0    724.0  1062.0  2173.0  2607.0  2728.0      0.0      0.0
4072          DQ     0.0    152.0     27.0    416.0   669.0  1501.0     0.0     0.0      0.0      0.0
              *

4073          KK  RMSBSNRETRIEVE
4074          DR  SSPILL
              *

4075          KK   SRRMSSTORAGE
4076          KM        Reems Road Basin
4077          KO
4078          RS       1    STOR
4079          SV           11.50    55.40   202.00   228.00   256.00
4080          SQ           12.50    38.00    76.20   129.00  1583.00
4081          SE  1125.0  1127.00  1129.50  1136.00 1137.00  1138.00
4082          ST
              *
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4083          KK   CPRMSCOMBINE
4084          HC       2  24.822
              *

4085          KK    RRMSROUTE
4086          KM        Reems Road Channel
4087          RS       1    FLOW
4088          RC   0.035   0.035   0.035    1358  0.0011    0.00
4089          RX  100.00  105.00  130.00  190.00  210.00  270.00  285.00  290.00
4090          RY  1135.0 1124.00 1134.00 1127.00 1127.10 1134.50 1134.60 1135.00
              *

4091          KK   CPD58COMBINE
4092          HC       4  27.386
              *

4093          KK   DD581DIVERT
4094          KM        Olive at Reems split flow
4095          DT  DD581S     0.0     0.0
4096          DI     0.0    57.6   503.3  1318.1  2732.5     0.0     0.0     0.0     0.0     0.0
4097          DQ     0.0    32.6   304.7   767.6  1562.5     0.0     0.0     0.0     0.0     0.0
              *

4098          KK   DD582DIVERT
4099          KM        Olive at Reems split flow
4100          DT  DD582S     0.0     0.0
4101          DI     0.0    25.0   198.6   550.6  1170.1     0.0     0.0     0.0     0.0     0.0
4102          DQ     0.0     6.2    23.5    47.1    75.5     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE106

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4103          KK  D58D59ROUTE
4104          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4105          KM        aerial & topo / Manning's N Value: clean earth channel; street ROB
4106          RS       8    FLOW
4107          RC   0.038   0.022   0.013    5267  0.0023    0.00
4108          RX  100.00  105.00  422.00  430.00  436.00  444.00  452.00  466.00
4109          RY  1118.7 1118.30 1118.00 1115.00 1115.10 1118.00 1118.20 1118.70
              *

4110          KK     D59BASIN
4111          KM        BASIN BOUNDARIES FROM AERIAL PHOTOGRAPHY OF AG LAND
4112          KM        1990 TOPO, AND BNSF RR ALIGNMENT
4113          BA   0.993
4114          LG    0.11    0.25    4.80    0.42      77
4115          UI       0     201     744    1116    1850    1564    1035     601     281     151
4116          UI      52      53       0       0       0       0       0       0       0       0
4117          UI       0       0       0       0       0       0       0       0       0       0
4118          UI       0       0       0       0       0       0       0       0       0       0
4119          UI       0       0       0       0       0       0       0       0       0       0
              *

4120          KK  DD59REDIVERT
4121          KM        Additional Retention based on 100yr 2hr retention.
4122          KM        C value is based on future land use, P=2.7, A=acres
4123          DT    RD59   105.1     0.0
4124          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4125          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4126          KK   DD462RETRIEVE
4127          DR  DD462S
              *

4128          KK  D46D59ROUTE
4129          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4130          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4131          RS      27    FLOW
4132          RC   0.035   0.035   0.035    9975  0.0034    0.00
4133          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4134          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

4135          KK  DD47SERETRIEVE
4136          DR   DD47S
              *

4137          KK  D47D59ROUTE
4138          KM        Cross-section: Cross-section determined from aerial & topo
4139          KM        Manning's N Value: clean earth; straight
4140          RS      16    FLOW
4141          RC   0.022   0.022   0.022    5274  0.0046    0.00
4142          RX  100.00  107.00  114.00  122.00  162.00  170.00  190.00  210.00
4143          RY  1118.5 1118.25 1118.00 1114.00 1114.40 1118.00 1118.25 1118.50
              *
1                                        HEC-1 INPUT                                          PAGE107

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4144          KK   CPD59COMBINE
4145          HC       4  32.373
              *

4146          KK  DD59SEDIVERT
4147          KM        Olive at Bullard split flow
4148          DT   DD59S     0.0     0.0
4149          DI     0.0   578.9  2379.7  5553.1  9800.2     0.0     0.0     0.0     0.0     0.0
4150          DQ     0.0   549.4  2103.3  4574.6  7763.0     0.0     0.0     0.0     0.0     0.0
              *

4151          KK  D59D61ROUTE
4152          KM        Cross-section: Cross-section estimated from aerial and
4153          KM        topo-road / Manning's N Value: clean earth; straight, street ROB
4154          RS       5    FLOW
4155          RC   0.022   0.022   0.016    2759  0.0007    0.00
4156          RX  100.00  108.00  116.00  122.00  128.00  132.00  144.00  156.00
4157          RY  1113.0 1112.50 1112.00 1110.00 1110.10 1112.00 1112.25 1112.50
              *

4158          KK     D61BASIN
4159          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4160          KM        1990 TOPO, AND BNSF RR ALIGNMENT
4161          BA   0.348
4162          LG    0.10    0.25    4.55    0.49      79
4163          UI       0      81     284     436     708     523     340     158      86      36
4164          UI      19      20       0       0       0       0       0       0       0       0
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4165          UI       0       0       0       0       0       0       0       0       0       0
4166          UI       0       0       0       0       0       0       0       0       0       0
4167          UI       0       0       0       0       0       0       0       0       0       0
              *

4168          KK  DD61REDIVERT
4169          KM        Additional Retention based on 100yr 2hr retention.
4170          KM        C value is based on future land use, P=2.7, A=acres
4171          DT    RD61    37.6     0.0
4172          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4173          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4174          KK   CPD61COMBINE
4175          HC       2  32.721
              *

4176          KK  D61D72ROUTE
4177          KM        Cross-section: Estimated 4' deep, width based on aerial & topo
4178          KM        Manning's N Value: natural wash w/ heavy vegetation
4179          RS      10    FLOW
4180          RC   0.045   0.045   0.045    5378  0.0041    0.00
4181          RX  100.00  108.00  116.00  140.00  156.00  180.00  188.00  196.00
4182          RY  1102.2 1102.10 1102.00 1098.00 1098.10 1102.00 1102.10 1102.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4183          KK     L30BASIN
4184          KM        BASIN BOUNDARY FROM CORTESSA
4185          BA   0.535
4186          LG    0.26    0.25    4.55    0.39      34
4187          UI       0      90     357     532     844     903     600     406     181     110
4188          UI      52      26      26       0       0       0       0       0       0       0
4189          UI       0       0       0       0       0       0       0       0       0       0
4190          UI       0       0       0       0       0       0       0       0       0       0
4191          UI       0       0       0       0       0       0       0       0       0       0
              *

4192          KK  DL30REDIVERT
4193          KM        Retention volume estimated based on aerial
4194          DT    RL30    40.0     0.0
4195          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4196          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4197          KK  L30L31ROUTE
4198          KM        Cross-section: Cross section estimated from aerial; road
4199          KM        Manning's N Value: earth w/ sparse trees and shrubs; street ROB
4200          RS       5    FLOW
4201          RC   0.032   0.032   0.016    2808  0.0078    0.00
4202          RX  100.00  101.00  102.00  114.00  116.00  128.00  148.00  168.00
4203          RY  1227.0 1226.00 1225.00 1223.00 1223.10 1225.00 1225.10 1225.20
              *

4204          KK     L31BASIN
4205          KM        BASIN BOUNDARY FROM CORTESSA
4206          BA   0.422
4207          LG    0.26    0.25    4.45    0.42      37
4208          UI       0     201     621    1099     766     366     136      41      32       0
4209          UI       0       0       0       0       0       0       0       0       0       0
4210          UI       0       0       0       0       0       0       0       0       0       0
4211          UI       0       0       0       0       0       0       0       0       0       0
4212          UI       0       0       0       0       0       0       0       0       0       0
              *

4213          KK  DL31REDIVERT
4214          KM        Retention volume estimated based on aerial
4215          DT    RL31    31.6     0.0
4216          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4217          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4218          KK   CPL31COMBINE
4219          HC       2   0.957
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4220          KK  L31L32ROUTE
4221          KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width based on
4222          KM        aerial / Manning's N Value: clean earth; straight; ROB street
4223          RS       4    FLOW
4224          RC   0.022   0.022   0.016    3746  0.0069    0.00
4225          RX  100.00  120.00  140.00  152.00  154.00  166.00  176.00  186.00
4226          RY  1194.5 1194.25 1194.00 1192.00 1192.10 1194.00 1194.25 1194.50
              *

4227          KK     L32BASIN
4228          KM        BASIN BOUNDARY FROM CORTESSA
4229          BA   0.351
4230          LG    0.30    0.25    4.10    0.46       5
4231          UI       0      71     267     399     661     548     365     206      98      53
4232          UI      18      18       0       0       0       0       0       0       0       0
4233          UI       0       0       0       0       0       0       0       0       0       0
4234          UI       0       0       0       0       0       0       0       0       0       0
4235          UI       0       0       0       0       0       0       0       0       0       0
              *

4236          KK  DL32REDIVERT
4237          KM        Additional Retention based on 100yr 2hr retention.
4238          KM        C value is based on future land use, P=2.7, A=acres
4239          DT    RL32    20.7     0.0
4240          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4241          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4242          KK   CPL32COMBINE
4243          HC       2   1.308
              *

4244          KK  L32L38ROUTE
4245          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4246          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4247          RS      18    FLOW
4248          RC   0.035   0.035   0.035    7380  0.0051    0.00
```

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4249          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4250          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

4251          KK     L28BASIN
4252          KM        BASIN BOUNDARY FROM BEARDSLEY CSR, EASTERN BOUNDARY OF CORTESSA
4253          BA   0.312
4254          LG    0.24    0.25    4.25    0.49      29
4255          UI       0      63     237     355     587     488     324     184      86      47
4256          UI      16      17       0       0       0       0       0       0       0       0
4257          UI       0       0       0       0       0       0       0       0       0       0
4258          UI       0       0       0       0       0       0       0       0       0       0
4259          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4260          KK  DL28REDIVERT
4261          KM        Additional Retention based on 100yr 2hr retention.
4262          KM        C value is based on future land use, P=2.7, A=acres
4263          DT    RL28    21.8     0.0
4264          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4265          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4266          KK  L28L29ROUTE
4267          KM        Cross-section: Cross-section determined from 1990 topo
4268          KM        Manning's N Value: earth w/ sparse trees and brush
4269          RS      15    FLOW
4270          RC   0.032   0.032   0.032    3315  0.0060    0.00
4271          RX  100.00  118.00  134.00  164.00  199.00  243.00  252.00  262.00
4272          RY  1270.0 1269.00 1268.00 1266.00 1265.90 1268.00 1269.00 1270.00
              *

4273          KK     L29BASIN
4274          KM        BASIN BOUNDARY FROM 1990 TOPO, 2008 TOPO AT INTERSECTION
4275          KM        AND FIELD VISIT, WESTERN BOUNDARY DEFINED BY BEARDSLEY CSR
4276          KM        EASTERN BOUNDARY OF CORTESSA
4277          BA   0.245
4278          LG    0.21    0.24    4.40    0.49      33
4279          UI       0      43     167     248     400     405     274     179      80      49
4280          UI      22      12      12       0       0       0       0       0       0       0
4281          UI       0       0       0       0       0       0       0       0       0       0
4282          UI       0       0       0       0       0       0       0       0       0       0
4283          UI       0       0       0       0       0       0       0       0       0       0
              *

4284          KK  DL29REDIVERT
4285          KM        Additional Retention based on 100yr 2hr retention.
4286          KM        C value is based on future land use, P=2.7, A=acres
4287          DT    RL29    19.2     0.0
4288          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4289          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4290          KK   CPL29COMBINE
4291          HC       2   0.557
              *

4292          KK  DL29SEDIVERT
4293          KM        Diversion at canal overtopping, assume 50-50 split
4294          DT   DL29S     0.0     0.0
4295          DI     0.0   100.0  1000.0  5000.0 10000.0     0.0     0.0     0.0     0.0     0.0
4296          DQ     0.0    50.0   500.0  2500.0  5000.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE111

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4297          KK  L29L36ROUTE
4298          KM        Cross-section: Estimated 5' deep and 6:1 side slopes, width based
4299          KM        on aerial / Manning's N Value: clean earth; straight
4300          RS      15    FLOW
4301          RC   0.022   0.022   0.022    6696  0.0066    0.00
4302          RX  100.00  112.00  121.00  151.00  186.00  216.00  228.00  244.00
4303          RY  1220.5 1220.25 1220.00 1215.00 1215.10 1220.00 1220.25 1220.50
              *

4304          KK     L35BASIN
4305          KM        BASIN BOUNDARY FROM 1990 TOPO AND FIELD VISIT
4306          BA   0.517
4307          LG    0.23    0.25    4.45    0.44      35
4308          UI       0     116     420     629    1031     789     511     251     132      59
4309          UI      28      28       0       0       0       0       0       0       0       0
4310          UI       0       0       0       0       0       0       0       0       0       0
4311          UI       0       0       0       0       0       0       0       0       0       0
4312          UI       0       0       0       0       0       0       0       0       0       0
              *

4313          KK  DL35REDIVERT
4314          KM        Additional Retention based on 100yr 6hr retention.
4315          KM        C value is based on future land use, P=3.2, A=acres
4316          DT    RL35    45.4     0.0
4317          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4318          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4319          KK  DL29SERETRIEVE
4320          DR   DL29S
              *

4321          KK  L29L35ROUTE
4322          KM        Cross-section: Cross-section determined from aerial
4323          KM        Manning's N Value: earth w/ sparse trees and brush
4324          RS      24    FLOW
4325          RC   0.032   0.032   0.032    3510  0.0006    0.00
4326          RX  100.00  120.00  140.00  145.00  155.00  160.00  180.00  200.00
4327          RY  1234.0 1233.50 1233.00 1231.50 1231.50 1232.00 1232.00 1232.00
              *

4328          KK   CPL35COMBINE
4329          HC       2   1.074
              *

4330          KK  L35L37ROUTE
4331          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4332          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
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4333          RS      21    FLOW
4334          RC   0.035   0.035   0.035    8274  0.0058    0.00
4335          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4336          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4337          KK     L37BASIN
4338          KM        BASIN BOUNDARY FROM NORTH EASTERN BASIN BOUNDARY
4339          KM        AND ENGINEERED CHANNEL
4340          BA   0.399
4341          LG    0.23    0.25    4.15    0.53      26
4342          UI       0      78     289     436     721     639     424     257     115      69
4343          UI      21      20      21       0       0       0       0       0       0       0
4344          UI       0       0       0       0       0       0       0       0       0       0
4345          UI       0       0       0       0       0       0       0       0       0       0
4346          UI       0       0       0       0       0       0       0       0       0       0
              *

4347          KK  DL37REDIVERT
4348          KM        Additional Retention based on 100yr 2hr retention.
4349          KM        C value is based on future land use, P=2.7, A=acres
4350          DT    RL37    26.5     0.0
4351          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4352          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4353          KK     L36BASIN
4354          KM        BASIN BOUNDARY FROM WHITE TANK FOOTHILLS / CORTESSA
4355          KM        SW BOUNDARY BASED ON ENGINEERED CHANNEL
4356          BA   0.466
4357          LG    0.22    0.25    4.10    0.57      38
4358          UI       0      87     336     501     820     753     500     312     137      84
4359          UI      29      24      23       0       0       0       0       0       0       0
4360          UI       0       0       0       0       0       0       0       0       0       0
4361          UI       0       0       0       0       0       0       0       0       0       0
4362          UI       0       0       0       0       0       0       0       0       0       0
              *

4363          KK  DL36REDIVERT
4364          KM        Retention volume estimated based on aerial
4365          DT    RL36    75.1     0.0
4366          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4367          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4368          KK   CPL36COMBINE
4369          HC       4   1.939
              *

4370          KK  L36L38ROUTE
4371          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on aer
4372          KM        Manning's N Value: clean earth; straight
4373          RS       2    FLOW
4374          RC   0.038   0.022   0.013    5308  0.0070    0.00
4375          RX  100.00  101.00  260.00  264.00  272.00  276.00  290.00  305.00
4376          RY  1146.6 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.60
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4377          KK     L38BASIN
4378          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHYAND AG LAND
4379          BA   1.005
4380          LG    0.29    0.25    4.60    0.34       6
4381          UI       0     142     522     804    1126    1712    1246     903     612     286
4382          UI     188     104      44      43      45       0       0       0       0       0
4383          UI       0       0       0       0       0       0       0       0       0       0
4384          UI       0       0       0       0       0       0       0       0       0       0
4385          UI       0       0       0       0       0       0       0       0       0       0
              *

4386          KK  DL38REDIVERT
4387          KM        Additional Retention based on 100yr 6hr retention.
4388          KM        C value is based on future land use, P=3.2, A=acres
4389          DT    RL38    48.0     0.0
4390          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4391          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4392          KK  DL33SERETRIEVE
4393          DR   DL33S
              *

4394          KK  L33L38ROUTE
4395          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4396          KM        on aerial / Manning's N Value: clean earth; straight, street LOB
4397          RS      13    FLOW
4398          RC   0.016   0.022   0.022    5310  0.0060    0.00
4399          RX  100.00  112.00  124.00  132.00  140.00  148.00  168.00  188.00
4400          RY  1170.5 1170.25 1170.00 1167.00 1167.10 1170.00 1170.25 1170.50
              *

4401          KK   CPL38COMBINE
4402          HC       4   4.903
              *

4403          KK   DL381DIVERT
4404          KM        Northern at Cotton split flow
4405          DT  DL381S     0.0     0.0
4406          DI     0.0    74.9   379.5  1198.9  2430.8     0.0     0.0     0.0     0.0     0.0
4407          DQ     0.0     1.9    30.1   320.7   837.7     0.0     0.0     0.0     0.0     0.0
              *

4408          KK   DL382DIVERT
4409          KM        Northern at Cotton split flow
4410          DT  DL382S     0.0     0.0
4411          DI     0.0    73.0   349.3   878.2  1593.1     0.0     0.0     0.0     0.0     0.0
4412          DQ     0.0    22.8    76.8   149.1   235.7     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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4413          KK  L38L39ROUTE
4414          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based
4415          KM        on aerial / Manning's N Value: clean earth; straight
4416          RS       2    FLOW
4417          RC   0.038   0.022   0.013    2555  0.0039    0.00
4418          RX  100.00  101.00  450.00  454.00  462.00  466.00  480.00  495.00
4419          RY  1146.7 1146.20 1146.00 1144.50 1144.60 1146.00 1146.20 1146.65
              *

4420          KK     L39BASIN
4421          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
4422          KM        AND EASTERN BOUNDARY LOOP 303
4423          BA   0.507
4424          LG    0.10    0.25    4.30    0.57      79
4425          UI       0     145     490     778    1100     706     397     163      78      31
4426          UI      30       0       0       0       0       0       0       0       0       0
4427          UI       0       0       0       0       0       0       0       0       0       0
4428          UI       0       0       0       0       0       0       0       0       0       0
4429          UI       0       0       0       0       0       0       0       0       0       0
              *

4430          KK  DL39REDIVERT
4431          KM        Additional Retention based on 100yr 2hr retention.
4432          KM        C value is based on future land use, P=2.7, A=acres
4433          DT    RL39    52.5     0.0
4434          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4435          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4436          KK   DL341RETRIEVE
4437          DR  DL341S
              *

4438          KK  L34L39ROUTE
4439          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width
4440          KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
4441          RS       5    FLOW
4442          RC   0.032   0.032   0.032    5333  0.0053    0.00
4443          RX  100.00  120.00  140.00  156.00  166.00  182.00  202.00  222.00
4444          RY  1156.2 1156.10 1156.00 1152.00 1152.10 1156.00 1156.10 1156.20
              *

4445          KK   CPL39COMBINE
4446          HC       3  18.452
              *

4447          KK   DL391DIVERT
4448          KM        Northern at L303 split flow
4449          DT  DL391S     0.0     0.0
4450          DI     0.0   409.6  1188.4  2552.2  4924.4     0.0     0.0     0.0     0.0     0.0
4451          DQ     0.0   360.2  1056.6  2027.9  3368.6     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                          PAGE115

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4452          KK   DL392DIVERT
4453          KM        Northern at L303 split flow
4454          DT  DL392S     0.0     0.0
4455          DI     0.0    49.4   131.9   524.3  1555.8     0.0     0.0     0.0     0.0     0.0
4456          DQ     0.0    27.9    60.7   108.8   168.3     0.0     0.0     0.0     0.0     0.0
              *

4457          KK  L39D68ROUTE
4458          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4459          KM        aerial & topo / Manning's N Value: clean earth; straight
4460          RS       4    FLOW
4461          RC   0.022   0.022   0.022    2769  0.0043    0.00
4462          RX  100.00  120.00  140.00  148.00  152.00  160.00  180.00  200.00
4463          RY  1129.2 1129.10 1129.00 1126.00 1126.10 1129.00 1129.10 1129.20
              *

4464          KK     D68BASIN
4465          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM
4466          KM        AERIAL PHOTOGRAPHY OF AG LAND AND 1990 TOPO
4467          BA   0.494
4468          LG    0.14    0.24    4.10    0.60      67
4469          UI       0     208     645    1182     949     524     185      74      36       0
4470          UI       0       0       0       0       0       0       0       0       0       0
4471          UI       0       0       0       0       0       0       0       0       0       0
4472          UI       0       0       0       0       0       0       0       0       0       0
4473          UI       0       0       0       0       0       0       0       0       0       0
              *

4474          KK  DD68REDIVERT
4475          KM        Additional Retention based on 100yr 6hr retention.
4476          KM        C value is based on future land use, P=3.2, A=acres
4477          DT    RD68    48.7     0.0
4478          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4479          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4480          KK   DL342RETRIEVE
4481          DR  DL342S
              *

4482          KK  L34D68ROUTE
4483          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4484          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4485          RS       9    FLOW
4486          RC   0.035   0.035   0.035    7802  0.0051    0.00
4487          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4488          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE116

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4489          KK   CPD68COMBINE
4490          HC       3  18.946
              *

4491          KK   DD681DIVERT
4492          KM        Northern at Sarival split flow
4493          DT  DD681S     0.0     0.0
4494          DI     0.0   250.0  1230.1  3091.5  6023.2     0.0     0.0     0.0     0.0     0.0
4495          DQ     0.0   197.3   899.3  2174.8  3885.3     0.0     0.0     0.0     0.0     0.0
              *
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4496          KK   DD682DIVERT
4497          KM        Northern at Sarival split flow
4498          DT  DD682S      0.0      0.0
4499          DI     0.0     52.7    330.8    916.7   2138.0      0.0      0.0      0.0      0.0      0.0
4500          DQ     0.0     17.6     39.4     66.5     97.9      0.0      0.0      0.0      0.0      0.0
              *

4501          KK  D68D69ROUTE
4502          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4503          KM        on aerial & topo / Manning's N Value: clean earth; straight, street ROB
4504          RS       4    FLOW
4505          RC   0.022   0.022   0.016     4930  0.0045     0.00
4506          RX  100.00  120.00  140.00   152.00  154.00   166.00   176.00   186.00
4507          RY  1121.2 1121.10 1121.00 1118.00 1118.10 1121.00 1121.10 1121.20
              *

4508          KK     D69BASIN
4509          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4510          BA   0.925
4511          LG    0.21     0.25     4.55     0.44       38
4512          UI       0      143      591      868     1345     1594     1067      735      366      209
4513          UI     115       44       44        0        0        0        0        0        0        0
4514          UI       0        0        0        0        0        0        0        0        0        0
4515          UI       0        0        0        0        0        0        0        0        0        0
4516          UI       0        0        0        0        0        0        0        0        0        0
              *

4517          KK  DD69REDIVERT
4518          KM        Additional Retention based on 100yr 2hr retention.
4519          KM        C value is based on future land use, P=3.2, A=acres
4520          DT    RD69     74.7      0.0
4521          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4522          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

4523          KK   DD581RETRIEVE
4524          DR  DD581S
              *
1                                        HEC-1 INPUT                                                PAGE117

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4525          KK  D58D69ROUTE
4526          KM        Cross-section: Estimated 2' deep and 2:1 side slopes, width based on
4527          KM        aerial & topo / Manning's N Value: concrete channel
4528          RS      11    FLOW
4529          RC   0.013   0.032   0.038     5296  0.0038     0.00
4530          RX  100.00  118.00  136.00   142.00  145.00   151.00   700.00   705.00
4531          RY  1118.7 1118.20 1118.00 1116.00 1116.10 1118.00 1118.25 1118.70
              *

4532          KK   CPD69COMBINE
4533          HC       3  33.564
              *

4534          KK   DD691DIVERT
4535          KM        Northern at Reems split flow
4536          DT  DD691S      0.0      0.0
4537          DI     0.0   1524.4   3177.7   5722.8   8992.0      0.0      0.0      0.0      0.0      0.0
4538          DQ     0.0    127.3    360.0    873.5   1631.7      0.0      0.0      0.0      0.0      0.0
              *

4539          KK   DD692DIVERT
4540          KM        Northern at Reems split flow
4541          DT  DD692S      0.0      0.0
4542          DI     0.0   1397.1   2817.7   4849.3   7360.3      0.0      0.0      0.0      0.0      0.0
4543          DQ     0.0    102.5    198.8    314.3    446.2      0.0      0.0      0.0      0.0      0.0
              *

4544          KK  D69D70ROUTE
4545          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
4546          KM        & topo / Manning's N Value: clean earth; straight, street ROB
4547          RS       2    FLOW
4548          RC   0.038   0.032   0.013     2823  0.0021     0.00
4549          RX  100.00  101.00  400.00   408.00  418.00   426.00   436.00   446.00
4550          RY  1102.5 1101.90 1101.80 1098.00 1098.10 1101.80 1102.00 1102.50
              *

4551          KK    D70ABASIN
4552          KM        Basin bounded to south by Falcon Dunes
4553          BA   0.266
4554          LG    0.10     0.25     4.80     0.42       78
4555          UI       0      363     1048      514      105        0        0        0        0        0
4556          UI       0        0        0        0        0        0        0        0        0        0
4557          UI       0        0        0        0        0        0        0        0        0        0
4558          UI       0        0        0        0        0        0        0        0        0        0
4559          UI       0        0        0        0        0        0        0        0        0        0
              *

4560          KK  DD70ARDIVERT
4561          KM        Additional Retention based on 100yr 2hr retention.
4562          KM        C value is based on future land use, P=3.2, A=acres
4563          DT   RD70A     27.6      0.0
4564          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
4565          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
1                                        HEC-1 INPUT                                                PAGE118

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4566          KK   DD582RETRIEVE
4567          DR  DD582S
              *

4568          KK  D5870AROUTE
4569          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4570          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4571          RS       7    FLOW
4572          RC   0.035   0.035   0.035     5101  0.0042     0.00
4573          RX   25.00   50.00   75.00    99.00  124.00   148.00   173.00   198.00
4574          RY  1000.0  999.50  999.00   993.00  993.05   999.00   999.50 1000.00
              *

4575          KK  CPD70ACOMBINE
4576          HC       2  27.652
              *
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```
4577          KK  D70A70ROUTE
4578          KM        Cross-section: Falcon Dunes, assumed 0.5% side slopes, V-ditch
4579          KM        Manning's N Value: avg value for cultivated areas
4580          RS      26    FLOW
4581          RC   0.038   0.038   0.038    2650  0.0030    0.00
4582          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
4583          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

4584          KK     D70BASIN
4585          KM        FALCON DUNES
4586          BA   0.259
4587          LG    0.10    0.25    4.80    0.47       6
4588          UI       0      85     356     489     438     285     156      81      48      30
4589          UI       7       8       7       8       8       0       0       0       0       0
4590          UI       0       0       0       0       0       0       0       0       0       0
4591          UI       0       0       0       0       0       0       0       0       0       0
4592          UI       0       0       0       0       0       0       0       0       0       0
              *

4593          KK  DD70REDIVERT
4594          KM        Additional Retention based on 100yr 2hr retention.
4595          KM        C value is based on future land use, P=3.2, A=acres
4596          DT    RD70     0.4     0.0
4597          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4598          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4599          KK   CPD70COMBINE
4600          HC       3  34.089
              *
1                                        HEC-1 INPUT                                          PAGE119

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4601          KK   SRD70STORAGE
4602          KM        Falcon  Dunes. Storage recalc'd by FCDMC 3/2009
4603          KO
4604          RS       1    STOR
4605          SV            0.10    0.80    2.70    6.60   17.30   38.40   69.90  141.80  285.90
4606          SQ                                                   67.00  160.00  300.00  453.00
4607          SE  1079.0 1081.00 1083.00 1085.00 1087.00 1089.90 1092.50 1094.50 1097.00 1100.00
4608          ST
              *

4609          KK  D70D71ROUTE
4610          KM        Dysart Drain
4611          KM        As Built Plans FCD No 94-38, May 1995
4612          KM        Manning's N Value: concrete channel
4613          RS       1    FLOW
4614          RC   0.013   0.013   0.013    2520  0.0011    0.00
4615          RX  100.00  107.00  110.00  113.00  123.00  126.00  129.00  136.00
4616          RY  1094.5 1089.83 1087.83 1085.83 1085.73 1087.83 1089.83 1094.50
              *

4617          KK     D71BASIN
4618          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4619          BA   0.478
4620          LG    0.11    0.25    4.80    0.42      75
4621          UI       0     153     506     866    1020     621     299     134      51      30
4622          UI       0       0       0       0       0       0       0       0       0       0
4623          UI       0       0       0       0       0       0       0       0       0       0
4624          UI       0       0       0       0       0       0       0       0       0       0
4625          UI       0       0       0       0       0       0       0       0       0       0
              *

4626          KK  DD71REDIVERT
4627          KM        Additional Retention based on 100yr 6hr retention.
4628          KM        C value is based on future land use, P=3.2, A=acres
4629          DT    RD71    48.4     0.0
4630          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4631          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4632          KK  DD59SERETRIEVE
4633          DR   DD59S
              *

4634          KK  D59D71ROUTE
4635          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
4636          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
4637          RS       1    FLOW
4638          RC   0.035   0.035   0.035       7  0.0040    0.00
4639          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
4640          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE120

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4641          KK   CPD71COMBINE
4642          HC       3  39.554
              *

4643          KK  D71D72ROUTE
4644          KM        Dysart Drain
4645          KM        As Built Plans FCD No 94-38, May 1995
4646          KM        Manning's N Value: concrete channel
4647          RS       1    FLOW
4648          RC   0.013   0.013   0.013    2698  0.0011    0.00
4649          RX  100.00  109.00  112.00  115.00  139.00  142.00  145.00  152.50
4650          RY  1090.0 1084.00 1082.00 1080.00 1079.90 1082.00 1084.00 1089.00
              *

4651          KK     D72BASIN
4652          KM        Dysart Drain
4653          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4654          KM        1990 TOPO AND BNSF RR ALIGNMENT
4655          BA   0.518
4656          LG    0.10    0.25    4.70    0.44      77
4657          UI       0     156     530     865    1120     699     358     154      66      32
4658          UI       0       0       0       0       0       0       0       0       0       0
4659          UI       0       0       0       0       0       0       0       0       0       0
4660          UI       0       0       0       0       0       0       0       0       0       0
4661          UI       0       0       0       0       0       0       0       0       0       0
              *

4662          KK  DD72REDIVERT
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4663          KM        Additional Retention based on 100yr 2hr retention.
4664          KM        C value is based on future land use, P=3.2, A=acres
4665          DT    RD72    54.3     0.0
4666          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4667          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4668          KK   CPD72COMBINE
4669          HC       3   40.42
              *

4670          KK  D72D73ROUTE
4671          KM        Dysart Drain
4672          KM        As Built Plans FCD No 94-38, May 1995
4673          KM        Manning's N Value: concrete channel
4674          RS       1    FLOW
4675          RC   0.013   0.013   0.013    3001  0.0045    0.00
4676          RX  100.00  112.00  116.00  120.00  128.00  132.00  136.00  148.00
4677          RY  1086.5 1080.50 1078.50 1076.50 1076.40 1078.50 1080.50 1086.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4678          KK     D73BASIN
4679          KM        BASIN BOUNDARY FROM LUKE AFB, AG LAND, 1990 TOPO AND BNSF RR ALIGNMENT
4680          BA   0.522
4681          LG    0.18    0.25    4.60    0.43      50
4682          UI       0      77     296     449     656     903     629     447     274     132
4683          UI      83      35      23      23       0       0       0       0       0       0
4684          UI       0       0       0       0       0       0       0       0       0       0
4685          UI       0       0       0       0       0       0       0       0       0       0
4686          UI       0       0       0       0       0       0       0       0       0       0
              *

4687          KK  DD73REDIVERT
4688          KM        Additional Retention based on 100yr 2hr retention.
4689          KM        C value is based on future land use, P=3.2, A=acres
4690          DT    RD73    37.8     0.0
4691          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4692          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4693          KK   DD621RETRIEVE
4694          DR  DD621S
              *

4695          KK  D62D73ROUTE
4696          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
4697          KM        aerial & topo / Manning's N Value: clean earth; straight
4698          RS       4    FLOW
4699          RC   0.022   0.022   0.022    6486  0.0045    0.00
4700          RX  100.00  111.00  122.00  134.00  138.00  150.00  160.00  170.00
4701          RY  1094.2 1094.10 1094.00 1091.00 1091.10 1094.00 1094.10 1094.20
              *

4702          KK   CPD73COMBINE
4703          HC       3  47.233
              *

4704          KK  D73D78ROUTE
4705          KM        Dysart Drain
4706          KM        As Built Plans FCD No 94-38, May 1995
4707          KM        Manning's N Value: concrete channel
4708          RS       2    FLOW
4709          RC   0.013   0.013   0.013    8062  0.0019    0.00
4710          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
4711          RY  1073.0 1068.33 1064.33 1060.33 1060.23 1064.33 1068.33 1073.00
              *

4712          KK     D78BASIN
4713          KM        BASIN BOUNDARY FROM TREE FARMS, AG LAND
4714          KM        1990 TOPO AND THE DYSART DRAIN
4715          BA   0.531
4716          LG    0.10    0.25    4.70    0.44      75
4717          UI       0      61     168     301     391     537     755     565     446     329
4718          UI     224     110      86      58      19      19      19      19       0       0
4719          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4720          UI       0       0       0       0       0       0       0       0       0       0
4721          UI       0       0       0       0       0       0       0       0       0       0
              *

4722          KK  DD78REDIVERT
4723          KM        Additional Retention based on 100yr 2hr retention.
4724          KM        C value is based on future land use, P=2.7, A=acres
4725          DT    RD78    56.5     0.0
4726          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4727          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4728          KK   DD741RETRIEVE
4729          DR  DD741S
              *

4730          KK  D74D78ROUTE
4731          KM        Cross-section: Cross-section estimated from aerial and topo-road
4732          KM        Manning's N Value: street, clean earth, Ag field
4733          RS       9    FLOW
4734          RC   0.013   0.022   0.038    2724  0.0015    0.00
4735          RX  100.00  132.00  144.00  156.00  200.00  400.00  600.00  605.00
4736          RY  1000.7 1000.00  999.00 1000.00 1000.05 1000.10 1000.15 1000.70
              *

4737          KK   CPD78COMBINE
4738          HC       3  52.545
              *

4739          KK  D7879BROUTE
4740          KM        Dysart Drain
4741          KM        As Built Plans FCD No 94-38, May 1995
4742          KM        Manning's N Value: concrete channel
4743          RS      33    FLOW
4744          RC   0.013   0.013   0.013    3524  0.0009    0.00
4745          RX  100.00  108.50  114.50  120.50  135.50  141.50  147.50  156.00
4746          RY  1068.0 1062.33 1058.33 1054.33 1054.23 1058.33 1062.33 1068.00
```

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                *
4747            KK    D79BBASIN
4748            KM        BASIN BOUNDARY FROM THE GLENDALE SALT DEVELOPMENT
4749            KM        1990 TOPO AND DYSART DRAIN
4750            BA   0.317
4751            LG    0.10    0.25    4.65    0.47      66
4752            UI       0     111     360     634     656     395     168      80      23      20
4753            UI       0       0       0       0       0       0       0       0       0       0
4754            UI       0       0       0       0       0       0       0       0       0       0
4755            UI       0       0       0       0       0       0       0       0       0       0
4756            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE123

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4757            KK  DD79BRDIVERT
4758            KM        Additional Retention based on 100yr 2hr retention.
4759            KM        C value is based on future land use, P=2.7, A=acres
4760            DT   RD79B    28.2     0.0
4761            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4762            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4763            KK  CPD79BCOMBINE
4764            HC       3  54.902
                *

4765            KK  D79B80ROUTE
4766            KM        Dysart Drain
4767            KM        As Built Plans FCD No 94-38, May 1995
4768            KM        Manning's N Value: concrete channel
4769            RS       1    FLOW
4770            RC   0.013   0.013   0.013    1044  0.0009    0.00
4771            RX  100.00  109.30  117.30  125.30  135.30  143.30  151.30  160.70
4772            RY  1064.5 1059.83 1055.83 1051.83 1051.73 1055.83 1059.83 1064.50
                *

4773            KK     D80BASIN
4774            KM        BASIN BOUNDARY FROM 1990 TOPO AND DYSART DRAIN
4775            BA   0.131
4776            LG    0.16    0.25    4.45    0.49      49
4777            UI       0     145     457     309      80      17       0       0       0       0
4778            UI       0       0       0       0       0       0       0       0       0       0
4779            UI       0       0       0       0       0       0       0       0       0       0
4780            UI       0       0       0       0       0       0       0       0       0       0
4781            UI       0       0       0       0       0       0       0       0       0       0
                *

4782            KK  DD80REDIVERT
4783            KM        Additional Retention based on 100yr 2hr retention.
4784            KM        C value is based on future land use, P=2.7, A=acres
4785            DT    RD80     9.5     0.0
4786            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4787            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4788            KK   CPD80COMBINE
4789            HC       2  55.033
                *

4790            KK     D52BASIN
4791            KM        BASIN BOUNDARY FROM RACHO MIRAGE UNITS 1 AND
4792            KM        DYSART HIGH SCHOOL, AND DYSART RACHETTES
4793            BA   0.587
4794            LG    0.28    0.25    5.40    0.26      23
4795            UI       0      69     188     338     438     603     837     625     488     363
4796            UI     237     120      91      61      22      21      21      21       0       0
4797            UI       0       0       0       0       0       0       0       0       0       0
4798            UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE124

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4799            UI       0       0       0       0       0       0       0       0       0       0
                *

4800            KK  DD52REDIVERT
4801            KM        Retention volume estimated based calculation assuming 100-yr 2hr retenti
4802            DT    RD52     4.7     0.0
4803            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4804            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4805            KK  D52D66ROUTE
4806            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
4807            KM        based on aerial & topo / Manning's N Value: clean earth;
4808            KM        straight, street LOB
4809            RS       8    FLOW
4810            RC   0.013   0.022   0.038    5258  0.0015    0.00
4811            RX  100.00  120.00  141.00  153.00  163.00  175.00  595.00  600.00
4812            RY  1095.7 1098.20 1098.00 1095.00 1095.10 1098.00 1098.30 1098.65
                *

4813            KK     D66BASIN
4814            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND, 1990 TOPO
4815            BA   0.300
4816            LG    0.10    0.25    4.80    0.42      42
4817            UI       0      72     249     383     617     449     287     132      71      28
4818            UI      17      16       0       0       0       0       0       0       0       0
4819            UI       0       0       0       0       0       0       0       0       0       0
4820            UI       0       0       0       0       0       0       0       0       0       0
4821            UI       0       0       0       0       0       0       0       0       0       0
                *

4822            KK  DD66REDIVERT
4823            KM        Additional Retention based on 100yr 2hr retention.
4824            KM        C value is based on future land use, P=2.7, A=acres
4825            DT    RD66    32.7     0.0
4826            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4827            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

4828            KK   CPD66COMBINE
4829            HC       2   0.887
                *

4830            KK  D66D67ROUTE
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4831          KM        Cross-section: Cross-section estimated from aerial and topo-road
4832          KM        Manning's N Value: clean earth; straight, street ROB
4833          RS       1    FLOW
4834          RC   0.022   0.022   0.016    1882  0.0032    0.00
4835          RX  100.00  120.00  140.00  150.00  160.00  170.00  178.00  188.00
4836          RY  1092.5 1092.25 1092.00 1090.00 1090.10 1092.00 1092.25 1095.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4837          KK     D67BASIN
4838          KM        BASIN BOUNDARY FROM EL MIRAGE INDUSTRIAL PARK
4839          KM        COYOTE PASS RV STORAGE AND AGUA FRIA RIVER
4840          BA   0.317
4841          LG    0.13    0.25    4.60    0.46      44
4842          UI       0      79     277     424     669     462     293     124      70      23
4843          UI      18       0       0       0       0       0       0       0       0       0
4844          UI       0       0       0       0       0       0       0       0       0       0
4845          UI       0       0       0       0       0       0       0       0       0       0
4846          UI       0       0       0       0       0       0       0       0       0       0
              *

4847          KK  DD67REDIVERT
4848          KM        Additional Retention based on 100yr 2hr retention.
4849          KM        C value is based on future land use, P=2.7, A=acres
4850          DT    RD67    13.9     0.0
4851          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4852          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4853          KK   CPD67COMBINE
4854          HC       2   1.204
              *

4855          KK     D76BASIN
4856          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
4857          KM        1990 TOPO, LUKE INDUSTRIAL PARK, CLAYTON HOMES INC.
4858          BA   0.109
4859          LG    0.13    0.25    4.80    0.41      48
4860          UI       0      33     111     183     235     147      76      32      14       6
4861          UI       0       0       0       0       0       0       0       0       0       0
4862          UI       0       0       0       0       0       0       0       0       0       0
4863          UI       0       0       0       0       0       0       0       0       0       0
4864          UI       0       0       0       0       0       0       0       0       0       0
              *

4865          KK  DD76REDIVERT
4866          KM        Additional Retention based on 100yr 2hr retention.
4867          KM        C value is based on future land use, P=2.7, A=acres
4868          DT    RD76     5.4     0.0
4869          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4870          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4871          KK  D76D77ROUTE
4872          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width
4873          KM        based on aerial & topo / Manning's N Value: clean earth;
4874          KM        straight; street ROB
4875          RS       1    FLOW
4876          RC   0.022   0.022   0.016    2313  0.0130    0.00
4877          RX  100.00  120.00  140.00  146.00  148.00  154.00  164.00  174.00
4878          RY  1070.5 1070.25 1070.00 1068.00 1068.10 1070.00 1070.25 1070.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4879          KK     D77BASIN
4880          KM        BASIN BOUNDARY FROM UNION ROCK & MATERAIL CORR AND AGUA FRIA RIVER
4881          BA   0.361
4882          LG    0.15    0.25    4.60    0.44      54
4883          UI       0     160     503     903     670     352     126      44      27       0
4884          UI       0       0       0       0       0       0       0       0       0       0
4885          UI       0       0       0       0       0       0       0       0       0       0
4886          UI       0       0       0       0       0       0       0       0       0       0
4887          UI       0       0       0       0       0       0       0       0       0       0
              *

4888          KK   CPD77COMBINE
4889          HC       2    0.47
              *

4890          KK     B01BASIN
4891          KM        BASIN BOUNDARY FROM AMERICAN SAND AND ROCK INC
4892          KM        EL MIRAGE ROAD LLC, DYSART DRAIN AND AGUA FRIA RIVER
4893          BA   0.096
4894          LG    0.14    0.25    4.35    0.53      50
4895          UI       0     137     387     176      34       0       0       0       0       0
4896          UI       0       0       0       0       0       0       0       0       0       0
4897          UI       0       0       0       0       0       0       0       0       0       0
4898          UI       0       0       0       0       0       0       0       0       0       0
4899          UI       0       0       0       0       0       0       0       0       0       0
              *

4900          KK   DUMMYCOMBINE
4901          HC       5
              *

4902          KK     B03BASIN
4903          KM        BASIN BOUNDARY FROM GLENDALE SALT DEVELOPMENT
4904          KM        1990 TOPO AND DYSART DRAIN
4905          BA   0.338
4906          LG    0.17    0.25    4.70    0.41      53
4907          UI       0     140     436     806     648     364     130      52      24       0
4908          UI       0       0       0       0       0       0       0       0       0       0
4909          UI       0       0       0       0       0       0       0       0       0       0
4910          UI       0       0       0       0       0       0       0       0       0       0
4911          UI       0       0       0       0       0       0       0       0       0       0
              *

4912          KK  DB03REDIVERT
4913          KM        Additional Retention based on 100yr 2hr retention.
4914          KM        C value is based on future land use, P=2.7, A=acres
4915          DT    RB03    30.6     0.0
4916          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4917          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4918          KK  B03B05ROUTE
4919          KM        Cross section estimated from topo
4920          RS       5    FLOW
4921          RC   0.035   0.035   0.035    2746  0.0080    0.00
4922          RX  100.00  135.00  175.00  190.00  210.00  235.00  260.00  300.00
4923          RY  1074.0 1073.00 1072.00 1071.00 1070.00 1068.00 1069.00 1071.00
              *

4924          KK     B05BASIN
4925          KM        BASIN BOUNDARY FROM DYSART DRAIN, GLENDALE SALT DEVELOPMENT
4926          KM        AND 1990 TOPO
4927          BA   0.395
4928          LG    0.14    0.25    4.65    0.45      58
4929          UI       0      96     337     516     825     584     369     164      91      33
4930          UI      22       0       0       0       0       0       0       0       0       0
4931          UI       0       0       0       0       0       0       0       0       0       0
4932          UI       0       0       0       0       0       0       0       0       0       0
4933          UI       0       0       0       0       0       0       0       0       0       0
              *

4934          KK  DB05REDIVERT
4935          KM        Additional Retention based on 100yr 6hr retention.
4936          KM        C value is based on future land use, P=3.2, A=acres
4937          DT    RB05    26.6     0.0
4938          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4939          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4940          KK   CPB05COMBINE
4941          HC       2   0.733
              *

4942          KK  B05B06ROUTE
4943          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
4944          KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4945          RS       4    FLOW
4946          RC   0.032   0.032   0.032    4011  0.0040    0.00
4947          RX  100.00  150.00  167.00  179.00  214.00  226.00  255.00  277.00
4948          RY  1039.0 1038.50 1038.00 1035.00 1035.10 1038.00 1038.25 1038.50
              *

4949          KK     B06BASIN
4950          KM        BASIN BOUNDARY ROCK QUARRY AND AGUA FRIA RIVER
4951          BA   0.400
4952          LG    0.20    0.25    3.92    0.41      40
4953          UI       0     132     426     731     856     519     241     110      40      26
4954          UI       0       0       0       0       0       0       0       0       0       0
4955          UI       0       0       0       0       0       0       0       0       0       0
4956          UI       0       0       0       0       0       0       0       0       0       0
4957          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4958          KK  DB06REDIVERT
4959          KM        Additional Retention based on 100yr 2hr retention.
4960          KM        C value is based on future land use, P=2.7, A=acres
4961          DT    RB06    10.0     0.0
4962          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4963          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4964          KK   CPB06COMBINE
4965          HC       2   1.133
              *

4966          KK  B06B15ROUTE
4967          KM        Cross-section: Estimated 4:1 side slopes, width based on
4968          KM        aerial / Manning's N Value: clean earth; straight
4969          RS       6    FLOW
4970          RC   0.022   0.022   0.022    6376  0.0025    0.00
4971          RX  100.00  101.00  222.00  238.00  250.00  264.00  283.00  284.00
4972          RY  1033.0 1032.25 1032.00 1030.00 1030.10 1032.00 1032.25 1033.00
              *

4973          KK     B07BASIN
4974          KM        BASIN BOUNDARY FROM LUKE AFT ESTATES, DESERT GARDENS IV
4975          KM        AND LAFB BOUNDARY
4976          BA   0.246
4977          LG    0.27    0.25    4.90    0.31      19
4978          UI       0      37     145     215     322     428     292     205     121      63
4979          UI      36      14      11      11       0       0       0       0       0       0
4980          UI       0       0       0       0       0       0       0       0       0       0
4981          UI       0       0       0       0       0       0       0       0       0       0
4982          UI       0       0       0       0       0       0       0       0       0       0
              *

4983          KK  DB07REDIVERT
4984          KM        Preliminary Drainage Report for Luke Ranch
4985          KM        Remaining retention volume estimated from aerial
4986          KM        Additional Retention based on 100yr 2hr retention.
4987          KM        C value is based on future land use, P=2.7, A=acres
4988          DT    RB07    22.0     0.0
4989          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
4990          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

4991          KK  B07B09ROUTE
4992          KM        Cross-section: Estimated 4' deep and 6:1 side slopes, width based
4993          KM        on aerial & topo / Manning's N Value: earth w/ sparse trees and brush
4994          RS       1    FLOW
4995          RC   0.032   0.032   0.032    3559  0.0020    0.00
4996          RX  100.00  106.00  112.00  136.00  160.00  184.00  194.00  204.00
4997          RY  1070.0 1069.50 1069.00 1065.00 1065.10 1069.00 1069.50 1070.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4998          KK     B08BASIN
4999          KM        BASIN BOUNDARY FROM LAFB BOUNDARY, 1990 TOPO
5000          KM        MOBILE HOME PARK AND DREAMING SUMMIT DEVELOPMENT
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```
5001          BA   0.270
5002          LG    0.11    0.25    4.70    0.44      53
5003          UI       0     571    1227     255       0       0       0       0       0       0
5004          UI       0       0       0       0       0       0       0       0       0       0
5005          UI       0       0       0       0       0       0       0       0       0       0
5006          UI       0       0       0       0       0       0       0       0       0       0
5007          UI       0       0       0       0       0       0       0       0       0       0
              *

5008          KK  DB08REDIVERT
5009          KM        Additional Retention based on 100yr 6hr retention.
5010          KM        C value is based on future land use, P=3.2, A=acres
5011          DT    RB08    24.9     0.0
5012          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5013          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5014          KK  B08B09ROUTE
5015          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
5016          KM        aerial & topo / Manning's N Value: grass sides, concrete bottom
5017          RS       6    FLOW
5018          RC   0.025   0.016   0.025    3184  0.0016    0.00
5019          RX  100.00  107.00  114.00  118.00  133.00  137.00  157.00  167.00
5020          RY  1070.0 1069.50 1069.00 1067.00 1067.10 1069.00 1069.50 1070.00
              *

5021          KK     B09BASIN
5022          KM        BASIN BOUNDARY FROM DREAMING SUMMIT MULTI PHASE
5023          BA   0.430
5024          LG    0.24    0.25    5.00    0.33      33
5025          UI       0     266     787    1245     677     235      73      36       0       0
5026          UI       0       0       0       0       0       0       0       0       0       0
5027          UI       0       0       0       0       0       0       0       0       0       0
5028          UI       0       0       0       0       0       0       0       0       0       0
5029          UI       0       0       0       0       0       0       0       0       0       0
              *

5030          KK  DB09REDIVERT
5031          KM        Final Drainage Report for Dreaming Summit
5032          KM        Unit 1 (75% retention used), Final Drainage Report
5033          KM        Dreaming Summit Unit 2A
5034          KM        Additional Retention based on 100yr 2hr retention.
5035          KM        C value is based on future land use, P=2.7, A=acres
5036          DT    RB09    20.1     0.0
5037          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5038          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5039          KK   CPB09COMBINE
5040          HC       3   0.946
              *

5041          KK   SRB11STORAGE
5042          KM        Litchfield Park Detention Facility, Infrastructure from
5043          KM        Dreaming Summit Master Drainage Report
5044          KO
5045          RS       1    STOR
5046          SV            2.24   11.46   25.91   43.25   61.13   79.80   98.97  119.35  140.75
5047          SQ            5.00   18.00   37.00   58.00   79.00   92.00  104.00  115.00  125.00
5048          SE  1058.0 1059.00 1060.00 1061.00 1062.00 1063.00 1064.00 1065.00 1066.00 1067.00
5049          ST
              *

5050          KK  B09B11ROUTE
5051          KM        Cross-section: Estimated 3' deep; side slopes and width based on
5052          KM        aerial and topo / Manning's N Value: semi-natural wash w/ vegetation
5053          RS      11    FLOW
5054          RC   0.035   0.035   0.035    5810  0.0022    0.00
5055          RX  100.00  107.00  112.00  118.00  130.00  137.00  143.00  154.00
5056          RY  1058.0 1057.00 1056.00 1055.50 1055.00 1056.00 1058.00 1060.00
              *

5057          KK     B10BASIN
5058          KM        BASIN BOUNDARY FROM 1990 TOPO, DREAMING SUMMIT AND FALCON PLAZA
5059          BA   0.162
5060          LG    0.10    0.25    4.50    0.51      49
5061          UI       0     159     510     410     131      31       0       0       0       0
5062          UI       0       0       0       0       0       0       0       0       0       0
5063          UI       0       0       0       0       0       0       0       0       0       0
5064          UI       0       0       0       0       0       0       0       0       0       0
5065          UI       0       0       0       0       0       0       0       0       0       0
              *

5066          KK  DB10REDIVERT
5067          KM        Additional Retention based on 100yr 2hr retention.
5068          KM        C value is based on future land use, P=2.7, A=acres
5069          DT    RB10    16.4     0.0
5070          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5071          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5072          KK  B1011AROUTE
5073          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
5074          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
5075          RS       9    FLOW
5076          RC   0.022   0.022   0.022    3609  0.0060    0.00
5077          RX  100.00  107.50  119.50  125.50  129.00  135.00  147.00  154.50
5078          RY  1056.6 1055.30 1053.30 1052.30 1051.90 1053.30 1055.30 1056.60
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5079          KK  B1011BROUTE
5080          KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
5081          KM        August 1993, Litchfield Rd to Dysart Rd-20+00 and 50+00
5082          RS      20    FLOW
5083          RC   0.022   0.022   0.022    2760  0.0017    0.00
5084          RX  100.00  103.90  115.90  127.90  172.90  184.90  196.90  200.80
5085          RY  1051.9 1051.20 1049.20 1047.20 1046.80 1049.20 1051.20 1051.90
              *

5086          KK     B11BASIN
5087          KM        BASIN BOUNDARY FROM DREAMING SUMMIT,
5088          KM        FALCON PLAZA AND COLTER CHANNEL
```

```
5089        BA   0.821
5090        LG    0.24    0.24    4.80    0.36      30
5091        UI       0     188     670    1007    1659    1245     802     390     204      91
5092        UI      44      45       0       0       0       0       0       0       0       0
5093        UI       0       0       0       0       0       0       0       0       0       0
5094        UI       0       0       0       0       0       0       0       0       0       0
5095        UI       0       0       0       0       0       0       0       0       0       0
            *

5096        KK  DB11REDIVERT
5097        KM        Final Drainage Report for Dreaming Summit
5098        KM        Unit 1 Retention Basin 1
5099        KM        Dreaming Summit Unit 2B Retention Basin for Commercial Site
5100        KM        Additional Retention based on 100yr 2hr retention.
5101        KM        C value is based on future land use, P=2.7, A=acres
5102        DT    RB11    11.2     0.0
5103        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5104        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

5105        KK   CPB11COMBINE
5106        HC       3   1.929
            *

5107        KK  B11B12ROUTE
5108        KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
5109        KM        August 1993, From Dysart Rd to Wigwam Creek Rd-74+00
5110        RS       1    FLOW
5111        RC   0.022   0.022   0.022    3516  0.0017    0.00
5112        RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
5113        RY  1046.0 1044.30 1042.30 1040.30 1039.90 1042.30 1044.30 1045.95
            *

5114        KK     B12BASIN
5115        KM        BASIN BOUNDARY FROM LOC CERROS, LITCHFILED VISTA VIEWS MULTI PHASE
5116        KM        WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
5117        BA   0.381
5118        LG    0.28    0.24    4.45    0.44      17
5119        UI       0      52     176     279     378     605     491     364     263     139
5120        UI      86      51      21      15      16       0       0       0       0       0
5121        UI       0       0       0       0       0       0       0       0       0       0
5122        UI       0       0       0       0       0       0       0       0       0       0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5123        UI       0       0       0       0       0       0       0       0       0       0
            *

5124        KK  DB12REDIVERT
5125        KM        Retention volume estimated based on aerial
5126        DT    RB12     1.8     0.0
5127        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5128        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

5129        KK   CPB12COMBINE
5130        HC       2    2.31
            *

5131        KK  B12B14ROUTE
5132        KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
5133        KM        August 1993, From Wigwam Creek Rd to El Mirage-99+00
5134        RS       1    FLOW
5135        RC   0.022   0.022   0.022    1682  0.0021    0.00
5136        RX  100.00  109.90  121.90  133.90  178.90  190.90  202.90  212.80
5137        RY  1036.6 1034.90 1032.90 1030.90 1030.50 1032.90 1034.90 1036.60
            *

5138        KK     B13BASIN
5139        KM        BASIN BOUNDARY FROM WIGWAM CREEK PH 2, DYSART VILLAGE
5140        KM        BETHANY ESTATES NORTH AND 1990 TOPO
5141        BA   0.489
5142        LG    0.28    0.25    4.60    0.37      15
5143        UI       0      92     347     518     850     798     525     334     148      89
5144        UI      32      25      25       0       0       0       0       0       0       0
5145        UI       0       0       0       0       0       0       0       0       0       0
5146        UI       0       0       0       0       0       0       0       0       0       0
5147        UI       0       0       0       0       0       0       0       0       0       0
            *

5148        KK  DB13REDIVERT
5149        KM        Additional Retention based on 100yr 2hr retention.
5150        KM        C value is based on future land use, P=2.7, A=acres
5151        DT    RB13    23.4     0.0
5152        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5153        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
            *

5154        KK  B13B14ROUTE
5155        KM        Cross-section: Estimated 4' deep and 4:1 side slopes
5156        KM        width based on aerial / Manning's N Value: grass
5157        RS       4    FLOW
5158        RC   0.025   0.025   0.025    4696  0.0030    0.00
5159        RX  100.00  108.00  116.00  136.00  166.00  186.00  196.00  206.00
5160        RY  1040.0 1039.50 1039.00 1035.00 1035.10 1039.00 1039.50 1040.00
            *
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5161        KK     B14BASIN
5162        KM        BASIN BOUNDARY FROM WIGWAM CREEK MULTI PHASE AND COLTER CHANNEL
5163        BA   0.328
5164        LG    0.25    0.24    4.60    0.39      34
5165        UI       0      69     251     374     627     508     338     189      90      47
5166        UI      17      18       0       0       0       0       0       0       0       0
5167        UI       0       0       0       0       0       0       0       0       0       0
5168        UI       0       0       0       0       0       0       0       0       0       0
5169        UI       0       0       0       0       0       0       0       0       0       0
            *

5170        KK  DB14REDIVERT
5171        KM        Final Drainage Report for Wigwam Creek Ph. 1
5172        KM        (60% retention used), Remaining retention volume
5173        KM        estimated from aerial
5174        DT    RB14    24.5     0.0
5175        DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5176        DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                *
5177            KK   CPB14COMBINE
5178            HC       3   3.127
                *
5179            KK  B14B15ROUTE
5180            KM        Cross-section: Colter Channel Proj No 93-08 by CRSS
5181            KM        August 1993, From El Mirage to AFR-99+00
5182            RS       1    FLOW
5183            RC   0.022   0.022   0.022    2696  0.0016    0.00
5184            RX  100.00  112.00  118.00  124.00  238.00  244.00  250.00  262.00
5185            RY  1027.0 1025.00 1024.00 1023.00 1022.90 1024.00 1025.00 1027.00
                *
5186            KK     B15BASIN
5187            KM        BASIN BOUNDARY FROM ROCK QUARRY, COLTER CHANNEL AND AGUA FRIA RIVER
5188            BA   0.376
5189            LG    0.14    0.24    4.45    0.49      52
5190            UI       0      86     307     461     760     570     367     179      93      41
5191            UI      21      21       0       0       0       0       0       0       0       0
5192            UI       0       0       0       0       0       0       0       0       0       0
5193            UI       0       0       0       0       0       0       0       0       0       0
5194            UI       0       0       0       0       0       0       0       0       0       0
                *
5195            KK   CPB15COMBINE
5196            HC       3   4.636
                *
5197            KK     B16BASIN
5198            KM        BASIN BOUNDARY FROM SUN HEALTH PROPERTIES AND 1990 TOPO
5199            BA   0.113
5200            LG    0.10    0.25    4.25    0.60      43
5201            UI       0     115     369     280      84      19       0       0       0       0
5202            UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5203            UI       0       0       0       0       0       0       0       0       0       0
5204            UI       0       0       0       0       0       0       0       0       0       0
5205            UI       0       0       0       0       0       0       0       0       0       0
                *
5206            KK  DB16REDIVERT
5207            KM        Retention volume estimated based on aerial
5208            DT    RB16     6.9     0.0
5209            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5210            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
5211            KK  B16B17ROUTE
5212            KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
5213            KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 65+00
5214            RS       1    FLOW
5215            RC   0.013   0.013   0.013    5250  0.0015    0.00
5216            RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
5217            RY  1038.3 1037.30 1035.30 1033.30 1033.20 1035.30 1037.30 1038.30
                *
5218            KK     B17BASIN
5219            KM        BASIN BOUNDARY FROM VERANDA MULTI PHASE, DYSART COMMONS
5220            KM        CAMBELBACK PLACE AT DYSART AND COLTER CHANNEL
5221            BA   0.334
5222            LG    0.16    0.25    4.80    0.39      51
5223            UI       0     103     347     576     726     441     220      96      39      20
5224            UI       0       0       0       0       0       0       0       0       0       0
5225            UI       0       0       0       0       0       0       0       0       0       0
5226            UI       0       0       0       0       0       0       0       0       0       0
5227            UI       0       0       0       0       0       0       0       0       0       0
                *
5228            KK  DB17REDIVERT
5229            KM        Retention volume estimated based on aerial
5230            DT    RB17    18.8     0.0
5231            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5232            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
5233            KK   CPB17COMBINE
5234            HC       2   0.447
                *
5235            KK  B17B18ROUTE
5236            KM        Cross-section: Camelback Channel Prj No 68227, Cella Barr, Aug 1999
5237            KM        MCDOT, Route from Litchfield Rd to Dysart Rd Sta. 115+00
5238            RS       2    FLOW
5239            RC   0.013   0.013   0.013    5176  0.0032    0.00
5240            RX  100.00  102.00  106.00  110.00  115.00  119.00  123.00  125.00
5241            RY  1028.4 1027.40 1025.40 1023.40 1023.30 1025.40 1027.40 1028.40
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5242            KK     B18BASIN
5243            KM        BASIN BOUNDARY FROM CAMELBACK CROSSING, TIERRA BUENA
5244            KM        WIGWAM CREEK AND COLTER CHANNEL
5245            BA   0.282
5246            LG    0.22    0.25    4.55    0.41      36
5247            UI       0      59     216     322     539     436     291     162      78      41
5248            UI      14      16       0       0       0       0       0       0       0       0
5249            UI       0       0       0       0       0       0       0       0       0       0
5250            UI       0       0       0       0       0       0       0       0       0       0
5251            UI       0       0       0       0       0       0       0       0       0       0
                *
5252            KK  DB18REDIVERT
5253            KM        Final Drainage Report for Wigwam Creek Ph. 1 (40% retention used)
5254            KM        Additional Retention based on 100yr 2hr retention.
5255            KM        C value is based on future land use, P=2.7, A=acres
5256            DT    RB18    20.6     0.0
5257            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5258            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
5259            KK   CPB18COMBINE
5260            HC       2   0.729
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5261            KK  B18B19ROUTE
5262            KM        Cross-section: Cross-section determined from aerial and
5263            KM        1990 topo / Manning's N Value: earth w/ sparse trees and brush
5264            RS        2    FLOW
5265            RC   0.032   0.032   0.032    3218  0.0053    0.00
5266            RX  100.00  104.00  108.00  124.00  142.00  157.00  179.00  193.00
5267            RY  1026.0 1026.00 1022.00 1020.00 1020.00 1022.00 1022.00 1022.10
                *

5268            KK     B19BASIN
5269            KM        BASIN BOUNDARY FROM ROCK QUARY, COLTER CHANNEL AND AGUA FRIA RIVER
5270            BA   0.117
5271            LG    0.15    0.25    4.40    0.51      55
5272            UI       0     156     456     232      48       0       0       0       0       0
5273            UI       0       0       0       0       0       0       0       0       0       0
5274            UI       0       0       0       0       0       0       0       0       0       0
5275            UI       0       0       0       0       0       0       0       0       0       0
5276            UI       0       0       0       0       0       0       0       0       0       0
                *

5277            KK   CPB19COMBINE
5278            HC       2   0.846
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5279            KK     B20BASIN
5280            KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
5281            BA   0.228
5282            LG    0.15    0.25    4.15    0.59      55
5283            UI       0     161     487     669     311      96      25       0       0       0
5284            UI       0       0       0       0       0       0       0       0       0       0
5285            UI       0       0       0       0       0       0       0       0       0       0
5286            UI       0       0       0       0       0       0       0       0       0       0
5287            UI       0       0       0       0       0       0       0       0       0       0
                *

5288            KK   DUMMYCOMBINE
5289            HC       4
                *

5290            KK     B21BASIN
5291            KM        BASIN BOUNDARY FROM RIO CROSSING AND WIGWAM CREEK
5292            BA   0.243
5293            LG    0.23    0.25    4.20    0.52      41
5294            UI       0      54     195     292     486     369     241     122      62      29
5295            UI      13      14       0       0       0       0       0       0       0       0
5296            UI       0       0       0       0       0       0       0       0       0       0
5297            UI       0       0       0       0       0       0       0       0       0       0
5298            UI       0       0       0       0       0       0       0       0       0       0
                *

5299            KK  DB21REDIVERT
5300            KM        Final Drainage Report for Rio Crossing
5301            KM        Additional Retention based on 100yr 2hr retention.
5302            KM        C value is based on future land use, P=2.7, A=acres
5303            DT    RB21    21.9     0.0
5304            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5305            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

5306            KK  B21B22ROUTE
5307            KM        Cross-section: Estimated channel, 2' depth, width based on
5308            KM        aerial / Manning's N Value: earth w/ sparse trees and brush
5309            RS        6    FLOW
5310            RC   0.032   0.032   0.032    1942  0.0082    0.00
5311            RX  100.00  108.00  116.00  128.00  136.00  148.00  156.00  164.00
5312            RY  1010.0 1009.50 1009.00 1007.00 1007.10 1009.00 1009.50 1010.00
                *

5313            KK     B22BASIN
5314            KM        BASIN BOUNDARY FROM ROCK QUARY AND AGUA FRIA RIVER
5315            BA   0.217
5316            LG    0.14    0.24    4.00    0.62      55
5317            UI       0     185     588     595     225      61      21       0       0       0
5318            UI       0       0       0       0       0       0       0       0       0       0
5319            UI       0       0       0       0       0       0       0       0       0       0
5320            UI       0       0       0       0       0       0       0       0       0       0
5321            UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5322            KK  DB22REDIVERT
5323            KM        Additional Retention based on 100yr 6hr retention.
5324            KM        C value is based on future land use, P=3.2, A=acres
5325            DT    RB22     1.4     0.0
5326            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5327            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

5328            KK   CPB22COMBINE
5329            HC       2    0.46
                *

5330            KK     B23BASIN
5331            KM        BASIN BOUNDARY FROM WIGWAM CREEK
5332            BA   0.269
5333            LG    0.25    0.25    6.00    0.21      35
5334            UI       0      38     138     214     300     454     335     243     166      78
5335            UI      51      28      12      12      12       0       0       0       0       0
5336            UI       0       0       0       0       0       0       0       0       0       0
5337            UI       0       0       0       0       0       0       0       0       0       0
5338            UI       0       0       0       0       0       0       0       0       0       0
                *

5339            KK  DB23REDIVERT
5340            KM        Drainage Report for Wigwam Creek
5341            KM        South Offsites (50% area)
5342            DT    RB23     2.1     0.0
5343            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5344            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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5345          KK  B23B24ROUTE
5346          KM        Cross-section: Assumed 2% cross slope from crown of road,
5347          KM        0.5' curb height / Manning's N Value: street and curb
5348          RS       1    FLOW
5349          RC   0.032   0.013   0.032    2557  0.0051    0.00
5350          RX  100.00  100.50  124.00  124.50  175.00  175.50  197.50  198.00
5351          RY  1025.0 1024.50 1024.00 1023.50 1023.40 1024.00 1024.50 1025.00
              *

5352          KK     B24BASIN
5353          KM        BASIN BOUNDARY FROM CORTE SIERRA
5354          BA   0.188
5355          LG    0.23    0.24    4.20    0.54      38
5356          UI       0      73     233     422     371     215      82      35      13       0
5357          UI       0       0       0       0       0       0       0       0       0       0
5358          UI       0       0       0       0       0       0       0       0       0       0
5359          UI       0       0       0       0       0       0       0       0       0       0
5360          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5361          KK  DB24REDIVERT
5362          KM        Master Drainage and Grading Plans for Corte
5363          KM        Sierra Unit 1 and Unit 2 (50% area)
5364          KM        Additional Retention based on 100yr 2hr retention.
5365          KM        C value is based on future land use, P=2.7, A=acres
5366          DT    RB24    12.6     0.0
5367          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5368          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5369          KK   CPB24COMBINE
5370          HC       2   0.457
              *

5371          KK  B24B25ROUTE
5372          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
5373          KM        based on aerial / Manning's N Value: earth w/ sparse trees and brush
5374          RS       3    FLOW
5375          RC   0.032   0.032   0.032    3303  0.0012    0.00
5376          RX  100.00  108.00  116.00  128.00  134.00  146.00  154.00  162.00
5377          RY  1011.5 1011.25 1011.00 1008.00 1008.10 1011.00 1013.50 1014.00
              *

5378          KK     B25BASIN
5379          KM        BASIN BOUNDARY FROM 1990 TOPO
5380          BA   0.203
5381          LG    0.18    0.24    4.15    0.58      42
5382          UI       0     116     350     577     334     128      42      16       0       0
5383          UI       0       0       0       0       0       0       0       0       0       0
5384          UI       0       0       0       0       0       0       0       0       0       0
5385          UI       0       0       0       0       0       0       0       0       0       0
5386          UI       0       0       0       0       0       0       0       0       0       0
              *

5387          KK  DB25REDIVERT
5388          KM        Additional Retention based on 100yr 2hr retention.
5389          KM        C value is based on future land use, P=2.7, A=acres
5390          DT    RB25    10.7     0.0
5391          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5392          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5393          KK   CPB25COMBINE
5394          HC       2    0.66
              *

5395          KK     B26BASIN
5396          KM        BASIN BOUNDARY FROM CORTE SIERRA
5397          BA   0.308
5398          LG    0.23    0.24    4.50    0.42      38
5399          UI       0     114     363     649     627     368     149      69      21      21
5400          UI       0       0       0       0       0       0       0       0       0       0
5401          UI       0       0       0       0       0       0       0       0       0       0
5402          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE139

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5403          UI       0       0       0       0       0       0       0       0       0       0
              *

5404          KK  DB26REDIVERT
5405          KM        Master Drainage and Grading Plans for Corte
5406          KM        Sierra Unit 1 and Unit 2 (50% area), Final Drainage
5407          KM        Report for Las Palmeras West
5408          DT    RB26    17.6     0.0
5409          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5410          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5411          KK  B26B27ROUTE
5412          KM        Cross-section: Estimated 2' deep and 6:1 side slopes, width
5413          KM        based on aerial / Manning's N Value: clean earth; straight; ROB street
5414          RS       8    FLOW
5415          RC   0.032   0.022   0.013    2653  0.0008    0.00
5416          RX  100.00  101.00  340.00  352.00  356.00  368.00  378.00  388.00
5417          RY  996.75  996.25  996.00  994.00  994.10  996.00  996.25  996.75
              *

5418          KK     B27BASIN
5419          KM        BASIN BOUNDARY FROM CORTE SIERRA AND 1990 TOPO
5420          BA   0.363
5421          LG    0.15    0.25    4.50    0.48      54
5422          UI       0      78     281     422     705     563     369     197      98      48
5423          UI      19      20       0       0       0       0       0       0       0       0
5424          UI       0       0       0       0       0       0       0       0       0       0
5425          UI       0       0       0       0       0       0       0       0       0       0
5426          UI       0       0       0       0       0       0       0       0       0       0
              *

5427          KK   CPB27COMBINE
5428          HC       2   0.671
              *

5429          KK   DUMMYCOMBINE
5430          HC       4
```

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                *
5431            KK     B76BASIN
5432            KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
5433            BA   0.386
5434            LG    0.18    0.25    4.15    0.60      24
5435            UI       0      55     204     316     441     665     476     340     228     106
5436            UI      70      36      17      17      17       0       0       0       0       0
5437            UI       0       0       0       0       0       0       0       0       0       0
5438            UI       0       0       0       0       0       0       0       0       0       0
5439            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE140

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5440            KK  DB76REDIVERT
5441            KM        Retention volume estimated based on aerial
5442            DT    RB76    52.4     0.0
5443            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5444            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

5445            KK  B7676AROUTE
5446            KM        Cross-section: Estimated based on aerial, street section
5447            KM        Manning's N Value: street, earth with sparse trees and shrubs
5448            RS       1    FLOW
5449            RC   0.032   0.016   0.032    3516  0.0057    0.00
5450            RX  100.00  110.00  120.00  122.00  158.00  160.00  170.00  180.00
5451            RY  1020.5 1020.25 1020.00 1019.50 1019.40 1019.90 1020.25 1020.50
                *

5452            KK     B75BASIN
5453            KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
5454            BA   0.417
5455            LG    0.19    0.25    4.35    0.53      20
5456            UI       0     119     410     647     907     576     321     131      63      25
5457            UI      25       0       0       0       0       0       0       0       0       0
5458            UI       0       0       0       0       0       0       0       0       0       0
5459            UI       0       0       0       0       0       0       0       0       0       0
5460            UI       0       0       0       0       0       0       0       0       0       0
                *

5461            KK  DB75REDIVERT
5462            KM        Master Drainage Study for Palm Valley (CONCEPT
5463            KM        DESIGN VOLUME OF 550 AC-FT RECOMMENDED)
5464            KM        Remaining retention volume estimated from aerial
5465            DT    RB75    52.3     0.0
5466            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5467            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

5468            KK  B75A75ROUTE
5469            KM        Cross-section: Estimated based on aerial, street section
5470            KM        Manning's N Value: street, earth with sparse trees and shrubs
5471            RS       1    FLOW
5472            RC   0.025   0.025   0.025    5478  0.0026    0.00
5473            RX  100.00  107.00  114.00  114.10  155.00  155.10  165.00  171.00
5474            RY  1000.0  999.90  999.80  999.30  999.20  999.80  999.90 1000.00
                *

5475            KK    B75ABASIN
5476            KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
5477            BA   0.281
5478            LG    0.23    0.23    6.20    0.20      26
5479            UI       0      57     207     315     516     446     295     173      81      44
5480            UI      15      14       0       0       0       0       0       0       0       0
5481            UI       0       0       0       0       0       0       0       0       0       0
5482            UI       0       0       0       0       0       0       0       0       0       0
5483            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE141

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5484            KK  CPB75ACOMBINE
5485            HC       2   0.698
                *

5486            KK  B7576AROUTE
5487            KM        Cross-section: Estimated based on aerial, street section
5488            KM        Manning's N Value: street and ROW
5489            RS       1    FLOW
5490            RC   0.032   0.013   0.032    2062  0.0015    0.00
5491            RX  100.00  100.50  110.00  110.10  147.00  147.10  164.50  165.00
5492            RY  1000.9 1000.00  999.80  999.30  999.31  999.80 1000.00 1000.90
                *

5493            KK    B76ABASIN
5494            KM        WIGWAM CC/LITCHFIELD PARK SUBBASIN BOUNDARY FROM 1990 TOPO
5495            BA   0.314
5496            LG    0.19    0.24    4.10    0.59      38
5497            UI       0     186     553     904     509     184      59      26       0       0
5498            UI       0       0       0       0       0       0       0       0       0       0
5499            UI       0       0       0       0       0       0       0       0       0       0
5500            UI       0       0       0       0       0       0       0       0       0       0
5501            UI       0       0       0       0       0       0       0       0       0       0
                *

5502            KK  CPB76ACOMBINE
5503            HC       3   1.398
                *

5504            KK  B76B78ROUTE
5505            KM        Cross-section: assumed 9' headwall to keep flow from
5506            KM        overflowing into canal, width from aerial / Manning's
5507            KM        N Value: concrete
5508            RS       1    FLOW
5509            RC   0.016   0.016   0.016     171  0.0117    0.00
5510            RX  100.00  101.00  102.00  103.00  163.00  164.00  165.00  166.00
5511            RY  1009.0 1008.90 1008.80 1000.00 1000.10 1008.80 1008.90 1009.00
                *

5512            KK     B77BASIN
5513            KM        WIGWAM CREEK
5514            BA   0.825
5515            LG    0.22    0.16    7.00    0.15      28
5516            UI       0     128     527     774    1200    1422     950     656     326     187
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5517          UI     102      40      39       0       0       0       0       0       0       0
5518          UI       0       0       0       0       0       0       0       0       0       0
5519          UI       0       0       0       0       0       0       0       0       0       0
5520          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5521          KK  DB77REDIVERT
5522          KM        Drainage Report for Wigwam Creek
5523          KM        South Offsites (50% retention volume used)
5524          DT    RB77    32.1     0.0
5525          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5526          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5527          KK  B77B78ROUTE
5528          KM        Cross-section: Estimated 3' deep, 1' fb, included wall, width based on
5529          KM        aerial / Manning's N Value: earth with sparse trees and shrubs
5530          RS       8    FLOW
5531          RC   0.032   0.032   0.032    8404  0.0012    0.00
5532          RX  100.00  110.00  134.00  154.00  170.00  190.00  200.00  200.50
5533          RY  1001.0 1000.50 1000.00  996.00  996.10 1000.00 1001.00 1001.10
              *

5534          KK     B78BASIN
5535          KM        DYSART RANCH
5536          BA   0.570
5537          LG    0.20    0.24    5.80    0.24      46
5538          UI       0      51      89     204     271     334     404     589     599     461
5539          UI     377     306     237     152      91      80      52      36      16      16
5540          UI      16      16      15       0       0       0       0       0       0       0
5541          UI       0       0       0       0       0       0       0       0       0       0
5542          UI       0       0       0       0       0       0       0       0       0       0
              *

5543          KK  DB78REDIVERT
5544          KM        Final Drainage Report for Sage Creek
5545          KM        Additional Retention based on 100yr 2hr retention.
5546          KM        C value is based on future land use, P=2.7, A=acres
5547          DT    RB78    27.2     0.0
5548          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5549          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5550          KK  CPB78ACOMBINE
5551          HC       2   1.395
              *

5552          KK  DB78BNDIVERT
5553          KM        Est from RID Overchute Design Report for Basin #4
5554          KM        based on overchute plans. 23ac-ft in Basin #4 shown on plans.
5555          DT  RB78BN    18.4     0.0
5556          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5557          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5558          KK  CPB78BCOMBINE
5559          HC       2   2.793
              *

5560          KK  B78B79ROUTE
5561          KM        Cross-section: golf course, assumed 0.5% side slopes,
5562          KM        V-ditch / Manning's N Value: grass - golf course
5563          RS       9    FLOW
5564          RC   0.025   0.025   0.025    6489  0.0022    0.00
5565          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5566          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5567          KK     B79BASIN
5568          KM        BASIN BOUNDARY FROM RID CANAL, FULTON ESTATES
5569          KM        LITCHFIELD, AND PALM VALLEY PH 1
5570          BA   0.848
5571          LG    0.23    0.25    5.60    0.29      36
5572          UI       0     119     441     678     951    1444    1051     763     517     240
5573          UI     159      88      37      37      37       0       0       0       0       0
5574          UI       0       0       0       0       0       0       0       0       0       0
5575          UI       0       0       0       0       0       0       0       0       0       0
5576          UI       0       0       0       0       0       0       0       0       0       0
              *

5577          KK  DB79REDIVERT
5578          KM        Drainage Report for Fulton Estates
5579          KM        Additional Retention based on 100yr 2hr retention.
5580          KM        C value is based on future land use, P=2.7, A=acres
5581          DT    RB79    35.8     0.0
5582          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5583          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5584          KK   CPB79COMBINE
5585          HC       2   3.641
              *

5586          KK  B79B80ROUTE
5587          KM        Cross-section: golf course, assumed 0.5% side slopes,
5588          KM        V-ditch / Manning's N Value: grass - golf course
5589          RS       2    FLOW
5590          RC   0.025   0.025   0.025    1200  0.0033    0.00
5591          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5592          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5593          KK     B80BASIN
5594          KM        PALM VALLEY PHASE 1
5595          BA   0.266
5596          LG    0.21    0.25    4.80    0.38      32
5597          UI       0      51     193     292     480     426     283     171      77      46
5598          UI      14      13      14       0       0       0       0       0       0       0
5599          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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5600          UI       0       0       0       0       0       0       0       0       0       0
5601          UI       0       0       0       0       0       0       0       0       0       0
              *

5602          KK  DB80REDIVERT
5603          KM        Retention volume estimated based on aerial
5604          DT    RB80    21.4     0.0
5605          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5606          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5607          KK   CPB80COMBINE
5608          HC       2   3.907
              *

5609          KK   SRB80STORAGE
5610          KM        Storage at Palm Valley golf course cart path
5611          KO
5612          RS       1    STOR
5613          SV            6.61   16.70   34.00
5614          SQ          607.40 3236.62 7036.41
5615          SE  996.00  998.00 1000.00
5616          ST
              *

5617          KK  B80B81ROUTE
5618          KM        Cross-section: golf course, assumed 0.5% side slopes,
5619          KM        V-ditch / Manning's N Value: grass - golf course
5620          RS       4    FLOW
5621          RC   0.025   0.025   0.025    1746  0.0011    0.00
5622          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5623          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5624          KK     B81BASIN
5625          KM        PALM VALLEY PHASE 1
5626          BA   0.252
5627          LG    0.17    0.17    6.80    0.18      26
5628          UI       0      57     204     307     503     384     249     122      64      29
5629          UI      13      14       0       0       0       0       0       0       0       0
5630          UI       0       0       0       0       0       0       0       0       0       0
5631          UI       0       0       0       0       0       0       0       0       0       0
5632          UI       0       0       0       0       0       0       0       0       0       0
              *

5633          KK  DB81REDIVERT
5634          KM        Retention volume estimated based on aerial
5635          DT    RB81     2.4     0.0
5636          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5637          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5638          KK   CPB81COMBINE
5639          HC       2   4.159
              *

5640          KK   SRB81STORAGE
5641          KM        Storage at McDowell Road culvert
5642          KO
5643          RS       1    STOR
5644          SV            2.20    9.46   29.91
5645          SQ          114.77  324.61 2290.53
5646          SE  992.00  994.00  996.00  998.00
5647          ST
              *

5648          KK  B81B84ROUTE
5649          KM        Cross-section: Estimated from aerial, assumed 2' depth / Manning's
5650          KM        N Value: earth with sparse trees and shrubs (main channel),
5651          KM        clean earth (left and right bank)
5652          RS       1    FLOW
5653          RC   0.022   0.032   0.022    2092  0.0077    0.00
5654          RX  100.00  101.00  145.00  150.00  160.00  165.00  219.00  220.00
5655          RY  1000.2 1000.10  996.40  996.00  995.90  996.25 1000.10 1000.20
              *

5656          KK     B82BASIN
5657          KM        PALM VALLEY PHASE 1
5658          BA   0.149
5659          LG    0.19    0.25    5.30    0.31      29
5660          UI       0      38     132     202     313     219     134      58      32      11
5661          UI       8       0       0       0       0       0       0       0       0       0
5662          UI       0       0       0       0       0       0       0       0       0       0
5663          UI       0       0       0       0       0       0       0       0       0       0
5664          UI       0       0       0       0       0       0       0       0       0       0
              *

5665          KK  DB82REDIVERT
5666          KM        Retention volume estimated based on aerial
5667          DT    RB82    11.1     0.0
5668          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5669          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5670          KK  B82B83ROUTE
5671          KM        Cross-section: cross-section estimated from aerial, est
5672          KM        1' deep / Manning's N Value: clean straight earth
5673          RS       3    FLOW
5674          RC   0.022   0.022   0.022    1687  0.0095    0.00
5675          RX  100.00  105.00  115.00  135.00  136.00  155.00  160.00  170.00
5676          RY  1000.2 1000.10 1000.00  999.00  999.10 1000.00 1000.10 1000.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5677          KK     B83BASIN
5678          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5679          BA   0.223
5680          LG    0.10    0.25    6.00    0.26      62
5681          UI       0     259     800     507     126      27       0       0       0       0
5682          UI       0       0       0       0       0       0       0       0       0       0
5683          UI       0       0       0       0       0       0       0       0       0       0
5684          UI       0       0       0       0       0       0       0       0       0       0
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5685          UI       0       0       0       0       0       0       0       0       0       0
              *

5686          KK  DB83REDIVERT
5687          KM        Retention volume estimated based on aerial
5688          DT    RB83     5.4     0.0
5689          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5690          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5691          KK   CPB83COMBINE
5692          HC       2   0.372
              *

5693          KK   SRB83STORAGE
5694          KM        ADOT Regional Basin (per URS 2001 study)
5695          KO
5696          RS       1    STOR
5697          SV           19.83   60.59  109.71  161.17  215.52  334.65  399.54  399.64  399.74
5698          SQ           36.00   44.00   52.00   60.00   65.00   76.00   81.00   86.00   87.00
5699          SE  970.50  974.00  976.00  978.00  980.00  982.00  986.00  988.00  990.00  990.50
5700          ST
              *

5701          KK  B83B84ROUTE
5702          KM        Cross-section: Cross-section determined from aerial and
5703          KM        1990 topo / Manning's N Value: clean straight earth
5704          RS       2    FLOW
5705          RC   0.022   0.022   0.022     680  0.0010    0.00
5706          RX  100.00  142.00  160.00  191.00  231.00  258.00  269.00  281.00
5707          RY  988.00  986.00  984.00  976.00  976.10  984.00  986.00  988.00
              *

5708          KK     B71BASIN
5709          KM        BASIN BOUNDARY FROM PALM VALLEY CONCEPT DRAINAGE PLAN
5710          KM        PV PHASE 3A AND 38, SUNRISE
5711          BA   0.959
5712          LG    0.24    0.26    4.50    0.43      34
5713          UI       0     108     268     508     654     865    1280    1081     828     633
5714          UI     466     246     179     112      68      32      33      33       0       0
5715          UI       0       0       0       0       0       0       0       0       0       0
5716          UI       0       0       0       0       0       0       0       0       0       0
5717          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE147

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5718          KK  DB71REDIVERT
5719          KM        Palm Valley Concept Drainage Plan for the Roosevelt
5720          KM        Canal Watershed (conceptual retention required
5721          KM        volume used, no design plans available)
5722          DT    RB71    73.5     0.0
5723          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5724          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5725          KK  B71B72ROUTE
5726          KM        Cross-section: golf course, assumed 0.5% side slopes
5727          KM        V-ditch / Manning's N Value: grass/golf course
5728          RS      34    FLOW
5729          RC   0.025   0.025   0.025    8168  0.0022    0.00
5730          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5731          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5732          KK     B72BASIN
5733          KM        PALM VALLEY
5734          BA   1.120
5735          LG    0.18    0.25    4.90    0.38      33
5736          UI       0     131     359     655     838    1161    1603    1191     933     682
5737          UI     443     229     171     112      41      40      40      41       0       0
5738          UI       0       0       0       0       0       0       0       0       0       0
5739          UI       0       0       0       0       0       0       0       0       0       0
5740          UI       0       0       0       0       0       0       0       0       0       0
              *

5741          KK  DB72REDIVERT
5742          KM        Retention volume estimated based on aerial
5743          DT    RB72    49.8     0.0
5744          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5745          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5746          KK   CPB72COMBINE
5747          HC       2   2.079
              *

5748          KK  B72B74ROUTE
5749          KM        Cross-section: estimated from aerial, assumed 4' depth, 4:1
5750          KM        sideslopes / Manning's N Value: concrete channel
5751          RS       1    FLOW
5752          RC   0.016   0.016   0.016    2872  0.0045    0.00
5753          RX  100.00  107.00  114.00  138.00  150.00  174.00  184.00  194.00
5754          RY  1000.2 1000.10 1000.00  996.00  996.10 1000.00 1000.10 1000.10
              *
1                                          HEC-1 INPUT                                          PAGE148

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5755          KK     B73BASIN
5756          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5757          BA   0.304
5758          LG    0.10    0.25    4.70    0.45      54
5759          UI       0     134     424     760     565     297     105      37      23       0
5760          UI       0       0       0       0       0       0       0       0       0       0
5761          UI       0       0       0       0       0       0       0       0       0       0
5762          UI       0       0       0       0       0       0       0       0       0       0
5763          UI       0       0       0       0       0       0       0       0       0       0
              *

5764          KK  DB73REDIVERT
5765          KM        Retention volume estimated based on aerial
5766          DT    RB73    24.9     0.0
5767          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5768          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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5769          KK   SRB73STORAGE
5770          KM        ADOT Regional Basin (per URS 2001 study)
5771          KO
5772          RS       1    STOR
5773          SV            9.46   52.88  120.61  265.17  348.06  348.16  348.26
5774          SQ            7.00   55.00   55.00   55.00   55.00   55.00  329.00
5775          SE  975.70  978.00  980.00  982.00  986.00  988.00  988.80  990.00
5776          ST
              *

5777          KK  B73B74ROUTE
5778          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
5779          KM        Manning's N Value: avg value for cultivated areas
5780          RS      13    FLOW
5781          RC   0.038   0.038   0.038    1446  0.0007    0.00
5782          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
5783          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

5784          KK     B74BASIN
5785          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5786          BA   0.106
5787          LG    0.10    0.25    4.80    0.44      68
5788          UI       0     104     334     268      86      20       0       0       0       0
5789          UI       0       0       0       0       0       0       0       0       0       0
5790          UI       0       0       0       0       0       0       0       0       0       0
5791          UI       0       0       0       0       0       0       0       0       0       0
5792          UI       0       0       0       0       0       0       0       0       0       0
              *

5793          KK  DB74REDIVERT
5794          KM        Retention volume estimated based on aerial
5795          DT    RB74     4.9     0.0
5796          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5797          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5798          KK   CPB74COMBINE
5799          HC       3   2.489
              *

5800          KK   SRB74STORAGE
5801          KM        ADOT Regional Basin (per URS 2001 study)
5802          KO
5803          RS       1    STOR
5804          SV           11.35   32.69   57.00  108.98  126.82  136.43
5805          SQ            2.00   60.00  263.00  668.00  800.00  953.00
5806          SE  974.60  978.00  980.00  982.00  986.00  987.30  988.00
5807          ST
              *

5808          KK  B74B84ROUTE
5809          KM        Cross-section: Cross-section determined from aerial and 1990
5810          KM        topo / Manning's N Value: channel w/ concrete sides
5811          RS       1    FLOW
5812          RC   0.016   0.022   0.016    2292  0.0050    0.00
5813          RX  100.00  120.00  140.00  160.00  182.00  202.00  212.00  222.00
5814          RY  986.20  986.10  986.00  976.00  976.10  986.00  986.10  983.20
              *

5815          KK     B84BASIN
5816          KM        ADOT REGIONAL BASINS STORAGE PER URS 2001 ADOT BASIN ANALYSIS
5817          BA   0.216
5818          LG    0.10    0.15    8.00    0.12      51
5819          UI       0      76     245     432     447     269     114      55      15      15
5820          UI       0       0       0       0       0       0       0       0       0       0
5821          UI       0       0       0       0       0       0       0       0       0       0
5822          UI       0       0       0       0       0       0       0       0       0       0
5823          UI       0       0       0       0       0       0       0       0       0       0
              *

5824          KK  DB84REDIVERT
5825          KM        Retention volume estimated based on aerial
5826          DT    RB84     2.0     0.0
5827          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5828          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5829          KK   CPB84COMBINE
5830          HC       4   7.236
              *

5831          KK   SRB84STORAGE
5832          KM        ADOT Regional Basin (per URS 2001 study)
5833          KM        Drains to River via underground storm drain system
5834          KO
5835          RS       1    STOR
5836          SV           25.10   71.68  127.08  189.52  324.54  402.14  402.24  402.34
5837          SQ            6.00  233.00  460.00  460.00  460.00  460.00  460.00  657.00
5838          SE  972.50  976.00  978.00  980.00  982.00  986.00  988.00  988.60  990.00
5839          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5840          KK     B28BASIN
5841          KM        BASIN BOUNDARY FROM RANCHO SANTA FE
5842          BA   0.960
5843          LG    0.23    0.25    4.55    0.42      36
5844          UI       0     116     330     579     759    1086    1374    1003     771     567
5845          UI     318     197     130      74      36      35      36       0       0       0
5846          UI       0       0       0       0       0       0       0       0       0       0
5847          UI       0       0       0       0       0       0       0       0       0       0
5848          UI       0       0       0       0       0       0       0       0       0       0
              *

5849          KK  DB28REDIVERT
5850          KM        Rancho Santa Fe Ph.1 Infrastructure Drainage Design Report
5851          DT    RB28     0.4     0.0
5852          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5853          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5854          KK     B29BASIN
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5855          KM        BASIN BOUNDARY FROM PALMILLA APTS, RANCHO SANTA FE CENTER
5856          KM        PALMILLA CENTER
5857          BA   0.177
5858          LG    0.12    0.23    4.80    0.40      72
5859          UI       0      57     184     313     381     231     114      51      20      11
5860          UI       0       0       0       0       0       0       0       0       0       0
5861          UI       0       0       0       0       0       0       0       0       0       0
5862          UI       0       0       0       0       0       0       0       0       0       0
5863          UI       0       0       0       0       0       0       0       0       0       0
              *

5864          KK  DB29REDIVERT
5865          KM        Drainage Report for Palmilla Center, Final Drainage
5866          KM        Report for Rancho Santa Fe Center, Final Drainage
5867          KM        Report for Palmilla Apts, Drainage Report - Walmart
5868          KM        Additional Retention based on 100yr 2hr retention.
5869          KM        C value is based on future land use, P=2.7, A=acres
5870          DT    RB29    15.9     0.0
5871          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5872          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5873          KK     B30BASIN
5874          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
5875          BA   0.170
5876          LG    0.10    0.25    4.70    0.42      81
5877          UI       0      73     230     418     320     173      60      23      12       0
5878          UI       0       0       0       0       0       0       0       0       0       0
5879          UI       0       0       0       0       0       0       0       0       0       0
5880          UI       0       0       0       0       0       0       0       0       0       0
5881          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5882          KK  DB30REDIVERT
5883          KM        Drainage Report for Avondale Home Depot, Master
5884          KM        Drainage Report for Coldwater Plaza, Remaining
5885          KM        retention volume estimated from aerial
5886          DT    RB30    12.8     0.0
5887          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5888          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5889          KK   SRB30STORAGE
5890          KM        Storage behind Agua Fria River levee (WLB)
5891          KO
5892          RS       1     STOR
5893          SV            1.16    7.44   17.82   22.15   60.86
5894          SQ           16.00   38.00   49.00  117.00 3687.00
5895          SE  972.00  974.00  976.00  977.60  978.00  980.00
5896          ST
              *

5897          KK     B31BASIN
5898          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
5899          BA   0.681
5900          LG    0.17    0.25    4.60    0.46      43
5901          UI       0     190     644    1012    1477     957     558     227     112      41
5902          UI      40       0       0       0       0       0       0       0       0       0
5903          UI       0       0       0       0       0       0       0       0       0       0
5904          UI       0       0       0       0       0       0       0       0       0       0
5905          UI       0       0       0       0       0       0       0       0       0       0
              *

5906          KK  DB31REDIVERT
5907          KM        Preliminary Drainage Report for Rio Estrella Plaza
5908          KM        Drainage Report for Rio Estrella Commerce Park Drainage
5909          KM        System, Final Drainage Report for Parcel XIV at Arizona Traditions,
5910          KM        Remaining retention volume estimated from aerial
5911          DT    RB31    27.0     0.0
5912          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5913          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5914          KK   SRB31STORAGE
5915          KM        Storage behind Agua Fria River levee (WLB)
5916          KO
5917          RS       1     STOR
5918          SV            4.15   34.22   71.09  141.43  276.96  481.06  516.31  604.41  744.46
5919          SQ           16.00   50.00   71.00   87.00  100.00  112.00  114.00 1335.0010496.00
5920          SE  956.00  958.00  960.00  962.00  964.00  966.00  968.00  968.30  969.00  970.00
5921          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5922          KK   DUMMYCOMBINE
5923          HC       2
              *

5924          KK   DUMMYCOMBINE
5925          HC       5
              *

5926          KK     B32BASIN
5927          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR TRES
5928          KM        RIOS LANDING PARCELS 4 AND 5 DATED 2/13/03 BY CMX AND FINAL DRAINAGE
5929          KM        REPORT FOR THE VILLAGE AT TRES RIOS LANDING DATED 6/14/05 BY CMX
5930          BA   0.819
5931          LG    0.22    0.25    3.88    0.42      37
5932          UI       0     104     329     552     723    1119    1128     823     610     407
5933          UI     198     143      87      32      32      32       0       0       0       0
5934          UI       0       0       0       0       0       0       0       0       0       0
5935          UI       0       0       0       0       0       0       0       0       0       0
5936          UI       0       0       0       0       0       0       0       0       0       0
              *

5937          KK  DB32REDIVERT
5938          KM        Final Drainage Report for Tres Rios Landing Parcels 4 & 5, Final
5939          KM        Drainage Report for The Village at Tres Rios Landing, Drainage
5940          KM        Report for Whyman Haciendas, Drainage Report for Litchfield
5941          KM        Mountain View Homes, Remaining retention volume estimated from aerial
5942          KM        Additional Retention based on 100yr 2hr retention.
5943          KM        C value is based on future land use, P=2.7, A=acres
5944          DT    RB32    49.1     0.0
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5945          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5946          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5947          KK   SRB32STORAGE
5948          KM        Storage behind Lwr Buckeye Rd, est from topo
5949          KO
5950          RS       1    STOR
5951          SV            7.79   53.57  155.29  276.97
5952          SQ                         2206.00 6240.00
5953          SE  942.00  944.00  946.00  948.00  950.00
5954          ST
              *

5955          KK  B32B33ROUTE
5956          KM        Cross-section: Cross-section determined from 1990 topo
5957          KM        Manning's N Value: clean straight earth
5958          RS       1    FLOW
5959          RC   0.022   0.022   0.022    3134  0.0045    0.00
5960          RX  100.00  112.00  125.00  132.00  185.00  190.00  215.00  240.00
5961          RY  948.00  944.00  940.00  938.00  938.10  940.00  942.00  944.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

5962          KK     B33BASIN
5963          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5964          BA   0.285
5965          LG    0.15    0.25    4.30    0.54      56
5966          UI       0     379    1111     565     118       0       0       0       0       0
5967          UI       0       0       0       0       0       0       0       0       0       0
5968          UI       0       0       0       0       0       0       0       0       0       0
5969          UI       0       0       0       0       0       0       0       0       0       0
5970          UI       0       0       0       0       0       0       0       0       0       0
              *

5971          KK  DB33REDIVERT
5972          KM        Master Drainage Report for Lower Buckeye Park
5973          KM        Remaining retention volume estimated from aerial
5974          DT    RB33    32.2     0.0
5975          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5976          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5977          KK   CPB33COMBINE
5978          HC       2   1.104
              *

5979          KK     B34BASIN
5980          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5981          BA   0.125
5982          LG    0.17    0.25    4.25    0.55      43
5983          UI       0     218     545     173      27       0       0       0       0       0
5984          UI       0       0       0       0       0       0       0       0       0       0
5985          UI       0       0       0       0       0       0       0       0       0       0
5986          UI       0       0       0       0       0       0       0       0       0       0
5987          UI       0       0       0       0       0       0       0       0       0       0
              *

5988          KK  DB34REDIVERT
5989          KM        Additional Retention based on 100yr 2hr retention.
5990          KM        C value is based on future land use, P=2.7, A=acres
5991          DT    RB34     2.7     0.0
5992          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
5993          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

5994          KK     B38BASIN
5995          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
5996          BA   0.343
5997          LG    0.12    0.25    4.20    0.59      54
5998          UI       0     281     888     956     379     108      33       0       0       0
5999          UI       0       0       0       0       0       0       0       0       0       0
6000          UI       0       0       0       0       0       0       0       0       0       0
6001          UI       0       0       0       0       0       0       0       0       0       0
6002          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6003          KK  DB38REDIVERT
6004          KM        Retention volume estimated based on aerial
6005          DT    RB38    39.8     0.0
6006          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6007          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6008          KK  B38B39ROUTE
6009          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6010          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6011          RS      34    FLOW
6012          RC   0.035   0.035   0.035    6042  0.0018    0.00
6013          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6014          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6015          KK     B37BASIN
6016          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
6017          BA   0.466
6018          LG    0.10    0.25    3.92    0.41      54
6019          UI       0     217     670    1206     852     418     155      48      35       0
6020          UI       0       0       0       0       0       0       0       0       0       0
6021          UI       0       0       0       0       0       0       0       0       0       0
6022          UI       0       0       0       0       0       0       0       0       0       0
6023          UI       0       0       0       0       0       0       0       0       0       0
              *

6024          KK  DB37REDIVERT
6025          KM        Additional Retention based on 100yr 2hr retention.
6026          KM        C value is based on future land use, P=2.7, A=acres
6027          DT    RB37    59.4     0.0
6028          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6029          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6030          KK  B37B39ROUTE
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6031          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6032          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6033          RS       1    FLOW
6034          RC   0.035   0.035   0.035    7715  0.0023    0.00
6035          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6036          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6037          KK     B39BASIN
6038          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
6039          KM        FLOW ENTERS BUCKEYE CANAL
6040          BA   0.775
6041          LG    0.11    0.25    4.70    0.44      46
6042          UI       0     222     749    1190    1680    1080     606     250     120      46
6043          UI      46       0       0       0       0       0       0       0       0       0
6044          UI       0       0       0       0       0       0       0       0       0       0
6045          UI       0       0       0       0       0       0       0       0       0       0
6046          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6047          KK  DB39REDIVERT
6048          KM        Additional Retention based on 100yr 2hr retention.
6049          KM        C value is based on future land use, P=2.7, A=acres
6050          DT    RB39    82.2     0.0
6051          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6052          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6053          KK   CPB39COMBINE
6054          HC       3   1.584
              *

6055          KK   SRB39STORAGE
6056          KM        Storage behind canal (WLB)
6057          KO
6058          RS       1    STOR
6059          SV            1.84    7.82   26.86  173.63
6060          SQ                          247.00 6031.00
6061          SE  914.00  916.00  916.90  918.00  920.00
6062          ST
              *

6063          KK     B35BASIN
6064          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
6065          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
6066          BA   0.144
6067          LG    0.03    0.09    3.25    0.65      19
6068          UI       0      89     317     336     195      94      43      20       6       5
6069          UI       5       0       0       0       0       0       0       0       0       0
6070          UI       0       0       0       0       0       0       0       0       0       0
6071          UI       0       0       0       0       0       0       0       0       0       0
6072          UI       0       0       0       0       0       0       0       0       0       0
              *

6073          KK  DB35REDIVERT
6074          KM        Additional Retention based on 100yr 2hr retention.
6075          KM        C value is based on future land use, P=2.7, A=acres
6076          DT    RB35     0.3     0.0
6077          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6078          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6079          KK     B36BASIN
6080          KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO. BWCCD REQUESTED THIS
6081          KM        AREA TO BE INCLUDED IN MODEL, FLOW DIRECTLY ENTERS GILA RIVER
6082          BA   0.056
6083          LG    0.01    0.02    4.55    0.30       3
6084          UI       0     178     204      40       7       5       0       0       0       0
6085          UI       0       0       0       0       0       0       0       0       0       0
6086          UI       0       0       0       0       0       0       0       0       0       0
6087          UI       0       0       0       0       0       0       0       0       0       0
6088          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6089          KK  DB36REDIVERT
6090          KM        Additional Retention based on 100yr 2hr retention.
6091          KM        C value is based on future land use, P=2.7, A=acres
6092          DT    RB36     0.4     0.0
6093          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6094          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6095          KK   DUMMYCOMBINE
6096          HC       4
              *

6097          KK   DUMMYCOMBINE
6098          HC       3
              *

6099          KK     L41BASIN
6100          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6101          BA   0.249
6102          LG    0.30    0.25    4.60    0.34       5
6103          UI       0      34     111     182     242     390     324     238     174      96
6104          UI      56      36      15      10      10       0       0       0       0       0
6105          UI       0       0       0       0       0       0       0       0       0       0
6106          UI       0       0       0       0       0       0       0       0       0       0
6107          UI       0       0       0       0       0       0       0       0       0       0
              *

6108          KK  DL41SEDIVERT
6109          KM        Glendale at 185th split flow
6110          DT   DL41S     0.0     0.0
6111          DI     0.0    15.2   324.5  1021.5  2211.8     0.0     0.0     0.0     0.0     0.0
6112          DQ     0.0    15.2   203.0   611.7  1283.9     0.0     0.0     0.0     0.0     0.0
              *

6113          KK  L41L42ROUTE
6114          KM        Cross-section: Estimated 2' deep and 3:1 side slopes, width based
6115          KM        on aerial / Manning's N Value: clean earth; straight, street ROB
6116          RS       2    FLOW
```

```
6117          RC   0.022   0.022   0.016    3951  0.0040    0.00
6118          RX  100.00  115.00  130.00  136.00  139.00  145.00  157.00  167.00
6119          RY  1166.5 1166.25 1166.00 1164.00 1164.10 1166.00 1166.25 1166.50
              *

6120          KK     L42BASIN
6121          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6122          BA   0.740
6123          LG    0.30    0.25    4.10    0.46       5
6124          UI       0      71     131     293     382     473     598     865     732     581
6125          UI     463     367     265     144     118      77      60      22      22      22
6126          UI      22      21       0       0       0       0       0       0       0       0
6127          UI       0       0       0       0       0       0       0       0       0       0
6128          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6129          KK   CPL42COMBINE
6130          HC       2   0.989
              *

6131          KK   DL421DIVERT
6132          KM        Glendale at Citrus split flow
6133          DT  DL421S     0.0     0.0
6134          DI     0.0   189.3   751.3  2087.6  4053.5     0.0     0.0     0.0     0.0     0.0
6135          DQ     0.0    91.1   387.9  1123.4  2232.7     0.0     0.0     0.0     0.0     0.0
              *

6136          KK   DL422DIVERT
6137          KM        Glendale at Citrus split flow
6138          DT  DL422S     0.0     0.0
6139          DI     0.0    98.2   363.4   964.2  1820.8     0.0     0.0     0.0     0.0     0.0
6140          DQ     0.0    30.7    76.1   133.6   200.9     0.0     0.0     0.0     0.0     0.0
              *

6141          KK  L42L43ROUTE
6142          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
6143          KM        based on aerial / Manning's N Value: clean earth;
6144          KM        straight, street ROB
6145          RS       5    FLOW
6146          RC   0.022   0.022   0.013    5319  0.0056    0.00
6147          RX  100.00  100.50  224.00  230.00  233.00  239.00  262.50  263.00
6148          RY  1136.7 1136.50 1136.00 1134.00 1134.10 1136.35 1136.50 1136.65
              *

6149          KK     L43BASIN
6150          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6151          BA   0.997
6152          LG    0.30    0.25    4.20    0.43       5
6153          UI       0     128     405     675     889    1378    1368     994     741     490
6154          UI     235     172     102      40      39      39       0       0       0       0
6155          UI       0       0       0       0       0       0       0       0       0       0
6156          UI       0       0       0       0       0       0       0       0       0       0
6157          UI       0       0       0       0       0       0       0       0       0       0
              *

6158          KK  DL43REDIVERT
6159          KM        Additional Retention based on 100yr 6hr retention.
6160          KM        C value is based on future land use, P=3.2, A=acres
6161          DT    RL43     1.0     0.0
6162          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6163          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6164          KK   DL381RETRIEVE
6165          DR  DL381S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6166          KK  L38L43ROUTE
6167          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width from aerial
6168          KM        Manning's N Value: earth w/ sparse trees and brush: street LOB
6169          RS      13    FLOW
6170          RC   0.016   0.032   0.032    5276  0.0038    0.00
6171          RX  100.00  115.00  130.00  140.00  146.00  156.00  171.00  186.00
6172          RY  1135.5 1135.25 1135.00 1132.00 1132.10 1135.00 1135.25 1135.50
              *

6173          KK   CPL43COMBINE
6174          HC       3   6.889
              *

6175          KK   DL431DIVERT
6176          KM        Glendale at Cotton split flow
6177          DT  DL431S     0.0     0.0
6178          DI     0.0   174.4  1002.0  2334.9  4460.0     0.0     0.0     0.0     0.0     0.0
6179          DQ     0.0     0.0     3.8    19.5    58.9     0.0     0.0     0.0     0.0     0.0
              *

6180          KK   DL432DIVERT
6181          KM        Glendale at Cotton split flow
6182          DT  DL432S     0.0     0.0
6183          DI     0.0   174.4   998.2  2315.4  4401.1     0.0     0.0     0.0     0.0     0.0
6184          DQ     0.0     0.6    20.8    54.9    98.4     0.0     0.0     0.0     0.0     0.0
              *

6185          KK  L43L44ROUTE
6186          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
6187          KM        on aerial / Manning's N Value: earth w/ sparse trees and brush
6188          RS       2    FLOW
6189          RC   0.038   0.032   0.013    2574  0.0039    0.00
6190          RX  100.00  105.00  430.00  444.00  449.00  463.00  478.00  479.00
6191          RY  1126.8 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.80
              *

6192          KK     L44BASIN
6193          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6194          KM        AND EASTERN BOUNDARY LOOP 303
6195          BA   0.478
6196          LG    0.10    0.25    4.15    0.63      79
6197          UI       0     183     585    1053     955     555     212      93      33      33
6198          UI       0       0       0       0       0       0       0       0       0       0
6199          UI       0       0       0       0       0       0       0       0       0       0
6200          UI       0       0       0       0       0       0       0       0       0       0
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6201          UI       0       0       0       0       0       0       0       0       0       0
              *

6202          KK  DL44REDIVERT
6203          KM        Additional Retention based on 100yr 6hr retention.
6204          KM        C value is based on future land use, P=3.2, A=acres
6205          DT    RL44    47.3     0.0
6206          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6207          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6208          KK   DL382RETRIEVE
6209          DR  DL382S
              *

6210          KK  L38L44ROUTE
6211          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6212          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6213          RS      46     FLOW
6214          RC   0.035   0.035   0.035    7781  0.0026    0.00
6215          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6216          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6217          KK   DL391RETRIEVE
6218          DR  DL391S
              *

6219          KK  L39L44ROUTE
6220          KM        Cross-section: Estimated 1' deep, width based on aerial
6221          KM        Manning's N Value: clean earth channel, street and Ag field
6222          RS       8     FLOW
6223          RC   0.013   0.022   0.038    5284  0.0034    0.00
6224          RX  100.00  100.50  120.00  157.00  167.00  182.00  599.00  600.00
6225          RY  1000.3  999.90  999.60  998.60  998.50  999.60  999.90 1000.30
              *

6226          KK   CPL44COMBINE
6227          HC       4  20.916
              *

6228          KK   DL441DIVERT
6229          KM        Glendale at L303 split flow
6230          DT  DL441S     0.0     0.0
6231          DI     0.0    34.7   330.9  1066.0  2375.9     0.0     0.0     0.0     0.0     0.0
6232          DQ     0.0     5.7   153.4   473.9  1110.2     0.0     0.0     0.0     0.0     0.0
              *

6233          KK   DL442DIVERT
6234          KM        Glendale at L303 split flow
6235          DT  DL442S     0.0     0.0
6236          DI     0.0    29.0   177.5   592.1  1265.6     0.0     0.0     0.0     0.0     0.0
6237          DQ     0.0     0.0    26.5    75.0   137.8     0.0     0.0     0.0     0.0     0.0
              *

6238          KK  L44B40ROUTE
6239          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6240          KM        aerial & topo / Manning's N Value: clean straight earth; street ROB
6241          RS       1     FLOW
6242          RC   0.022   0.022   0.013    1653  0.0103    0.00
6243          RX  100.00  101.00  330.00  336.00  339.00  345.00  351.00  357.00
6244          RY  1106.6 1106.25 1106.00 1104.00 1104.10 1106.00 1106.25 1106.60
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6245          KK     B40BASIN
6246          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
6247          KM        PHOTOGRAPHY OF AG LAND, 1990 TOPO, SWAN HILL NURSERIES AND
6248          KM        ORANGEWOOD NURSERIES
6249          BA   0.514
6250          LG    0.11    0.25    4.50    0.50      69
6251          UI       0     164     544     932    1097     668     321     144      54      32
6252          UI       0       0       0       0       0       0       0       0       0       0
6253          UI       0       0       0       0       0       0       0       0       0       0
6254          UI       0       0       0       0       0       0       0       0       0       0
6255          UI       0       0       0       0       0       0       0       0       0       0
              *

6256          KK  DB40REDIVERT
6257          KM        Additional Retention based on 100yr 2hr retention.
6258          KM        C value is based on future land use, P=2.7, A=acres
6259          DT    RB40    37.9     0.0
6260          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6261          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6262          KK   DL392RETRIEVE
6263          DR  DL392S
              *

6264          KK  L39B40ROUTE
6265          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6266          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6267          RS      21     FLOW
6268          RC   0.035   0.035   0.035    7904  0.0048    0.00
6269          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6270          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6271          KK   DD681RETRIEVE
6272          DR  DD681S
              *

6273          KK  D68B40ROUTE
6274          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6275          KM        aerial & topo / Manning's N Value: clean straight earth; street LOB
6276          RS       2     FLOW
6277          RC   0.016   0.022   0.022    5311  0.0047    0.00
6278          RX  100.00  112.00  124.00  132.00  135.00  143.00  155.00  167.00
6279          RY  1110.5 1110.25 1110.00 1108.00 1108.10 1110.00 1110.25 1110.50
              *

6280          KK   CPB40COMBINE
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6281          HC       4  21.924
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6282          KK   DB401DIVERT
6283          KM        Glendale at Sarival split flow
6284          DT  DB401S     0.0     0.0
6285          DI     0.0    68.5   415.8  1670.6  4103.5     0.0     0.0     0.0     0.0     0.0
6286          DQ     0.0    37.6   246.0  1114.3  2520.9     0.0     0.0     0.0     0.0     0.0
              *

6287          KK   DB402DIVERT
6288          KM        Glendale at Sarival split flow
6289          DT  DB402S     0.0     0.0
6290          DI     0.0    30.9   169.8   556.4  1582.5     0.0     0.0     0.0     0.0     0.0
6291          DQ     0.0    14.8    64.4   133.4   217.4     0.0     0.0     0.0     0.0     0.0
              *

6292          KK  B40B41ROUTE
6293          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6294          KM        on aerial & topo / Manning's N Value: clean straight earth
6295          RS        9    FLOW
6296          RC   0.022   0.022   0.013    5216  0.0033    0.00
6297          RX  100.00  100.50  228.00  234.00  238.00  244.00  252.00  260.00
6298          RY  1088.6 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1088.60
              *

6299          KK     B41BASIN
6300          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
6301          KM        OF MARICOPA COUNTY HOMES AND 1990 TOPO
6302          BA   0.952
6303          LG    0.22    0.25    4.65    0.38      35
6304          UI       0     102     240     466     601     771    1146    1120     862     656
6305          UI     513     322     177     142     103      34      31      31      31       0
6306          UI       0       0       0       0       0       0       0       0       0       0
6307          UI       0       0       0       0       0       0       0       0       0       0
6308          UI       0       0       0       0       0       0       0       0       0       0
              *

6309          KK  DB41REDIVERT
6310          KM        Additional Retention based on 100yr 6hr retention.
6311          KM        C value is based on future land use, P=3.2, A=acres
6312          DT    RB41    41.8     0.0
6313          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6314          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6315          KK   DD682RETRIEVE
6316          DR  DD682S
              *

6317          KK  D68B41ROUTE
6318          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
6319          KM        aerial & topo / Manning's N Value: earth with sparse trees and shrubs
6320          RS       19    FLOW
6321          RC   0.032   0.032   0.032   10073  0.0042    0.00
6322          RX  100.00  124.00  130.00  136.00  141.00  147.00  153.00  162.00
6323          RY  1120.1 1120.00 1118.50 1117.00 1117.10 1118.50 1120.00 1120.10
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


6324          KK   DD691RETRIEVE
6325          DR  DD691S
              *

6326          KK  D69B41ROUTE
6327          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based
6328          KM        on aerial & topo / Manning's N Value: clean straight earth
6329          RS        5    FLOW
6330          RC   0.022   0.022   0.022    5281  0.0038    0.00
6331          RX  100.00  120.00  146.00  158.00  170.00  182.00  210.00  244.00
6332          RY  1086.2 1086.10 1086.00 1083.00 1082.90 1086.00 1086.10 1086.20
              *

6333          KK   CPB41COMBINE
6334          HC       4  37.494
              *

6335          KK  DB41SEDIVERT
6336          KM        Reems at Glendale split flow
6337          DT   DB41S     0.0     0.0
6338          DI     0.0   210.0  1330.5  3445.6  6340.8     0.0     0.0     0.0     0.0     0.0
6339          DQ     0.0   201.5  1259.5  3072.1  5469.4     0.0     0.0     0.0     0.0     0.0
              *

6340          KK  B41B43ROUTE
6341          KM        Cross-section: Cross section estimated from aerial and topo
6342          KM        Manning's N Value: clean straight earth
6343          RS        2    FLOW
6344          RC   0.022   0.022   0.022    1849  0.0022    0.00
6345          RX  100.00  104.00  108.00  114.00  116.00  122.00  125.00  128.00
6346          RY  1082.0 1081.80 1081.50 1080.00 1080.10 1081.50 1081.80 1082.00
              *

6347          KK     B43BASIN
6348          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
6349          BA   0.541
6350          LG    0.11    0.25    4.70    0.44      76
6351          UI       0      62     166     306     394     534     759     586     456     340
6352          UI     232     118      89      63      20      19      19      19       0       0
6353          UI       0       0       0       0       0       0       0       0       0       0
6354          UI       0       0       0       0       0       0       0       0       0       0
6355          UI       0       0       0       0       0       0       0       0       0       0
              *

6356          KK  DB43REDIVERT
6357          KM        Additional Retention based on 100yr 2hr retention.
6358          KM        C value is based on future land use, P=2.7, A=acres
6359          DT    RB43    56.4     0.0
6360          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6361          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                   HEC-1 INPUT                                                    PAGE163
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6362          KK   DD692RETRIEVE
6363          DR  DD692S
              *

6364          KK  D69B43ROUTE
6365          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6366          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6367          RS      22    FLOW
6368          RC   0.035   0.035   0.035   12235  0.0027    0.00
6369          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6370          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6371          KK   CPB43COMBINE
6372          HC       3  38.035
              *

6373          KK  B43B45ROUTE
6374          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
6375          KM        aerial & topo / Manning's N Value: clean straight earth
6376          RS      12    FLOW
6377          RC   0.022   0.022   0.022    4681  0.0004    0.00
6378          RX  100.00  112.00  124.00  132.00  138.00  146.00  166.00  186.00
6379          RY  1080.5 1080.25 1080.00 1076.00 1076.10 1080.00 1080.25 1080.50
              *

6380          KK     L40BASIN
6381          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6382          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6383          BA   0.610
6384          LG    0.25    0.25    4.25    0.49      25
6385          UI       0      82     287     450     615     970     785     578     417     219
6386          UI     136      83      30      26      25       0       0       0       0       0
6387          UI       0       0       0       0       0       0       0       0       0       0
6388          UI       0       0       0       0       0       0       0       0       0       0
6389          UI       0       0       0       0       0       0       0       0       0       0
              *

6390          KK  DL40REDIVERT
6391          KM        Additional Retention based on 100yr 6hr retention.
6392          KM        C value is based on future land use, P=3.2, A=acres
6393          DT    RL40    41.9     0.0
6394          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6395          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6396          KK  L40L45ROUTE
6397          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on
6398          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6399          RS      14    FLOW
6400          RC   0.032   0.032   0.032    5706  0.0053    0.00
6401          RX  100.00  120.00  128.00  136.00  144.00  152.00  164.00  220.00
6402          RY  1166.5 1166.00 1164.00 1162.00 1161.90 1164.00 1166.00 1166.50
              *
1                                          HEC-1 INPUT                                          PAGE164

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6403          KK     L45BASIN
6404          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6405          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6406          BA   0.503
6407          LG    0.25    0.25    4.45    0.43      24
6408          UI       0      81     330     489     762     854     572     390     185     109
6409          UI      55      25      24       0       0       0       0       0       0       0
6410          UI       0       0       0       0       0       0       0       0       0       0
6411          UI       0       0       0       0       0       0       0       0       0       0
6412          UI       0       0       0       0       0       0       0       0       0       0
              *

6413          KK  DL45REDIVERT
6414          KM        Additional Retention based on 100yr 2hr retention.
6415          KM        C value is based on future land use, P=2.7, A=acres
6416          DT    RL45    34.4     0.0
6417          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6418          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6419          KK   CPL45COMBINE
6420          HC       2   1.113
              *

6421          KK  L45L46ROUTE
6422          KM        Cross-section: Estimated 2' deep; width and side slopes estimated from a
6423          KM        road / Manning's N Value: clean earth; straight
6424          RS       4    FLOW
6425          RC   0.022   0.022   0.013    2613  0.0023    0.00
6426          RX  100.00  101.00  375.00  380.00  382.00  384.00  389.00  405.00
6427          RY  1143.0 1142.40 1142.00 1140.00 1139.90 1141.00 1142.20 1142.95
              *

6428          KK     L46BASIN
6429          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6430          BA   0.490
6431          LG    0.30    0.25    4.15    0.44       5
6432          UI       0      68     240     375     516     808     624     453     319     155
6433          UI     102      62      21      20      21       0       0       0       0       0
6434          UI       0       0       0       0       0       0       0       0       0       0
6435          UI       0       0       0       0       0       0       0       0       0       0
6436          UI       0       0       0       0       0       0       0       0       0       0
              *

6437          KK  DL41SERETRIEVE
6438          DR   DL41S
              *

6439          KK  L41L46ROUTE
6440          KM        Cross-section: Cross section estimated from aerial; road
6441          KM        Manning's N Value: street and ROW
6442          RS       4    FLOW
6443          RC   0.032   0.016   0.032    6496  0.0049    0.00
6444          RX  100.00  140.00  142.00  152.00  162.00  164.00  174.00  190.00
1                                          HEC-1 INPUT                                          PAGE165

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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6445          RY  1167.0 1166.00 1165.50 1165.70 1165.50 1166.00 1166.50 1167.00
              *

6446          KK   CPL46COMBINE
6447          HC       3   1.852
              *

6448          KK   DL461DIVERT
6449          KM        Bethany Home at 183rd split flow
6450          DT  DL461S      0.0      0.0
6451          DI     0.0   202.4   580.6  1312.2  2324.9      0.0      0.0      0.0      0.0      0.0
6452          DQ     0.0   102.5   110.7   124.7   147.0      0.0      0.0      0.0      0.0      0.0
              *

6453          KK   DL462DIVERT
6454          KM        Bethany Home at 183rd split flow
6455          DT  DL462S      0.0      0.0
6456          DI     0.0   100.0   469.8  1187.5  2178.0      0.0      0.0      0.0      0.0      0.0
6457          DQ     0.0    15.2    51.2    99.4   157.1      0.0      0.0      0.0      0.0      0.0
              *

6458          KK  L46L47ROUTE
6459          KM        Cross-section: Cross section estimated from aerial; road
6460          KM        Manning's N Value: clean earth; straight; street ROB
6461          RS       1    FLOW
6462          RC   0.022   0.022   0.013    2652  0.0053    0.00
6463          RX  100.00  101.00  250.00  262.00  277.00  289.00  305.00  335.00
6464          RY  1138.9 1138.30 1138.00 1136.00 1136.10 1138.00 1138.40 1138.90
              *

6465          KK     L47BASIN
6466          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6467          BA   0.497
6468          LG    0.30    0.25    4.10    0.46       5
6469          UI       0      60     168     303     388     559     705     522     402     294
6470          UI     169     102      69      40      18      19      18       0       0       0
6471          UI       0       0       0       0       0       0       0       0       0       0
6472          UI       0       0       0       0       0       0       0       0       0       0
6473          UI       0       0       0       0       0       0       0       0       0       0
              *

6474          KK  DL47REDIVERT
6475          KM        Additional Retention based on 100yr 2hr retention.
6476          KM        C value is based on future land use, P=2.7, A=acres
6477          DT    RL47     7.8      0.0
6478          DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6479          DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

6480          KK   DL421RETRIEVE
6481          DR  DL421S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6482          KK  L42L47ROUTE
6483          KM        Cross-section: Cross section estimated from 1992 survey
6484          KM        Manning's N Value: clean earth; straight; street LOB
6485          RS       2    FLOW
6486          RC   0.016   0.022   0.016    5287  0.0057    0.00
6487          RX  100.00  112.00  116.00  120.00  125.00  129.00  133.00  150.00
6488          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1146.00
              *

6489          KK   CPL47COMBINE
6490          HC       3   3.089
              *

6491          KK   DL471DIVERT
6492          KM        Bethany Home at Citrus split flow
6493          DT  DL471S      0.0      0.0
6494          DI     0.0   379.8  1603.8  3817.4  6818.0      0.0      0.0      0.0      0.0      0.0
6495          DQ     0.0   185.0   185.0   185.0   185.0      0.0      0.0      0.0      0.0      0.0
              *

6496          KK   DL472DIVERT
6497          KM        Bethany Home at Citrus split flow
6498          DT  DL472S      0.0      0.0
6499          DI     0.0   194.8  1418.8  3632.4  6633.0      0.0      0.0      0.0      0.0      0.0
6500          DQ     0.0   179.6  1195.7  2776.3  4806.5      0.0      0.0      0.0      0.0      0.0
              *

6501          KK  L47L48ROUTE
6502          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6503          KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6504          RS       4    FLOW
6505          RC   0.032   0.032   0.013    5306  0.0045    0.00
6506          RX  100.00  140.00  160.00  168.00  174.00  182.00  194.00  206.00
6507          RY  1124.5 1124.25 1124.00 1122.00 1122.10 1124.00 1124.25 1124.50
              *

6508          KK     L48BASIN
6509          KM        BASIN BOUNDARY FROM ROMOLA 42 BLKS
6510          BA   1.003
6511          LG    0.28    0.25    4.10    0.48      12
6512          UI       0     134     450     731     976    1574    1300     961     702     386
6513          UI     227     142      61      41      42       0       0       0       0       0
6514          UI       0       0       0       0       0       0       0       0       0       0
6515          UI       0       0       0       0       0       0       0       0       0       0
6516          UI       0       0       0       0       0       0       0       0       0       0
              *

6517          KK  DL48REDIVERT
6518          KM        Additional Retention based on 100yr 2hr retention.
6519          KM        C value is based on future land use, P=2.7, A=acres
6520          DT    RL48    27.4      0.0
6521          DI     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
6522          DQ     0.0   500.0  5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6523          KK   DL422RETRIEVE
6524          DR  DL422S
              *
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6525          KK  L42L48ROUTE
6526          KM        Cross-section: Cross section estimated from 1992 survey
6527          KM        Manning's N Value: clean earth; straight;
6528          RS       7    FLOW
6529          RC   0.022   0.022   0.022   10523  0.0030    0.00
6530          RX  100.00  125.00  130.00  135.00  138.00  143.00  148.00  168.00
6531          RY  1146.0 1145.00 1144.00 1143.00 1142.90 1144.00 1145.00 1145.00
              *

6532          KK   DL431RETRIEVE
6533          DR  DL431S
              *

6534          KK  L43L48ROUTE
6535          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6536          KM        aerial / Manning's N Value: clean earth; straight, street LOB
6537          RS       9    FLOW
6538          RC   0.022   0.022   0.016    5357  0.0045    0.00
6539          RX  100.00  120.00  128.00  136.00  142.00  150.00  170.00  190.00
6540          RY  1120.5 1120.25 1120.00 1118.00 1118.10 1120.00 1120.25 1120.50
              *

6541          KK   CPL48COMBINE
6542          HC       4   9.992
              *

6543          KK   DL481DIVERT
6544          KM        Bethany Home at Cotton split flow
6545          DT  DL481S      0.0     0.0
6546          DI     0.0   398.6  1307.1  2640.8  4556.3     0.0     0.0     0.0     0.0     0.0
6547          DQ     0.0     0.0    16.8    73.0   287.0     0.0     0.0     0.0     0.0     0.0
              *

6548          KK   DL482DIVERT
6549          KM        Bethany Home at Cotton split flow
6550          DT  DL482S      0.0     0.0
6551          DI     0.0   398.6  1290.3  2567.8  4269.2     0.0     0.0     0.0     0.0     0.0
6552          DQ     0.0     3.2    21.1    47.3    79.8     0.0     0.0     0.0     0.0     0.0
              *

6553          KK  L48L49ROUTE
6554          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6555          KM        aerial / Manning's N Value: clean earth; straight; street ROB
6556          RS       3    FLOW
6557          RC   0.022   0.022   0.013    2488  0.0040    0.00
6558          RX  100.00  101.00  540.00  548.00  550.00  558.00  566.00  576.00
6559          RY  1102.7 1102.30 1102.00 1100.00 1100.10 1102.00 1102.25 1102.65
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6560          KK     L49BASIN
6561          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY
6562          KM        AG LAND, EASTERN BOUNDARY LOOP 303
6563          BA   0.473
6564          LG    0.10    0.25    4.10    0.65      81
6565          UI       0     176     557     996     964     565     228     107      32      32
6566          UI       0       0       0       0       0       0       0       0       0       0
6567          UI       0       0       0       0       0       0       0       0       0       0
6568          UI       0       0       0       0       0       0       0       0       0       0
6569          UI       0       0       0       0       0       0       0       0       0       0
              *

6570          KK  DL49REDIVERT
6571          KM        Additional Retention based on 100yr 2hr retention.
6572          KM        C value is based on future land use, P=2.7, A=acres
6573          DT    RL49    49.5     0.0
6574          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6575          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6576          KK   DL432RETRIEVE
6577          DR  DL432S
              *

6578          KK  L43L49ROUTE
6579          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6580          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6581          RS      18    FLOW
6582          RC   0.035   0.035   0.035    7758  0.0045    0.00
6583          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6584          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6585          KK   DL441RETRIEVE
6586          DR  DL441S
              *

6587          KK  L44L49ROUTE
6588          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
6589          KM        aerial / Manning's N Value: clean earth; straight; street LOB
6590          RS       1    FLOW
6591          RC   0.016   0.022   0.022    5329  0.0041    0.00
6592          RX  100.00  123.00  129.00  135.00  147.00  153.00  159.00  190.00
6593          RY  1111.2 1111.00 1109.50 1108.00 1108.10 1109.50 1111.00 1111.20
              *

6594          KK   CPL49COMBINE
6595          HC       4  24.492
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6596          KK   DL491DIVERT
6597          KM        Bethany Home at L303 split flow
6598          DT  DL491S      0.0     0.0
6599          DI     0.0   199.8   761.4  1789.9  3518.1     0.0     0.0     0.0     0.0     0.0
6600          DQ     0.0   182.5   611.3  1275.8  2339.6     0.0     0.0     0.0     0.0     0.0
              *

6601          KK   DL492DIVERT
6602          KM        Bethany Home at L303 split flow
6603          DT  DL492S      0.0     0.0
6604          DI     0.0    17.4   150.1   514.1  1178.6     0.0     0.0     0.0     0.0     0.0
6605          DQ     0.0    17.4    88.0   188.9   312.7     0.0     0.0     0.0     0.0     0.0
              *
```

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6606          KK  L49B44ROUTE
6607          KM        Cross-section: Cross section estimated from aerial
6608          KM        Manning's N Value: clean straight earth
6609          RS       3    FLOW
6610          RC   0.022   0.022   0.022    2903  0.0041    0.00
6611          RX  100.00  115.00  130.00  145.00  175.00  190.00  205.00  220.00
6612          RY  1088.5 1088.25 1088.00 1082.00 1082.10 1088.00 1088.25 1088.50
              *

6613          KK     B44BASIN
6614          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
6615          KM        PHOTOGRAPHY OF AG LAND AND1990 TOPO
6616          BA   0.525
6617          LG    0.13    0.25    4.25    0.57      69
6618          UI       0     173     559     960    1124     680     317     144      53      33
6619          UI       0       0       0       0       0       0       0       0       0       0
6620          UI       0       0       0       0       0       0       0       0       0       0
6621          UI       0       0       0       0       0       0       0       0       0       0
6622          UI       0       0       0       0       0       0       0       0       0       0
              *

6623          KK  DB44REDIVERT
6624          KM        Additional Retention based on 100yr 6hr retention.
6625          KM        C value is based on future land use, P=3.2, A=acres
6626          DT    RB44    49.4     0.0
6627          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6628          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6629          KK   DL442RETRIEVE
6630          DR  DL442S
              *

6631          KK  L44B44ROUTE
6632          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6633          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6634          RS      10    FLOW
6635          RC   0.035   0.035   0.035    7854  0.0043    0.00
6636          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6637          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                        HEC-1 INPUT                                          PAGE170

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6638          KK   DB401RETRIEVE
6639          DR  DB401S
              *

6640          KK  B40B44ROUTE
6641          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width based on
6642          KM        aerial & topo / Manning's N Value: earth w/ sparse trees and brush
6643          KM        street LOB
6644          RS      12    FLOW
6645          RC   0.013   0.032   0.038    5333  0.0037    0.00
6646          RX  100.00  112.00  128.00  136.00  138.00  146.00  449.00  450.00
6647          RY  1084.8 1084.50 1084.00 1082.00 1082.10 1084.00 1084.40 1084.80
              *

6648          KK   CPB44COMBINE
6649          HC       4  26.025
              *

6650          KK   DB441DIVERT
6651          KM        Bethany Home at Sarival split flow
6652          DT  DB441S      0.0     0.0
6653          DI     0.0  1083.7  2846.1  5566.3  9305.7     0.0     0.0     0.0     0.0     0.0
6654          DQ     0.0   133.1   579.6  1378.1  2728.9     0.0     0.0     0.0     0.0     0.0
              *

6655          KK   DB442DIVERT
6656          KM        Bethany Home at Sarival split flow
6657          DT  DB442S      0.0     0.0
6658          DI     0.0   950.6  2266.5  4188.3  6576.8     0.0     0.0     0.0     0.0     0.0
6659          DQ     0.0    83.1   145.7   219.1   301.9     0.0     0.0     0.0     0.0     0.0
              *

6660          KK  B44B45ROUTE
6661          KM        Cross-section: Estimated 4' deep, width and side slopes based on
6662          KM        aerial & topo / Manning's N Value: clean straight earth, street ROB
6663          RS       1    FLOW
6664          RC   0.022   0.022   0.016    2127  0.0019    0.00
6665          RX  100.00  120.00  140.00  152.00  192.00  204.00  224.00  236.00
6666          RY  1078.5 1078.25 1078.00 1074.00 1074.10 1078.00 1078.25 1078.50
              *

6667          KK     B45BASIN
6668          KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
6669          BA   0.805
6670          LG    0.15    0.25    4.70    0.41      62
6671          UI       0     118     457     682     987    1409     970     689     433     203
6672          UI     132      57      36      36       0       0       0       0       0       0
6673          UI       0       0       0       0       0       0       0       0       0       0
6674          UI       0       0       0       0       0       0       0       0       0       0
6675          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6676          KK  DB45REDIVERT
6677          KM        Additional Retention based on 100yr 2hr retention.
6678          KM        C value is based on future land use, P=2.7, A=acres
6679          DT    RB45    63.5     0.0
6680          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6681          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6682          KK   DB402RETRIEVE
6683          DR  DB402S
              *

6684          KK  B40B45ROUTE
6685          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on
6686          KM        aerial & topo / Manning's N Value: clean straight earth
6687          RS       7    FLOW
6688          RC   0.022   0.022   0.022    6771  0.0037    0.00
```

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6689          RX  100.00  120.00  140.00  152.00  153.00  165.00  175.00  185.00
6690          RY  1090.2 1090.10 1090.00 1087.00 1087.10 1090.00 1090.10 1090.20
              *

6691          KK  DB41SERETRIEVE
6692          DR   DB41S
              *

6693          KK  B41B45ROUTE
6694          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6695          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6696          RS      11    FLOW
6697          RC   0.035   0.035   0.035    8616  0.0009    0.00
6698          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6699          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6700          KK   CPB45COMBINE
6701          HC       5  42.941
              *

6702          KK  B45B47ROUTE
6703          KM        Cross-section:
6704          KM        Manning's N Value: avg value for cultivated areas
6705          RS       8    FLOW
6706          RC   0.038   0.038   0.038    5550  0.0043    0.00
6707          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
6708          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

6709          KK     W21BASIN
6710          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN,
6711          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
6712          BA   0.420
6713          LG    0.25    0.25    4.35    0.47      30
6714          UI       0     127     423     697     900     570     300     126      57      25
6715          UI      26       0       0       0       0       0       0       0       0       0
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6716          UI       0       0       0       0       0       0       0       0       0       0
6717          UI       0       0       0       0       0       0       0       0       0       0
6718          UI       0       0       0       0       0       0       0       0       0       0
              *

6719          KK  DW21REDIVERT
6720          KM        Additional Retention based on 100yr 2hr retention.
6721          KM        C value is based on future land use, P=2.7, A=acres
6722          DT    RW21    32.3     0.0
6723          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6724          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6725          KK  W21L50ROUTE
6726          KM        Cross-section: Estimated 3' deep, side slopes and width based on
6727          KM        aerial / Manning's N Value: natural desert wash w/ vegetation
6728          RS      24    FLOW
6729          RC   0.035   0.035   0.035    6272  0.0056    0.00
6730          RX  100.00  110.00  120.00  146.00  166.00  236.00  256.00  276.00
6731          RY  1138.5 1138.25 1138.00 1132.00 1132.10 1136.00 1136.25 1136.50
              *

6732          KK     L50BASIN
6733          KM        BASIN BOUNDARY FROM BEARDSLEY CSR
6734          KM        EASTERN BOUNDARY BASED ON ROMOLA 42 BLKS
6735          BA   0.498
6736          LG    0.25    0.25    4.15    0.52      25
6737          UI       0      90     352     523     860     813     539     342     154      92
6738          UI      35      25      25       0       0       0       0       0       0       0
6739          UI       0       0       0       0       0       0       0       0       0       0
6740          UI       0       0       0       0       0       0       0       0       0       0
6741          UI       0       0       0       0       0       0       0       0       0       0
              *

6742          KK  DL50REDIVERT
6743          KM        Additional Retention based on 100yr 2hr retention.
6744          KM        C value is based on future land use, P=2.7, A=acres
6745          DT    RL50    34.5     0.0
6746          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6747          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6748          KK   CPL50COMBINE
6749          HC       2   0.918
              *

6750          KK  L50L51ROUTE
6751          KM        Cross-section: Cross-section determined from aerial
6752          KM        Manning's N Value: clean earth; straight, street ROB
6753          RS       3    FLOW
6754          RC   0.022   0.022   0.013    2654  0.0049    0.00
6755          RX  100.00  101.00  330.00  340.00  346.00  356.00  371.00  386.00
6756          RY  1126.5 1126.25 1126.00 1123.00 1123.10 1126.00 1126.25 1126.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6757          KK     L51BASIN
6758          KM        BASIN BOUNDARY FROM COTTONWOOD ESTATES AND SAVANNAH
6759          BA   0.495
6760          LG    0.27    0.25    4.10    0.49      15
6761          UI       0      72     269     408     580     852     609     434     286     129
6762          UI      88      43      21      22       0       0       0       0       0       0
6763          UI       0       0       0       0       0       0       0       0       0       0
6764          UI       0       0       0       0       0       0       0       0       0       0
6765          UI       0       0       0       0       0       0       0       0       0       0
              *

6766          KK  DL51REDIVERT
6767          KM        Retention volume estimated based on aerial
6768          DT    RL51    26.9     0.0
6769          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6770          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6771          KK   DL461RETRIEVE
6772          DR  DL461S
```

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                *
6773            KK  L46L51ROUTE
6774            KM        Cross-section: Cross-section determined from aerial
6775            KM        Manning's N Value: earth w/ sparse trees and brush
6776            RS       5    FLOW
6777            RC   0.032   0.032   0.032    5512  0.0045    0.00
6778            RX  100.00  105.00  110.00  130.00  150.00  170.00  190.00  210.00
6779            RY  1124.5 1124.25 1124.00 1120.00 1120.10 1124.00 1124.25 1124.50
                *

6780            KK   CPL51COMBINE
6781            HC       3   3.265
                *

6782            KK  L51L52ROUTE
6783            KM        Cross-section: Estimated 4:1 sideslopes, width based on
6784            KM        aerial / Manning's N Value: earth w/ sparse trees and brush
6785            RS       3    FLOW
6786            RC   0.032   0.032   0.032    2644  0.0034    0.00
6787            RX  100.00  122.00  144.00  156.00  176.00  188.00  200.00  212.00
6788            RY  1117.5 1116.25 1116.00 1113.00 1113.10 1116.00 1116.25 1117.50
                *

6789            KK     L52BASIN
6790            KM        BASIN BOUNDARY FROM RUSSEL RANCH PHASE 1 AND PHASE 2
6791            BA   0.498
6792            LG    0.26    0.25    4.00    0.53      20
6793            UI       0      61     187     322     417     623     704     513     381     274
6794            UI     134      96      63      22      19      19      18       0       0       0
6795            UI       0       0       0       0       0       0       0       0       0       0
6796            UI       0       0       0       0       0       0       0       0       0       0
6797            UI       0       0       0       0       0       0       0       0       0       0
                *
1                                          HEC-1 INPUT                                          PAGE174

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6798            KK  DL52REDIVERT
6799            KM        Retention volume estimated based on aerial
6800            DT    RL52    31.7     0.0
6801            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6802            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

6803            KK   DL462RETRIEVE
6804            DR  DL462S
                *

6805            KK  L46L52ROUTE
6806            KM        Cross-section: Estimated 4:1 sideslopes, width based on
6807            KM        aerial, included wall / Manning's N Value: gravel
6808            RS       7    FLOW
6809            RC   0.023   0.023   0.023    7754  0.0044    0.00
6810            RX  100.00  102.00  107.00  122.00  134.00  149.00  154.00  154.10
6811            RY  1000.5 1000.00  998.00  996.00  996.10  998.00 1000.00 1000.50
                *

6812            KK   DL471RETRIEVE
6813            DR  DL471S
                *

6814            KK  L47L52ROUTE
6815            KM        Cross-section: Cross section estimated from aerial
6816            KM        Manning's N Value: clean earth; straight; street LOB
6817            RS       6    FLOW
6818            RC   0.016   0.022   0.022    5307  0.0038    0.00
6819            RX  100.00  132.00  138.00  144.00  148.00  152.00  156.00  160.00
6820            RY  1118.5 1118.00 1117.00 1116.00 1115.90 1117.00 1118.00 1118.50
                *

6821            KK   CPL52COMBINE
6822            HC       4       5
                *

6823            KK   DL521DIVERT
6824            KM        Camelback at Citrus split flow
6825            DT  DL521S     0.0     0.0
6826            DI     0.0   349.6  1281.0  3821.5  7631.2     0.0     0.0     0.0     0.0     0.0
6827            DQ     0.0    29.6   306.8  1432.6  3229.3     0.0     0.0     0.0     0.0     0.0
                *

6828            KK   DL522DIVERT
6829            KM        Camelback at Citrus split flow
6830            DT  DL522S     0.0     0.0
6831            DI     0.0   320.1   974.2  2389.0  4401.9     0.0     0.0     0.0     0.0     0.0
6832            DQ     0.0    15.2    51.2    99.4   157.1     0.0     0.0     0.0     0.0     0.0
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6833            KK  L52L53ROUTE
6834            KM        Cross-section: Cross-section determined from aerial
6835            KM        Manning's N Value: clean earth; straight; street ROB
6836            RS       3    FLOW
6837            RC   0.022   0.022   0.016    5286  0.0045    0.00
6838            RX  100.00  220.00  240.00  246.00  256.00  262.00  274.00  286.00
6839            RY  1094.5 1093.00 1092.50 1092.00 1092.10 1094.00 1094.25 1094.50
                *

6840            KK     L53BASIN
6841            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY AND AG LAND
6842            BA   1.002
6843            LG    0.21    0.25    4.45    0.44      39
6844            UI       0     151     607     910    1359    1732    1186     818     457     244
6845            UI     143      47      46      47       0       0       0       0       0       0
6846            UI       0       0       0       0       0       0       0       0       0       0
6847            UI       0       0       0       0       0       0       0       0       0       0
6848            UI       0       0       0       0       0       0       0       0       0       0
                *

6849            KK  DL53REDIVERT
6850            KM        Additional Retention based on 100yr 2hr retention.
6851            KM        C value is based on future land use, P=2.7, A=acres
6852            DT    RL53    82.8     0.0
6853            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6854            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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                *

6855            KK   DL472RETRIEVE
6856            DR  DL472S
                *

6857            KK  L47L53ROUTE
6858            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6859            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6860            RS       5    FLOW
6861            RC   0.035   0.035   0.035    9947  0.0048    0.00
6862            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6863            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

6864            KK   DL481RETRIEVE
6865            DR  DL481S
                *

6866            KK  L48L53ROUTE
6867            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6868            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6869            RS      18    FLOW
6870            RC   0.035   0.035   0.035    7110  0.0041    0.00
6871            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6872            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6873            KK   CPL53COMBINE
6874            HC       4  12.905
                *

6875            KK   DL531DIVERT
6876            KM        Camelback at Cotton split flow
6877            DT  DL531S      0.0     0.0
6878            DI     0.0   351.4  1270.7  2947.6  5463.3     0.0     0.0     0.0     0.0     0.0
6879            DQ     0.0    10.3   376.9  1055.3  2049.3     0.0     0.0     0.0     0.0     0.0
                *

6880            KK   DL532DIVERT
6881            KM        Camelback at Cotton split flow
6882            DT  DL532S      0.0     0.0
6883            DI     0.0   341.1   893.8  1892.3  3414.0     0.0     0.0     0.0     0.0     0.0
6884            DQ     0.0     2.9    41.8   103.8   182.2     0.0     0.0     0.0     0.0     0.0
                *

6885            KK  L53L54ROUTE
6886            KM        Cross-section: Cross-section determined from aerial
6887            KM        Manning's N Value: natural wash with heavy vegetation
6888            RS       2    FLOW
6889            RC   0.045   0.045   0.045     2532  0.0039    0.00
6890            RX  100.00  105.00  110.00  115.10  135.00  141.00  148.00  175.00
6891            RY  1080.0 1078.00 1076.50 1075.00 1074.90 1076.50 1078.00 1080.00
                *

6892            KK     L54BASIN
6893            KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY, AG LAND
6894            KM        AND EASTERN BOUNDARY LOOP 303
6895            BA   0.479
6896            LG    0.09    0.24    4.65    0.45      76
6897            UI       0     183     587    1055     957     556     212      93      33      33
6898            UI       0       0       0       0       0       0       0       0       0       0
6899            UI       0       0       0       0       0       0       0       0       0       0
6900            UI       0       0       0       0       0       0       0       0       0       0
6901            UI       0       0       0       0       0       0       0       0       0       0
                *

6902            KK  DL54REDIVERT
6903            KM        Additional Retention based on 100yr 6hr retention.
6904            KM        C value is based on future land use, P=3.2, A=acres
6905            DT    RL54     47.6     0.0
6906            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6907            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

6908            KK   DL482RETRIEVE
6909            DR  DL482S
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6910            KK  L48L54ROUTE
6911            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6912            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6913            RS      21    FLOW
6914            RC   0.035   0.035   0.035    7799  0.0042    0.00
6915            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6916            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

6917            KK   DL491RETRIEVE
6918            DR  DL491S
                *

6919            KK  L49L54ROUTE
6920            KM        Cross-section: Estimated 3' depth, 4:1 sideslopes, width
6921            KM        based on aerial and topo Manning's N Value: clean earth; straight
6922            RS       3    FLOW
6923            RC   0.022   0.022   0.022    5344  0.0040    0.00
6924            RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
6925            RY  1085.0 1084.25 1084.00 1081.00 1081.10 1084.00 1084.25 1085.00
                *

6926            KK   CPL54COMBINE
6927            HC       4  27.884
                *

6928            KK  DL54SEDIVERT
6929            KM        Camelback at L303 split flow
6930            DT   DL54S      0.0     0.0
6931            DI     0.0   354.3   836.1  1615.9  2817.2     0.0     0.0     0.0     0.0     0.0
6932            DQ     0.0   186.6   644.6  1337.5  2330.5     0.0     0.0     0.0     0.0     0.0
                *
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6933          KK  L54B46ROUTE
6934          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6935          KM        Manning's N Value: earth w/ sparse trees and brush
6936          RS       2    FLOW
6937          RC   0.032   0.032   0.032    2773  0.0043    0.00
6938          RX  100.00  120.00  140.00  152.00  164.00  176.00  188.00  200.00
6939          RY  1066.5 1066.25 1066.00 1062.00 1062.10 1066.00 1066.25 1066.50
              *

6940          KK     B46BASIN
6941          KM        BASIN BOUNDARY FROM LOOP 303, BASIN BOUNDARIES FROM AERIAL
6942          KM        PHOTOGRAPHY OF AG LAND AND 1990 TOPO
6943          BA   0.542
6944          LG    0.10    0.25    4.80    0.42      78
6945          UI       0     190     616    1083    1123     676     284     138      38      36
6946          UI       0       0       0       0       0       0       0       0       0       0
6947          UI       0       0       0       0       0       0       0       0       0       0
6948          UI       0       0       0       0       0       0       0       0       0       0
6949          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6950          KK  DB46REDIVERT
6951          KM        Additional Retention based on 100yr 2hr retention.
6952          KM        C value is based on future land use, P=2.7, A=acres
6953          DT    RB46    54.5     0.0
6954          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6955          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6956          KK   DL492RETRIEVE
6957          DR  DL492S
              *

6958          KK  L49B46ROUTE
6959          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
6960          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
6961          RS      10    FLOW
6962          RC   0.035   0.035   0.035    8051  0.0041    0.00
6963          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
6964          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

6965          KK   DB441RETRIEVE
6966          DR  DB441S
              *

6967          KK  B44B46ROUTE
6968          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6969          KM        Manning's N Value: clean straight earth
6970          RS       3    FLOW
6971          RC   0.022   0.022   0.022    5267  0.0038    0.00
6972          RX  100.00  123.00  136.00  139.00  143.00  147.00  157.00  167.00
6973          RY  1072.5 1072.30 1072.00 1070.00 1070.10 1072.00 1072.30 1072.50
              *

6974          KK   CPB46COMBINE
6975          HC       4  29.959
              *

6976          KK  B46B47ROUTE
6977          KM        Cross-section: Cross-section determined from aerial and 1990 topo
6978          KM        Manning's N Value: earth w/ sparse trees and brush, road right bank
6979          RS       2    FLOW
6980          RC   0.032   0.032   0.016    2597  0.0023    0.00
6981          RX  100.00  109.00  121.00  131.00  177.00  183.00  199.00  206.00
6982          RY  1056.1 1054.30 1054.00 1050.00 1049.90 1053.00 1056.00 1056.10
              *

6983          KK     B47BASIN
6984          KM        BASIN BOUNDARY FROM AERIAL PHOTOGRAPHY OF AG LAND
6985          BA   0.496
6986          LG    0.11    0.25    4.90    0.40      70
6987          UI       0     168     540     944    1047     632     284     133      43      32
6988          UI       0       0       0       0       0       0       0       0       0       0
6989          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

6990          UI       0       0       0       0       0       0       0       0       0       0
6991          UI       0       0       0       0       0       0       0       0       0       0
              *

6992          KK  DB47REDIVERT
6993          KM        Additional Retention based on 100yr 2hr retention.
6994          KM        C value is based on future land use, P=2.7, A=acres
6995          DT    RB47    47.9     0.0
6996          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
6997          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

6998          KK   DB442RETRIEVE
6999          DR  DB442S
              *

7000          KK  B44B47ROUTE
7001          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7002          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7003          RS      13    FLOW
7004          RC   0.035   0.035   0.035    7757  0.0034    0.00
7005          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7006          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7007          KK   CPB47COMBINE
7008          HC       4  47.371
              *

7009          KK  B47B48ROUTE
7010          KM        Cross-section: Estimated 4:1 side slopes, width based on aerial
7011          KM        Manning's N Value: earth w/ sparse trees and brush in bottom
7012          KM        clean straight earth banks
7013          RS       2    FLOW
7014          RC   0.022   0.032   0.022    2606  0.0019    0.00
7015          RX  100.00  109.00  121.00  131.00  177.00  183.00  199.00  206.00
7016          RY  1056.1 1054.30 1054.00 1050.00 1049.90 1053.00 1056.00 1056.10
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                *
7017            KK     B48BASIN
7018            KM        BASIN BOUNDARY FROM AG LAND, 1990 TOPO AND LAFB BOUNDARY
7019            BA   0.397
7020            LG    0.10     0.25     4.70     0.44       77
7021            UI       0      189      584     1035      719      344      129       39       30        0
7022            UI       0        0        0        0        0        0        0        0        0        0
7023            UI       0        0        0        0        0        0        0        0        0        0
7024            UI       0        0        0        0        0        0        0        0        0        0
7025            UI       0        0        0        0        0        0        0        0        0        0
                *
1                                                HEC-1 INPUT                                                    PAGE180

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7026            KK  DB48REDIVERT
7027            KM        Additional Retention based on 100yr 6hr retention.
7028            KM        C value is based on future land use, P=3.2, A=acres
7029            DT    RB48     42.0      0.0
7030            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7031            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

7032            KK   CPB48COMBINE
7033            HC       2   47.768
                *

7034            KK  B48B54ROUTE
7035            KM        Cross-section: Estimated 4:1 side slopes, width based on aerial
7036            KM        Manning's N Value: earth w/ sparse trees and brush
7037            RS       2     FLOW
7038            RC   0.032    0.032    0.032     4128  0.0022     0.00
7039            RX  100.00   104.00   108.00   114.00   222.00   230.00   233.00   237.00
7040            RY  1052.2  1052.10  1052.00  1048.00  1047.90  1052.00  1052.10  1052.20
                *

7041            KK     B42BASIN
7042            KM        BASIN BOUNDARY FROM LUKE AFB
7043            BA   0.348
7044            LG    0.15     0.25     4.80     0.40       29
7045            UI       0      431     1308      743      166       42        0        0        0        0
7046            UI       0        0        0        0        0        0        0        0        0        0
7047            UI       0        0        0        0        0        0        0        0        0        0
7048            UI       0        0        0        0        0        0        0        0        0        0
7049            UI       0        0        0        0        0        0        0        0        0        0
                *

7050            KK  DB42REDIVERT
7051            KM        Additional Retention based on 100yr 6hr retention.
7052            KM        C value is based on future land use, P=3.2, A=acres
7053            DT    RB42      1.2      0.0
7054            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7055            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

7056            KK  B42B53ROUTE
7057            KM        Cross-section: Cross section estimated from aerial & topo
7058            KM        Manning's N Value: earth w/ sparse trees and brush
7059            RS      30     FLOW
7060            RC   0.032    0.032    0.032    17837  0.0009     0.00
7061            RX  100.00   140.00   180.00   220.00   240.00   280.00   300.00   320.00
7062            RY  1070.5  1070.25  1070.00  1068.00  1068.10  1070.00  1072.00  1074.00
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7063            KK     B53BASIN
7064            KM        BASIN BOUNDARY FROM LUKE AFB
7065            BA   1.101
7066            LG    0.15     0.25     4.80     0.40       32
7067            UI       0       94      136      354      472      575      684      925     1181      935
7068            UI     766      631      508      404      239      163      140       95       66       29
7069            UI      29       29       28       29        0        0        0        0        0        0
7070            UI       0        0        0        0        0        0        0        0        0        0
7071            UI       0        0        0        0        0        0        0        0        0        0
                *

7072            KK  DB53REDIVERT
7073            KM        Additional Retention based on 100yr 2hr retention.
7074            KM        C value is based on future land use, P=2.7, A=acres
7075            DT    RB53     23.2      0.0
7076            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7077            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

7078            KK   CPB53COMBINE
7079            HC       2    1.449
                *

7080            KK  B53B54ROUTE
7081            KM        Cross-section: Cross-section determined from aerial and 1991 topo
7082            KM        Manning's N Value: earth w/ sparse trees and brush
7083            RS       3     FLOW
7084            RC   0.032    0.032    0.032     3082  0.0042     0.00
7085            RX  100.00   200.00   365.00   540.00   785.00   940.00  1050.00  1130.00
7086            RY  1056.5  1056.30  1056.00  1054.00  1054.10  1056.00  1056.30  1056.50
                *

7087            KK     B49BASIN
7088            KM        BASIN BOUNDARY FROM LUKE AFB
7089            BA   0.323
7090            LG    0.15     0.25     4.70     0.42       29
7091            UI       0      513     1378      507       81        0        0        0        0        0
7092            UI       0        0        0        0        0        0        0        0        0        0
7093            UI       0        0        0        0        0        0        0        0        0        0
7094            UI       0        0        0        0        0        0        0        0        0        0
7095            UI       0        0        0        0        0        0        0        0        0        0
                *

7096            KK  B49B50ROUTE
7097            KM        Cross-section: Cross-section estimated from aerial and topo-road
7098            KM        Manning's N Value: street, parking lot
7099            RS       4     FLOW
7100            RC   0.016    0.016    0.016     6292  0.0016     0.00
7101            RX  100.00   120.00   140.00   142.00   272.00   274.00   294.00   314.00
7102            RY  1075.0  1074.50  1074.00  1073.50  1073.50  1074.00  1074.50  1075.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7103          KK     B02BASIN
7104          KM        BASIN BOUNDARY FROM LUKE AFB HOUSING AND DYSART DRAIN
7105          BA   0.543
7106          LG    0.21    0.25    4.80    0.38      39
7107          UI       0      73     255     407     552     868     697     512     370     190
7108          UI     119      75      25      22      23       0       0       0       0       0
7109          UI       0       0       0       0       0       0       0       0       0       0
7110          UI       0       0       0       0       0       0       0       0       0       0
7111          UI       0       0       0       0       0       0       0       0       0       0
              *

7112          KK  DB02REDIVERT
7113          KM        Retention volume estimated based on aerial
7114          DT    RB02    20.7     0.0
7115          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7116          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7117          KK     B04BASIN
7118          KM        BASIN BOUNDARY FROM CAPISTRANO NORTH AND SOUTH
7119          KM        CASITAS BONITAS, LAFB HOUSING AND 1990 TOPO
7120          BA   0.315
7121          LG    0.23    0.25    4.60    0.40      38
7122          UI       0     500    1344     495      79       0       0       0       0       0
7123          UI       0       0       0       0       0       0       0       0       0       0
7124          UI       0       0       0       0       0       0       0       0       0       0
7125          UI       0       0       0       0       0       0       0       0       0       0
7126          UI       0       0       0       0       0       0       0       0       0       0
              *

7127          KK  DB04REDIVERT
7128          KM        Preliminary Drainage Report for Capistrano North
7129          KM        Drainage Report for Dysart Estates, Remaining
7130          KM        Retention Volume estimated from aerial
7131          DT    RB04    14.2     0.0
7132          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7133          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7134          KK  B04B02ROUTE
7135          KM        Cross-section: Route taken along Thunderbird Rd, with walls on either si
7136          RS       7    FLOW
7137          RC   0.016   0.016   0.016    6392  0.0011    0.00
7138          RX  100.00  101.00  124.00  124.10  184.00  184.10  207.00  208.00
7139          RY  1090.0 1082.00 1081.90 1081.40 1081.30 1081.90 1082.00 1090.00
              *

7140          KK   CPB02COMBINE
7141          HC       2   0.858
              *
1                                   HEC-1 INPUT                                                    PAGE183

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


7142          KK  B02B50ROUTE
7143          KM        Cross-section: From Litchfield Rd to Bullard Wash Trib outlet thru LAFB
7144          KM        route taken at roadway and parking lots north and south of
7145          KM        roadway per aerial and topo
7146          RS       4    FLOW
7147          RC   0.016   0.016   0.016    4817  0.0016    0.00
7148          RX  100.00  120.00  140.00  142.00  272.00  274.00  294.00  314.00
7149          RY  1075.0 1074.50 1074.00 1073.50 1073.40 1074.00 1074.50 1075.00
              *

7150          KK     B50BASIN
7151          KM        BASIN BOUNDARY FROM LUKE AFB
7152          BA   0.668
7153          LG    0.15    0.25    5.60    0.29      29
7154          UI       0     448    1337    1957     978     306      89       0       0       0
7155          UI       0       0       0       0       0       0       0       0       0       0
7156          UI       0       0       0       0       0       0       0       0       0       0
7157          UI       0       0       0       0       0       0       0       0       0       0
7158          UI       0       0       0       0       0       0       0       0       0       0
              *

7159          KK   CPB50COMBINE
7160          HC       3   1.849
              *

7161          KK  B50B52ROUTE
7162          KM        Cross-section: Cross section estimated from aerial & topo
7163          KM        Manning's N Value: natural desert wash w/ vegetation
7164          RS       3    FLOW
7165          RC   0.032   0.032   0.032    6368  0.0027    0.00
7166          RX  100.00  115.00  130.00  165.00  175.00  195.00  210.00  225.00
7167          RY  1073.0 1072.25 1072.00 1066.00 1066.10 1072.00 1072.25 1073.00
              *

7168          KK     B51BASIN
7169          KM        BASIN BOUNDARY FROM LUKE AFB
7170          BA   0.609
7171          LG    0.15    0.25    5.40    0.30      29
7172          UI       0     309     944    1640    1078     471     182      47       0       0
7173          UI       0       0       0       0       0       0       0       0       0       0
7174          UI       0       0       0       0       0       0       0       0       0       0
7175          UI       0       0       0       0       0       0       0       0       0       0
7176          UI       0       0       0       0       0       0       0       0       0       0
              *

7177          KK  B51B52ROUTE
7178          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7179          KM        width based on aerial & topo / Manning's N Value
7180          KM        earth w/ sparse trees and brush
7181          RS       6    FLOW
7182          RC   0.032   0.032   0.032    5441  0.0015    0.00
7183          RX  100.00  130.00  160.00  172.00  177.00  193.00  300.00  350.00
7184          RY  1066.0 1064.25 1064.00 1061.00 1061.10 1064.00 1064.25 1066.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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7185          KK     B52BASIN
7186          KM        BASIN BOUNDARY FROM LUKE AFB
7187          BA   0.842
7188          LG    0.12     0.25     5.30     0.33       56
7189          UI       0      345     1073     1973     1630      923      337      134       59        0
7190          UI       0        0        0        0        0        0        0        0        0        0
7191          UI       0        0        0        0        0        0        0        0        0        0
7192          UI       0        0        0        0        0        0        0        0        0        0
7193          UI       0        0        0        0        0        0        0        0        0        0
              *

7194          KK  DB52REDIVERT
7195          KM        Additional Retention based on 100yr 2hr retention.
7196          KM        C value is based on future land use, P=2.7, A=acres
7197          DT    RB52     73.3      0.0
7198          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7199          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7200          KK   CPB52COMBINE
7201          HC       3      3.3
              *

7202          KK  B52B54ROUTE
7203          KM        Cross-section: Cross-section determined from aerial and 1991 topo
7204          KM        Manning's N Value: earth w/ sparse trees and brush
7205          RS       3     FLOW
7206          RC   0.032    0.032    0.032     3082   0.0042     0.00
7207          RX  100.00   200.00   365.00   540.00   785.00   940.00  1050.00  1130.00
7208          RY  1056.5  1056.30  1056.00  1054.00  1054.10  1056.00  1056.30  1056.50
              *

7209          KK     B54BASIN
7210          KM        BASIN BOUNDARY FROM FR CAL FACLON GOLF, ARIZONA MOTORSPORTS PARK,
7211          KM        LAFB BOUNDARY AND CAMELBACK CHANNEL
7212          BA   1.228
7213          LG    0.12     0.25     4.65     0.46       44
7214          UI       0      392     1282     2168     2649     1599      795      350      136       78
7215          UI       0        0        0        0        0        0        0        0        0        0
7216          UI       0        0        0        0        0        0        0        0        0        0
7217          UI       0        0        0        0        0        0        0        0        0        0
7218          UI       0        0        0        0        0        0        0        0        0        0
              *

7219          KK  DB54REDIVERT
7220          KM        Retention volume estimated based on aerial
7221          DT    RB54     79.7      0.0
7222          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7223          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7224          KK   CPB54COMBINE
7225          KM        Bullard Wash at Camelback Road
7226          HC       4   53.745
              *

7227          KK  B54B57ROUTE
7228          KM        Geometry from Bullard Wash L33PE4H9.OUT,
7229          KM        4/18/07 by WoodPatel provided by FCDMC
7230          RS       3     FLOW
7231          RC   0.030    0.030    0.030     5603   0.0020     0.00
7232          RX    0.00    48.90    61.90    74.90    87.90   100.90   113.90   162.70
7233          RY  1047.6  1039.50  1039.49  1039.48  1039.49  1039.50  1039.80  1047.60
              *

7234          KK     L55BASIN
7235          KM        BASIN BOUNDARY FROM 1990 TOPO
7236          BA   0.497
7237          LG    0.30     0.25     4.00     0.52       12
7238          UI       0       69      251      390      539      838      620      453      316      148
7239          UI      97       57       21       22       21        0        0        0        0        0
7240          UI       0        0        0        0        0        0        0        0        0        0
7241          UI       0        0        0        0        0        0        0        0        0        0
7242          UI       0        0        0        0        0        0        0        0        0        0
              *

7243          KK  DL55REDIVERT
7244          KM        Additional Retention based on 100yr 6hr retention.
7245          KM        C value is based on future land use, P=3.2, A=acres
7246          DT    RL55     24.4      0.0
7247          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7248          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7249          KK   DL551DIVERT
7250          KM        Indian School at Perryville split flow
7251          DT  DL551S      0.0      0.0
7252          DI     0.0    155.2   1033.7   2463.5   4920.4      0.0      0.0      0.0      0.0      0.0
7253          DQ     0.0      0.0     97.8    314.7    781.8      0.0      0.0      0.0      0.0      0.0
              *

7254          KK   DL552DIVERT
7255          KM        Indian School at Perryville split flow
7256          DT  DL552S      0.0      0.0
7257          DI     0.0    155.2    935.9   2148.8   4138.5      0.0      0.0      0.0      0.0      0.0
7258          DQ     0.0      7.9     34.4     71.2    115.9      0.0      0.0      0.0      0.0      0.0
              *

7259          KK  L55L56ROUTE
7260          KM        Cross-section: Estimated 3' depth,  4:1 sideslopes
7261          KM        width based on aerial / Manning's N Value
7262          KM        clean earth; straight; street  ROB
7263          RS       5     FLOW
7264          RC   0.022    0.022    0.016     5334   0.0051     0.00
7265          RX  100.00   120.00   140.00   152.00   172.00   184.00   204.00   224.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7266          RY  1096.5 1096.25 1096.00 1093.00 1093.10 1096.00 1096.25 1096.50
              *

7267          KK     L56BASIN
7268          KM        SEDELLA
7269          BA   0.999
7270          LG    0.29     0.25     4.00     0.48        8
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7271          UI       0     124     368     643     832    1230    1430    1021     773     551
7272          UI     274     197     123      48      39      38      38       0       0       0
7273          UI       0       0       0       0       0       0       0       0       0       0
7274          UI       0       0       0       0       0       0       0       0       0       0
7275          UI       0       0       0       0       0       0       0       0       0       0
              *

7276          KK  DL56REDIVERT
7277          KM        Retention volume estimated based on aerial
7278          DT    RL56   168.0     0.0
7279          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7280          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7281          KK   DL521RETRIEVE
7282          DR  DL521S
              *

7283          KK  L52L56ROUTE
7284          KM        Cross-section: Assumed v-ditch in ROW, widths based on aerials
7285          KM        Manning's N Value: clean earth; straight; street ROB
7286          RS       3    FLOW
7287          RC   0.016   0.022   0.022    5292  0.0051    0.00
7288          RX  100.00  112.00  122.00  128.00  134.00  140.00  152.00  164.00
7289          RY  1089.5 1088.25 1088.00 1086.00 1086.10 1088.00 1088.25 1089.50
              *

7290          KK   CPL56COMBINE
7291          HC       3   6.496
              *

7292          KK   DL561DIVERT
7293          KM        Indian School at Citrus split flow
7294          DT  DL561S     0.0     0.0
7295          DI     0.0    74.1   987.7  4308.5  9171.0     0.0     0.0     0.0     0.0     0.0
7296          DQ     0.0     0.0   322.7  1829.1  4074.0     0.0     0.0     0.0     0.0     0.0
              *

7297          KK   DL562DIVERT
7298          KM        Indian School at Citrus split flow
7299          DT  DL562S     0.0     0.0
7300          DI     0.0    74.1   665.0  2479.3  5097.1     0.0     0.0     0.0     0.0     0.0
7301          DQ     0.0     1.7    15.7    37.0    63.6     0.0     0.0     0.0     0.0     0.0
              *
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7302          KK  L56L57ROUTE
7303          KM        Cross-section: Estimated 2' depth, width and side slopes based on aerial
7304          KM        Manning's N Value: clean earth; straight; street ROB
7305          RS       5    FLOW
7306          RC   0.022   0.022   0.013    5299  0.0034    0.00
7307          RX  100.00  101.00  108.00  118.00  124.00  134.00  145.00  146.00
7308          RY  1080.6 1080.50 1080.00 1078.00 1078.10 1080.00 1080.50 1080.60
              *

7309          KK     L57BASIN
7310          KM        BASIN BOUNDARY FROM TALAVERDE ESTATES, LIBRARY PROP TRUST, TEN303
7311          BA   0.997
7312          LG    0.18    0.25    4.45    0.46      49
7313          UI       0     154     639     948    1476    1707    1146     783     388     223
7314          UI     118      48      48       0       0       0       0       0       0       0
7315          UI       0       0       0       0       0       0       0       0       0       0
7316          UI       0       0       0       0       0       0       0       0       0       0
7317          UI       0       0       0       0       0       0       0       0       0       0
              *

7318          KK  DL57REDIVERT
7319          KM        Additional Retention based on 100yr 2hr retention.
7320          KM        C value is based on future land use, P=2.7, A=acres
7321          DT    RL57   102.8     0.0
7322          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7323          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7324          KK   DL522RETRIEVE
7325          DR  DL522S
              *

7326          KK  L52L57ROUTE
7327          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7328          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7329          RS      24    FLOW
7330          RC   0.035   0.035   0.035    9910  0.0043    0.00
7331          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7332          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7333          KK   DL531RETRIEVE
7334          DR  DL531S
              *

7335          KK  L53L57ROUTE
7336          KM        Cross-section: Cross section estimated from aerial
7337          KM        Manning's N Value: street  ROW and clean earth
7338          RS       6    FLOW
7339          RC   0.016   0.022   0.022    5274  0.0032    0.00
7340          RX  100.00  113.00  126.00  141.00  166.00  186.00  201.00  214.00
7341          RY  1077.0 1076.25 1076.00 1075.00 1075.10 1076.00 1076.25 1077.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7342          KK   CPL57COMBINE
7343          HC       4  15.398
              *

7344          KK   DL571DIVERT
7345          KM        Indian School at Cotton split flow
7346          DT  DL571S     0.0     0.0
7347          DI     0.0    60.8   404.7  1424.5  3101.9     0.0     0.0     0.0     0.0     0.0
7348          DQ     0.0     2.7    39.0   238.0   569.0     0.0     0.0     0.0     0.0     0.0
              *

7349          KK   DL572DIVERT
7350          KM        Indian School at Cotton split flow
```

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7351          DT  DL572S      0.0      0.0
7352          DI     0.0     58.1    365.6   1186.5   2532.9      0.0      0.0      0.0      0.0      0.0
7353          DQ     0.0      2.7     17.6     39.4     66.5      0.0      0.0      0.0      0.0      0.0
              *

7354          KK  L57L58ROUTE
7355          KM        Cross-section: Width and side slopes estimated from topo
7356          KM        and aerial / Manning's N Value: clean earth; straight
7357          RS       4    FLOW
7358          RC   0.022   0.022   0.022    2016  0.0030    0.00
7359          RX  100.00  102.00  104.00  106.00  206.00  254.00  264.00  274.00
7360          RY  1061.0 1060.00 1059.50 1059.00 1059.50 1060.00 1060.25 1061.00
              *

7361          KK     L58BASIN
7362          KM        BASIN BOUNDARY FROM 1990 TOPO
7363          BA   0.443
7364          LG    0.10     0.25     4.60     0.48       80
7365          UI       0      150      483      842      935      565      254      118       39       29
7366          UI       0        0        0        0        0        0        0        0        0        0
7367          UI       0        0        0        0        0        0        0        0        0        0
7368          UI       0        0        0        0        0        0        0        0        0        0
7369          UI       0        0        0        0        0        0        0        0        0        0
              *

7370          KK  DL58REDIVERT
7371          KM        Additional Retention based on 100yr 2hr retention.
7372          KM        C value is based on future land use, P=2.7, A=acres
7373          DT    RL58     53.4      0.0
7374          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7375          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7376          KK   DL532RETRIEVE
7377          DR  DL532S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7378          KK  L53L58ROUTE
7379          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7380          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7381          RS      22    FLOW
7382          RC   0.035   0.035   0.035     7468  0.0033    0.00
7383          RX   25.00   50.00   75.00    99.00  124.00  148.00  173.00  198.00
7384          RY  1000.0  999.50  999.00   993.00  993.05  999.00  999.50 1000.00
              *

7385          KK  DL54SERETRIEVE
7386          DR   DL54S
              *

7387          KK  L54L58ROUTE
7388          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7389          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7390          RS       5    FLOW
7391          RC   0.035   0.035   0.035     7066  0.0028    0.00
7392          RX   25.00   50.00   75.00    99.00  124.00  148.00  173.00  198.00
7393          RY  1000.0  999.50  999.00   993.00  993.05  999.00  999.50 1000.00
              *

7394          KK   CPL58COMBINE
7395          HC       4   30.82
              *

7396          KK   DL581DIVERT
7397          KM        Indian School at L303 split flow
7398          DT  DL581S      0.0      0.0
7399          DI     0.0    284.1  1096.6   3059.3   6274.0      0.0      0.0      0.0      0.0      0.0
7400          DQ     0.0    185.2   614.3   1315.2   2413.8      0.0      0.0      0.0      0.0      0.0
              *

7401          KK   DL582DIVERT
7402          KM        Indian School at L303 split flow
7403          DT  DL582S      0.0      0.0
7404          DI     0.0     98.9   482.2   1744.1   3860.2      0.0      0.0      0.0      0.0      0.0
7405          DQ     0.0     15.9    45.0     82.7    127.3      0.0      0.0      0.0      0.0      0.0
              *

7406          KK  L58B55ROUTE
7407          KM        Cross-section: Assumed v-ditch in street ROW, width based on aerial
7408          KM        Manning's N Value: clean straight earth; road ROB
7409          RS       3    FLOW
7410          RC   0.022   0.022   0.016     3319  0.0042    0.00
7411          RX  100.00  110.00  135.00   148.00  149.00  162.00  188.00  200.00
7412          RY  1050.2 1050.10 1050.00 1049.00 1048.90 1050.00 1050.50 1052.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7413          KK     B55BASIN
7414          KM        BASIN BOUNDARY FROM 1990 TOPO
7415          BA   0.530
7416          LG    0.10     0.25     4.80     0.43       80
7417          UI       0      186      602     1059     1098      661      279      134       37       35
7418          UI       0        0        0        0        0        0        0        0        0        0
7419          UI       0        0        0        0        0        0        0        0        0        0
7420          UI       0        0        0        0        0        0        0        0        0        0
7421          UI       0        0        0        0        0        0        0        0        0        0
              *

7422          KK  DB55REDIVERT
7423          KM        Additional Retention based on 100yr 2hr retention.
7424          KM        C value is based on future land use, P=2.7, A=acres
7425          DT    RB55     65.8      0.0
7426          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
7427          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
              *

7428          KK   CPB55COMBINE
7429          HC       2   31.35
              *

7430          KK  B55B56ROUTE
7431          KM        Cross-section: assumed 3' depth, 4:1 sideslope, width based on
7432          KM        aerial / Manning's N Value: clean earth; straight
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7433          RS       5    FLOW
7434          RC   0.022   0.022   0.022    7006  0.0027    0.00
7435          RX  100.00  102.00  104.00  124.00  154.00  174.00  194.00  214.00
7436          RY  1037.0 1036.25 1036.00 1033.00 1033.10 1036.00 1036.25 1037.00
              *

7437          KK     B56BASIN
7438          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5
7439          BA   1.136
7440          LG    0.19    0.25    4.70    0.40      47
7441          UI       0      82      83     252     360     444     505     599     749    1023
7442          UI     917     758     646     538     458     377     268     159     138     117
7443          UI      83      70      25      26      25      25      25      26       0       0
7444          UI       0       0       0       0       0       0       0       0       0       0
7445          UI       0       0       0       0       0       0       0       0       0       0
              *

7446          KK  DB56REDIVERT
7447          KM        Retention volume estimated based on aerial
7448          DT    RB56   108.7     0.0
7449          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7450          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7451          KK   CPB56COMBINE
7452          HC       2  32.486
              *

7453          KK  B56B57ROUTE
7454          KM        Cross-section: Estimated 4:1 side slopes, 3' depth
7455          KM        width based on aerial / Manning's N Value: gravel
7456          RS       1    FLOW
7457          RC   0.023   0.023   0.023    1680  0.0018    0.00
7458          RX  100.00  113.00  122.00  128.00  148.00  156.00  171.00  184.00
7459          RY  1027.0 1025.25 1025.00 1022.00 1022.10 1025.00 1025.25 1027.00
              *

7460          KK     B57BASIN
7461          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 5 AND 1990 TOPO
7462          BA   1.119
7463          LG    0.24    0.24    5.10    0.33      21
7464          UI       0     156     564     877    1214    1887    1397    1021     710     332
7465          UI     219     128      48      48      48       0       0       0       0       0
7466          UI       0       0       0       0       0       0       0       0       0       0
7467          UI       0       0       0       0       0       0       0       0       0       0
7468          UI       0       0       0       0       0       0       0       0       0       0
              *

7469          KK  DB57REDIVERT
7470          KM        Retention volume estimated based on aerial
7471          DT    RB57    80.8     0.0
7472          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7473          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7474          KK   CPB57COMBINE
7475          HC       3  59.466
              *

7476          KK  B57B58ROUTE
7477          KM        Geometry from Bullard Wash L33PE4H9.OUT,
7478          KM        4/18/07 by WoodPatel provided by FCDMC
7479          RS       3    FLOW
7480          RC   0.030   0.030   0.030    5318  0.0027    0.00
7481          RX    0.00   70.00   83.00   96.00  109.00  122.00  135.00  205.00
7482          RY  1022.8 1015.80 1015.70 1015.60 1015.70 1015.80 1015.90 1022.80
              *

7483          KK     B58BASIN
7484          KM        BASIN BOUNDARY FROM PEBBLE CREEK PHASE 1
7485          BA   1.197
7486          LG    0.21    0.25    5.60    0.28      27
7487          UI       0     154     491     816    1072    1678    1637    1197     874     583
7488          UI     275     203     119      48      48      47       0       0       0       0
7489          UI       0       0       0       0       0       0       0       0       0       0
7490          UI       0       0       0       0       0       0       0       0       0       0
7491          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7492          KK  DB58REDIVERT
7493          KM        Pebblecreek Development Phase I - West Half Drainage
7494          KM        Report, Pebblecreek Development Phase I - East Half Drainage Report
7495          DT    RB58    55.4     0.0
7496          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7497          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7498          KK   CPB58COMBINE
7499          HC       2  60.663
              *

7500          KK  B58B59ROUTE
7501          KM        Geometry from Bullard Wash L33PE4H9.OUT,
7502          KM        4/18/07 by WoodPatel provided by FCDMC
7503          RS       3    FLOW
7504          RC   0.030   0.030   0.030    6454  0.0048    0.00
7505          RX    0.00    0.00   18.40   36.70   55.10   73.40   97.80   91.80
7506          RY  1013.1 1005.70 1005.60 1005.50 1005.60 1005.70 1005.80 1013.10
              *

7507          KK     B59BASIN
7508          KM        BASIN BOUNDARY FROM PUEBLO VERDE, ESTRELLA FALLS, AND RIO PASEO
7509          BA   0.699
7510          LG    0.16    0.25    5.80    0.25      56
7511          UI       0     117     475     697    1129    1166     785     515     235     142
7512          UI      65      34      34       0       0       0       0       0       0       0
7513          UI       0       0       0       0       0       0       0       0       0       0
7514          UI       0       0       0       0       0       0       0       0       0       0
7515          UI       0       0       0       0       0       0       0       0       0       0
              *

7516          KK  DB59REDIVERT
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7517          KM        Final Drainage Report for Rio Paseo Parcel 8, Drainage Report for
7518          KM        Parcels 9, 10, & 11 of Goodyear Planned Regional Center
7519          KM        (60% retention used)
7520          KM        Additional Retention based on 100yr 6hr retention.
7521          KM        C value is based on future land use, P=3.2, A=acres
7522          DT    RB59    65.9     0.0
7523          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7524          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7525          KK   CPB59COMBINE
7526          HC       2  61.362
              *

7527          KK  B59B65ROUTE
7528          KM        Cross-section: Estimated based on aerial
7529          KM        Manning's N Value: clean earth; straight
7530          RS       1    FLOW
7531          RC   0.022   0.022   0.022    1254  0.0040    0.00
7532          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
7533          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7534          KK     B61BASIN
7535          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
7536          KM        BY DEL RIO ENG (2006)
7537          BA   0.963
7538          LG    0.20    0.25    4.80    0.39      27
7539          UI       0      90     159     364     476     591     729    1076     979     764
7540          UI     621     495     380     211     153     117      90      37      27      27
7541          UI      28      28       0       0       0       0       0       0       0       0
7542          UI       0       0       0       0       0       0       0       0       0       0
7543          UI       0       0       0       0       0       0       0       0       0       0
              *

7544          KK  DB61REDIVERT
7545          KM        Pebblecreek Phase II Master Drainage Report (east half)
7546          DT    RB61    68.2     0.0
7547          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7548          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7549          KK  B61B62ROUTE
7550          KM        Cross-section: assumed ROW V-Ditch, 4:1 sideslopes
7551          KM        width based on aerial / Manning's N Value: clean earth;
7552          KM        straight; street LOB
7553          RS      10    FLOW
7554          RC   0.016   0.022   0.022    4105  0.0010    0.00
7555          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
7556          RY  1012.5 1012.25 1012.00 1009.00 1009.10 1012.00 1012.25 1012.50
              *

7557          KK     B62BASIN
7558          KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT BY DEL RIO
7559          KM        ENG (2006), MODIFIED TO INCLUDE NE AREA CONTRIBUTES AT ROAD OVERTOPPING
7560          BA   0.427
7561          LG    0.27    0.27    4.80    0.34      22
7562          UI       0      45     106     209     268     345     504     507     388     295
7563          UI     230     151      78      65      46      17      14      14      14       0
7564          UI       0       0       0       0       0       0       0       0       0       0
7565          UI       0       0       0       0       0       0       0       0       0       0
7566          UI       0       0       0       0       0       0       0       0       0       0
              *

7567          KK  DB62REDIVERT
7568          KM        Retention volume estimated based on aerial
7569          DT    RB62    27.8     0.0
7570          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7571          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7572          KK   CPB62COMBINE
7573          HC       2    1.39
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7574          KK  B62B63ROUTE
7575          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7576          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7577          RS       2    FLOW
7578          RC   0.035   0.035   0.035    1838  0.0058    0.00
7579          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7580          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7581          KK     B63BASIN
7582          KM        BASIN BOUNDARY FROM 1990 TOPO AND PEBBLE CREEK MARKETPLACE
7583          BA   0.124
7584          LG    0.10    0.24    4.80    0.40      83
7585          UI       0     225     551     157      24       0       0       0       0       0
7586          UI       0       0       0       0       0       0       0       0       0       0
7587          UI       0       0       0       0       0       0       0       0       0       0
7588          UI       0       0       0       0       0       0       0       0       0       0
7589          UI       0       0       0       0       0       0       0       0       0       0
              *

7590          KK  DB63REDIVERT
7591          KM        Additional Retention based on 100yr 6hr retention.
7592          KM        C value is based on future land use, P=3.2, A=acres
7593          DT    RB63    13.9     0.0
7594          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7595          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7596          KK   CPB63COMBINE
7597          HC       2   1.514
              *

7598          KK   SRB63STORAGE
7599          KM        Basin at I-10
7600          KO
7601          RS       1    STOR
7602          SV            0.17    1.61    4.19
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7603          SQ           82.00  694.00 1687.00
7604          SE  1002.8 1003.00 1003.50 1004.00
7605          ST
              *

7606          KK  B63B65ROUTE
7607          KM        Cross-section: Cross-section determined from aerial and
7608          KM        1991 topo / Manning's N Value: earth w/ sparse trees and brush
7609          RS       3    FLOW
7610          RC   0.032   0.032   0.032    2605  0.0054    0.00
7611          RX  100.00  104.00  108.00  122.00  123.00  137.00  140.00  145.00
7612          RY  998.50  998.25  998.00  995.00  995.10  998.00  999.00 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7613          KK     B64BASIN
7614          KM        BASIN BOUNDARY FROM GOODYEAR PLANNED RC AND ALEXAN ESTRELLA FALLS
7615          BA   0.229
7616          LG    0.17    0.25    4.80    0.38      64
7617          UI       0      75     248     429     485     294     135      62      22      14
7618          UI       0       0       0       0       0       0       0       0       0       0
7619          UI       0       0       0       0       0       0       0       0       0       0
7620          UI       0       0       0       0       0       0       0       0       0       0
7621          UI       0       0       0       0       0       0       0       0       0       0
              *

7622          KK  DB64REDIVERT
7623          KM        Drainage Report for Parcels 9, 10, & 11 of Goodyear Planned
7624          KM        Regional Center (40% retention used)
7625          KM        Additional Retention based on 100yr 6hr retention.
7626          KM        C value is based on future land use, P=3.2, A=acres
7627          DT    RB64    23.0     0.0
7628          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7629          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7630          KK  B64B65ROUTE
7631          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7632          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7633          RS      10    FLOW
7634          RC   0.035   0.035   0.035    4154  0.0032    0.00
7635          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7636          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7637          KK     B65BASIN
7638          KM        BASIN BOUNDARY FROM 1990 TOPO AND GOODYEAR CENTERPOINTE
7639          BA   0.234
7640          LG    0.10    0.25    5.10    0.36      80
7641          UI       0     689     993     115       0       0       0       0       0       0
7642          UI       0       0       0       0       0       0       0       0       0       0
7643          UI       0       0       0       0       0       0       0       0       0       0
7644          UI       0       0       0       0       0       0       0       0       0       0
7645          UI       0       0       0       0       0       0       0       0       0       0
              *

7646          KK  DB65REDIVERT
7647          KM        Additional Retention based on 100yr 2hr retention.
7648          KM        C value is based on future land use, P=2.7, A=acres
7649          DT    RB65    23.4     0.0
7650          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7651          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7652          KK   CPB65COMBINE
7653          HC       4  63.339
              *

7654          KK  B65B66ROUTE
7655          KM        Cross-section: Cross-section determined from 1991
7656          KM        topo / Manning's N Value: clean straight earth
7657          RS       4    FLOW
7658          RC   0.022   0.022   0.022    4400  0.0023    0.00
7659          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
7660          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *

7661          KK     S01BASIN
7662          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR ESTRELLA PARKWAY AND
7663          KM        1-10 DATED 8/26/04 BY KIMLEY HORN, FINAL DRAINAGE REPORT FOR PARKWAY
7664          KM        VILLAGE DATED 11/22/05 BY LANDFORM, FINAL DRAINAGE STATEMENT FOR
7665          KM        ESTRELLA SHOPS C DATED 6/5/07 BY CLC ASSOCIATES, BELLA
7666          BA   0.268
7667          LG    0.15    0.25    4.80    0.39      66
7668          UI       0     144     430     740     463     191      70      21       0       0
7669          UI       0       0       0       0       0       0       0       0       0       0
7670          UI       0       0       0       0       0       0       0       0       0       0
7671          UI       0       0       0       0       0       0       0       0       0       0
7672          UI       0       0       0       0       0       0       0       0       0       0
              *

7673          KK  DS01REDIVERT
7674          KM        Final Drainage Report Estrella Parkway and I-10, Final Drainage Report f
7675          KM        Parkway Village, Final Drainage Report for Canyon Trails Plaza Phase II,
7676          KM        Final Drainage Statement for Estrella Shops C, Final Drainage Report fo
7677          KM        Safeway at NWC of Estrella Parkway and Van Buren, Bella Rosa Subdivision
7678          KM        Final Drainage Study, Final Drainage Report for Travis Park at Canyon Tr
7679          KM        Parcel 3M1 (portion of retention used), Drainage Report for Canyon Trail
7680          KM        Unit 3A (portion of retention used)
7681          KM        Additional Retention based on 100yr 6hr retention.
7682          KM        C value is based on future land use, P=3.2, A=acres
7683          DT    RS01    39.9     0.0
7684          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7685          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7686          KK   DS011DIVERT
7687          KM        Van Buren at Estrella split flow
7688          DT  DS011S     0.0     0.0
7689          DI     0.0   137.2   537.6  1491.9  2902.6     0.0     0.0     0.0     0.0     0.0
7690          DQ     0.0    75.1   298.1   885.3  1750.8     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7691          KK   DS012DIVERT
7692          KM        Van Buren at Estrella split flow
7693          DT  DS012S     0.0     0.0
7694          DI     0.0    62.1   239.4   606.7  1151.8     0.0     0.0     0.0     0.0     0.0
7695          DQ     0.0    18.2    61.5   119.3   188.6     0.0     0.0     0.0     0.0     0.0
              *

7696          KK  S01B66ROUTE
7697          KM        Cross-section: Estimated 3' deep ; side slopes and
7698          KM        width based on aerial / Manning's N Value: clean straight earth
7699          RS       1    FLOW
7700          RC   0.022   0.022   0.022    3048  0.0052    0.00
7701          RX  100.00  112.00  124.00  134.00  140.00  150.00  158.00  166.00
7702          RY  986.50  986.25  986.00  983.00  983.10  986.00  986.25  986.50
              *

7703          KK     B66BASIN
7704          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO, FINAL DRAINAGE REPORT FOR
7705          KM        SYNDERS OF HANOVER DATED 11/11/05, FINAL DRAINAGE REPORT FOR
7706          KM        RANCHO EL  MIRAGE DATED 6/2/99
7707          BA   0.759
7708          LG    0.15    0.25    4.80    0.40      55
7709          UI       0     311     967    1778    1470     832     303     121      54       0
7710          UI       0       0       0       0       0       0       0       0       0       0
7711          UI       0       0       0       0       0       0       0       0       0       0
7712          UI       0       0       0       0       0       0       0       0       0       0
7713          UI       0       0       0       0       0       0       0       0       0       0
              *

7714          KK  DB66REDIVERT
7715          KM        Final Drainage Report Snyder's of Hanover I-10 and Bullard Ave
7716          KM        Final Drainage Report for Rancho Mirage, Final Drainage Report for
7717          KM        Southwest Specialty Foods, Drainage Statement for Estrella Crossroads
7718          KM        Additional Retention based on 100yr 6hr retention.
7719          KM        C value is based on future land use, P=3.2, A=acres
7720          DT    RB66    76.2     0.0
7721          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7722          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7723          KK   CPB66COMBINE
7724          HC       3  64.366
              *

7725          KK  B66B68ROUTE
7726          KM        Cross-section: Cross-section determined from aerial
7727          KM        and 1991 topo / Manning's N Value: clean earth channel
7728          KM        cultivated areas LOB and ROB
7729          RS       5    FLOW
7730          RC   0.038   0.022   0.038    5325  0.0030    0.00
7731          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
7732          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7733          KK   DS011RETRIEVE
7734          DR  DS011S
              *

7735          KK  S01S02ROUTE
7736          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7737          KM        width based on aerial / Manning's N Value: earth with
7738          KM        sparse trees and shrubs; clean straight earth LOB
7739          RS       1    FLOW
7740          RC   0.022   0.032   0.032    5352  0.0034    0.00
7741          RX  100.00  112.00  124.00  136.00  146.00  158.00  170.00  182.00
7742          RY  991.50  991.25  991.00  988.00  988.10  991.00  991.25  991.50
              *

7743          KK     S02BASIN
7744          KM        BASIN BOUNDARY FROM 1990 TOPO, MASTER DRAINAGE PLAN FOR WILDFLOWER
7745          KM        COMMUNITY DATED 4/96 BY KEOGH ENGINEERING, DRAINAGE REPORT FOR DESERT
7746          KM        EDGE HIGH SCHOOL DATED 12/13/00 BY KPFF CONSULTING ENGINEERS
7747          BA   0.606
7748          LG    0.19    0.25    4.80    0.41      40
7749          UI       0     145     505     771    1247     907     581     266     143      57
7750          UI      33      34       0       0       0       0       0       0       0       0
7751          UI       0       0       0       0       0       0       0       0       0       0
7752          UI       0       0       0       0       0       0       0       0       0       0
7753          UI       0       0       0       0       0       0       0       0       0       0
              *

7754          KK  DS02REDIVERT
7755          KM        Drainage Report for Desert Edge High School,
7756          KM        Remaining retention volume estimated from aerial
7757          KM        Additional Retention based on 100yr 6hr retention.
7758          KM        C value is based on future land use, P=3.2, A=acres
7759          DT    RS02    52.6     0.0
7760          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7761          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7762          KK   CPS02COMBINE
7763          HC       2   0.874
              *

7764          KK   DS021DIVERT
7765          KM        Yuma at Estrella split flow
7766          DT  DS021S     0.0     0.0
7767          DI     0.0    26.4   184.9   540.1  1546.9     0.0     0.0     0.0     0.0     0.0
7768          DQ     0.0     5.3    79.0   220.3   670.4     0.0     0.0     0.0     0.0     0.0
              *

7769          KK   DS022DIVERT
7770          KM        Yuma at Estrella split flow
7771          DT  DS022S     0.0     0.0
7772          DI     0.0    21.1   105.9   319.8   876.5     0.0     0.0     0.0     0.0     0.0
7773          DQ     0.0     9.9    42.9    88.9   144.9     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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7774          KK  S02B67ROUTE
7775          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
7776          KM        width based on aerial / Manning's N Value: clean straight
7777          KM        earth; earth with sparse trees and shrubs LOB and ROB
7778          RS       7    FLOW
7779          RC   0.032   0.022   0.032    1877  0.0021    0.00
7780          RX  100.00  120.00  140.00  148.00  152.00  160.00  168.00  176.00
7781          RY  972.50  972.25  972.00  970.00  970.10  972.00  972.25  972.50
              *

7782          KK     B67BASIN
7783          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CENTERRA
7784          KM        DATED 11/20/00 BY PREMIER ENGINEERING CO.
7785          BA   0.328
7786          LG    0.20    0.25    4.80    0.38      54
7787          UI       0      94     317     503     712     457     257     104      51      20
7788          UI      20       0       0       0       0       0       0       0       0       0
7789          UI       0       0       0       0       0       0       0       0       0       0
7790          UI       0       0       0       0       0       0       0       0       0       0
7791          UI       0       0       0       0       0       0       0       0       0       0
              *

7792          KK  DB67REDIVERT
7793          KM        Drainage Report for Centerra (50% retention volume used)
7794          KM        Additional Retention based on 100yr 6hr retention.
7795          KM        C value is based on future land use, P=3.2, A=acres
7796          DT    RB67    33.2     0.0
7797          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7798          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7799          KK   DS012RETRIEVE
7800          DR  DS012S
              *

7801          KK  S01B67ROUTE
7802          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7803          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7804          RS       1    FLOW
7805          RC   0.035   0.035   0.035    7887  0.0035    0.00
7806          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7807          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7808          KK   CPB67COMBINE
7809          HC       3   1.202
              *

7810          KK  B67B68ROUTE
7811          KM        Cross-section: Estimated based on aerial
7812          KM        Manning's N Value: clean straight earth
7813          RS       1    FLOW
7814          RC   0.022   0.022   0.022    1410  0.0085    0.00
7815          RX  100.00  110.00  120.00  132.00  144.00  156.00  166.00  176.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7816          RY  968.50  968.25  968.00  965.00  965.10  968.00  968.25  968.50
              *

7817          KK     B68BASIN
7818          KM        BASIN BOUNDARY FROM 1990 TOPO AND DRAINAGE REPORT
7819          KM        FOR CENTERRA DATED 11/20/00 BY PREMIER ENGINEERING CO.
7820          BA   0.736
7821          LG    0.16    0.24    5.30    0.32      46
7822          UI       0     222     742    1221    1577    1000     526     221      99      45
7823          UI      45       0       0       0       0       0       0       0       0       0
7824          UI       0       0       0       0       0       0       0       0       0       0
7825          UI       0       0       0       0       0       0       0       0       0       0
7826          UI       0       0       0       0       0       0       0       0       0       0
              *

7827          KK  DB68REDIVERT
7828          KM        Drainage Report for Centerra (50% retention volume used)
7829          KM        Additional Retention based on 100yr 6hr retention.
7830          KM        C value is based on future land use, P=3.2, A=acres
7831          DT    RB68    82.9     0.0
7832          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7833          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7834          KK   CPB68COMBINE
7835          HC       3  66.036
              *

7836          KK  B68B69ROUTE
7837          KM        Cross-section: Cross-section determined from 1991
7838          KM        topo and aerial/ Manning's N Value: clean straight earth
7839          RS       3    FLOW
7840          RC   0.022   0.022   0.022    5518  0.0031    0.00
7841          RX  100.00  200.00  400.00  600.00  800.00 1000.00 1200.00 1400.00
7842          RY  950.00  949.00  948.00  947.00  947.10  948.00  949.00  950.00
              *

7843          KK     B69BASIN
7844          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7845          BA   0.909
7846          LG    0.12    0.25    5.30    0.34      57
7847          UI       0     392    1227    2238    1712     921     324     123      67       0
7848          UI       0       0       0       0       0       0       0       0       0       0
7849          UI       0       0       0       0       0       0       0       0       0       0
7850          UI       0       0       0       0       0       0       0       0       0       0
7851          UI       0       0       0       0       0       0       0       0       0       0
              *

7852          KK  DB69REDIVERT
7853          KM        Additional Retention based on 100yr 2hr retention.
7854          KM        C value is based on future land use, P=2.7, A=acres
7855          DT    RB69    99.2     0.0
7856          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7857          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7858          KK   DS022RETRIEVE
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7859          DR  DS022S
              *

7860          KK  S02B69ROUTE
7861          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
7862          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
7863          RS      29    FLOW
7864          RC   0.035   0.035   0.035    8575  0.0043    0.00
7865          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
7866          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

7867          KK   CPB69COMBINE
7868          HC       3  66.945
              *

7869          KK  B69B70ROUTE
7870          KM        As Built plans for Bullard Wash Imprv, FCD 4700731
7871          KM        8/2008, N Value: earth with sparse trees and shrubs
7872          RS      19    FLOW
7873          RC   0.035   0.022   0.035    4315  0.0012    0.00
7874          RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
7875          RY  942.00  937.00  935.00  933.00  932.90  935.00  937.00  942.00
              *

7876          KK     B85BASIN
7877          KM        BASIN BOUNDARY FROM 1990 TOPO
7878          BA   0.407
7879          LG    0.10    0.25    5.80    0.27      82
7880          UI       0     126     422     703     883     538     268     117      48      25
7881          UI       0       0       0       0       0       0       0       0       0       0
7882          UI       0       0       0       0       0       0       0       0       0       0
7883          UI       0       0       0       0       0       0       0       0       0       0
7884          UI       0       0       0       0       0       0       0       0       0       0
              *

7885          KK  DB85REDIVERT
7886          KM        Final Drainage Report for Central Marketplace, Drainage Report for
7887          KM        the Roomstore, Drainage Report for Palm Valley Condominiums
7888          KM        Drainage Report for Palm Valley Crossing Phase II, Remaining
7889          KM        retention volume estimated from aerial
7890          DT    RB85    47.2     0.0
7891          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7892          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7893          KK  B85B86ROUTE
7894          KM        Cross-section: Estimated based on aerial
7895          KM        Manning's N Value: street and ROW
7896          RS       9    FLOW
7897          RC   0.022   0.016   0.022    5274  0.0030    0.00
7898          RX  100.00  120.00  141.00  143.00  226.00  228.00  248.00  269.00
7899          RY  1001.0 1000.50 1000.00  999.60  999.50 1000.00 1000.50 1001.00
              *
1                                        HEC-1 INPUT                                        PAGE202

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7900          KK     B86BASIN
7901          KM        BASIN BOUNDARY FROM 1990 TOPO
7902          BA   0.619
7903          LG    0.18    0.25    5.10    0.34      49
7904          UI       0     134     485     734    1208     957     622     327     164      79
7905          UI      33      34       0       0       0       0       0       0       0       0
7906          UI       0       0       0       0       0       0       0       0       0       0
7907          UI       0       0       0       0       0       0       0       0       0       0
7908          UI       0       0       0       0       0       0       0       0       0       0
              *

7909          KK  DB86REDIVERT
7910          KM        Retention volume estimated based on aerial
7911          DT    RB86    27.3     0.0
7912          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7913          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7914          KK   CPB86COMBINE
7915          HC       2   1.026
              *

7916          KK  B86B89ROUTE
7917          KM        Cross-section: Estimated based on aerial
7918          KM        Manning's N Value: street and ROW
7919          RS       3    FLOW
7920          RC   0.022   0.016   0.022    4090  0.0024    0.00
7921          RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
7922          RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
              *

7923          KK     B87BASIN
7924          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7925          BA   0.273
7926          LG    0.18    0.25    5.20    0.32      51
7927          UI       0     121     374     675     512     271      96      36      20       0
7928          UI       0       0       0       0       0       0       0       0       0       0
7929          UI       0       0       0       0       0       0       0       0       0       0
7930          UI       0       0       0       0       0       0       0       0       0       0
7931          UI       0       0       0       0       0       0       0       0       0       0
              *

7932          KK  DB87REDIVERT
7933          KM        Retention volume estimated based on aerial
7934          DT    RB87     9.6     0.0
7935          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7936          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                        HEC-1 INPUT                                        PAGE203

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7937          KK  B87B88ROUTE
7938          KM        Cross-section: Estimated based on aerial
7939          KM        Manning's N Value: street and ROW
7940          RS       6    FLOW
7941          RC   0.022   0.016   0.022    7579  0.0021    0.00
7942          RX  100.00  102.00  105.00  107.00  243.00  245.00  247.00  250.00
7943          RY  1001.0 1000.10 1000.00  999.50  999.60 1000.00 1000.10 1001.00
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7944          KK     B88BASIN
7945          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
7946          BA   0.509
7947          LG    0.20    0.25    4.80    0.39      50
7948          UI       0      61     170     304     390     563     719     540     414     308
7949          UI     179     105      73      44      19      19      18       0       0       0
7950          UI       0       0       0       0       0       0       0       0       0       0
7951          UI       0       0       0       0       0       0       0       0       0       0
7952          UI       0       0       0       0       0       0       0       0       0       0
              *

7953          KK  DB88REDIVERT
7954          KM        Retention volume estimated based on aerial
7955          DT    RB88    15.3     0.0
7956          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7957          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7958          KK   CPB88COMBINE
7959          HC       2   0.782
              *

7960          KK  B88B89ROUTE
7961          KM        Cross-section: Estimated based on aerial
7962          KM        Manning's N Value: street and ROW
7963          RS       3    FLOW
7964          RC   0.022   0.016   0.022    5377  0.0019    0.00
7965          RX  100.00  111.00  121.00  123.00  206.00  208.00  220.00  240.00
7966          RY  1001.0  999.80  999.50  999.00  999.10  999.50  999.80 1001.00
              *

7967          KK     B89BASIN
7968          KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FIELD VISIT. PONDS BEHIND
7969          KM        RAILROAD TRACKS AND SPILLS INTO PHOENIX-GOODYEAR AIRPORT
7970          BA   0.377
7971          LG    0.15    0.25    4.80    0.40      54
7972          UI       0     111     372     603     812     518     283     117      54      23
7973          UI      22       0       0       0       0       0       0       0       0       0
7974          UI       0       0       0       0       0       0       0       0       0       0
7975          UI       0       0       0       0       0       0       0       0       0       0
7976          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

7977          KK  DB89REDIVERT
7978          KM        Final Drainage Report for Goodyear Public Storage
7979          KM        Additional Retention based on 100yr 2hr retention.
7980          KM        C value is based on future land use, P=2.7, A=acres
7981          DT    RB89    15.1     0.0
7982          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
7983          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

7984          KK   CPB89COMBINE
7985          HC       3   2.185
              *

7986          KK   SRB89STORAGE
7987          KM        Storage at airport ramp (WLB)
7988          KO
7989          RS       1    STOR
7990          SV            0.06    3.14   15.08   45.28  110.59  221.78  290.44  449.81
7991          SQ           10.00  100.00  250.00  370.00  380.00  383.00  383.00 8928.00
7992          SE  951.30  952.00  954.00  956.00  958.00  960.00  962.00  962.80  964.00
7993          ST
              *

7994          KK  DB89SWDIVERT
7995          KM        Divert flow from 96"" Storm Drain into Agua Fria River.
7996          DT  DB89SD      0.0     0.0
7997          DI     0.0    10.0   100.0   250.0   370.0   380.0   500.0   600.0  5000.0     0.0
7998          DQ     0.0    10.0   100.0   250.0   370.0   380.0   380.0   380.0   380.0     0.0
              *

7999          KK  B89B92ROUTE
8000          KM        Cross-section: Cross-section determined from 1991
8001          KM        topo and aerial / Manning's N Value: clean straight earth
8002          RS       1    FLOW
8003          RC   0.022   0.022   0.022    8019  0.0045    0.00
8004          RX  100.00  120.00  140.00  152.00  166.00  178.00  198.00  218.00
8005          RY  934.50  934.25  934.00  930.00  930.10  934.00  934.25  934.50
              *

8006          KK     B90BASIN
8007          KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
8008          BA   0.455
8009          LG    0.10    0.25    4.80    0.43      62
8010          UI       0     540    1663    1009     244      54       0       0       0       0
8011          UI       0       0       0       0       0       0       0       0       0       0
8012          UI       0       0       0       0       0       0       0       0       0       0
8013          UI       0       0       0       0       0       0       0       0       0       0
8014          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8015          KK  DB90REDIVERT
8016          KM        Drainage Report for Goodyear Industrial Park
8017          KM        Additional Retention based on 100yr 6hr retention.
8018          KM        C value is based on future land use, P=3.2, A=acres
8019          DT    RB90    54.7     0.0
8020          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8021          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8022          KK  B90B91ROUTE
8023          KM        Cross-section: Cross-section determined from 1991 topo
8024          KM        Manning's N Value: avg value for cultivated areas from
8025          KM        Estimated Manning's Roughness Coefficient for Stream
8026          KM        Channels and Flood Plains in MC
8027          RS      42    FLOW
8028          RC   0.038   0.038   0.038    5756  0.0030    0.00
8029          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
8030          RY  1078.0 1077.50 1076.50 1076.00 1076.25 1076.50 1077.50 1078.00
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8031            KK     B91BASIN
8032            KM        BASIN BOUNDARY FROM AERIAL, 1990 TOPO AND FINAL DRAINAGE REPORT FOR
8033            KM        VENIDA BUSINESS PARK AT CROSSPOINTE PHASE 1
8034            BA   0.586
8035            LG    0.11     0.25     4.70     0.44       55
8036            UI       0      272      830     1500     1079      540      195       65       44        0
8037            UI       0        0        0        0        0        0        0        0        0        0
8038            UI       0        0        0        0        0        0        0        0        0        0
8039            UI       0        0        0        0        0        0        0        0        0        0
8040            UI       0        0        0        0        0        0        0        0        0        0
                *

8041            KK  DB91REDIVERT
8042            KM        Final Drainage Report for Venida Business Park at
8043            KM        Crosspointe Phase I
8044            KM        Additional Retention based on 100yr 6hr retention.
8045            KM        C value is based on future land use, P=3.2, A=acres
8046            DT    RB91     73.0      0.0
8047            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8048            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

8049            KK   CPB91COMBINE
8050            HC       2   1.041
                *

8051            KK  B91B92ROUTE
8052            KM        Cross-section: Cross-section determined from 1991 topo
8053            KM        Manning's N Value: clean straight earth
8054            RS      45     FLOW
8055            RC   0.022    0.022    0.022    12337   0.0033     0.00
8056            RX  100.00   150.00   190.00   230.00   290.00   350.00   370.00   390.00
8057            RY  956.50   956.25   956.00   954.00   954.10   956.00   957.00   958.00
                *
1                                                HEC-1 INPUT                                                PAGE206

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8058            KK     B92BASIN
8059            KM        BASIN BOUNDARY FROM AERIAL AND 1990 TOPO
8060            KM        ROUTING FROM BULLARD WASH IMPROV PLANS
8061            BA   1.371
8062            LG    0.15     0.25     4.80     0.40       32
8063            UI       0      425     1422     2365     2978     1810      903      394      162       85
8064            UI       0        0        0        0        0        0        0        0        0        0
8065            UI       0        0        0        0        0        0        0        0        0        0
8066            UI       0        0        0        0        0        0        0        0        0        0
8067            UI       0        0        0        0        0        0        0        0        0        0
                *

8068            KK  DB92REDIVERT
8069            KM        Additional Retention based on 100yr 2hr retention.
8070            KM        C value is based on future land use, P=2.7, A=acres
8071            DT    RB92     12.6      0.0
8072            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8073            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

8074            KK   CPB92COMBINE
8075            HC       3   4.597
                *

8076            KK  B92B70ROUTE
8077            KM        Cross-section: Cross-section determined from aerial
8078            KM        and 1991 topo / Manning's N Value: concrete channel
8079            RS       1     FLOW
8080            RC   0.016    0.016    0.016      115   0.0010     0.00
8081            RX  100.00   120.00   140.00   156.00   172.00   188.00   208.00   228.00
8082            RY  930.50   930.25   930.00   920.00   920.10   930.00   930.25   930.50
                *

8083            KK     B70BASIN
8084            KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
8085            BA   0.110
8086            LG    0.12     0.25     5.10     0.36       42
8087            UI       0       96      307      296      111       29       11        0        0        0
8088            UI       0        0        0        0        0        0        0        0        0        0
8089            UI       0        0        0        0        0        0        0        0        0        0
8090            UI       0        0        0        0        0        0        0        0        0        0
8091            UI       0        0        0        0        0        0        0        0        0        0
                *

8092            KK  DB70REDIVERT
8093            KM        Additional Retention based on 100yr 2hr retention.
8094            KM        C value is based on future land use, P=2.7, A=acres
8095            DT    RB70      7.0      0.0
8096            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8097            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *
1                                                HEC-1 INPUT                                                PAGE207

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8098            KK   CPB70COMBINE
8099            HC       3  71.652
                *

8100            KK  B70B93ROUTE
8101            KM        As-builts for Bullard Wash Channel Improvements
8102            KM        Project FCD No 4700731 by Sverdrup dated August 2008,
8103            KM        from UPRR to Broadway Rd-A3
8104            RS      30     FLOW
8105            RC   0.035    0.022    0.035     1268   0.0012     0.00
8106            RX  100.00   110.00   114.00   118.00   198.00   202.00   206.00   216.00
8107            RY  920.00   915.00   913.00   911.00   910.90   913.00   915.00   920.00
                *

8108            KK     B93BASIN
8109            KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
8110            BA   0.424
8111            LG    0.11     0.25     4.40     0.54       66
8112            UI       0       63      240      365      533      732      512      363      222      107
8113            UI      68       28       19       19        0        0        0        0        0        0
8114            UI       0        0        0        0        0        0        0        0        0        0
8115            UI       0        0        0        0        0        0        0        0        0        0
8116            UI       0        0        0        0        0        0        0        0        0        0
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8117            KK  DB93REDIVERT
8118            KM        Drainage Report for Goodyear 4 Industrial
8119            KM        Additional Retention based on 100yr 6hr retention.
8120            KM        C value is based on future land use, P=3.2, A=acres
8121            DT    RB93    40.5     0.0
8122            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8123            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8124            KK   CPB93COMBINE
8125            HC       2  72.076
                *

8126            KK  B93B94ROUTE
8127            KM        As-builts for Bullard Wash Channel Improvements
8128            KM        Project FCD No 4700731 by Sverdrup dated August 2008,
8129            KM        from Broadway to Gila River-A2
8130            RS       1    FLOW
8131            RC   0.035   0.022   0.035    3258  0.0015    0.00
8132            RX  100.00  115.00  121.00  127.00  207.00  211.00  215.00  225.00
8133            RY  918.00  913.00  911.00  909.00  908.90  911.00  913.00  918.00
                *

8134            KK     B94BASIN
8135            KM        BASIN BOUNDARY FROM AERIAL AND SR801 2006 TOPO
8136            KM        FLOW ENTERS BUCKEYE CANAL
8137            BA   0.507
8138            LG    0.14    0.25    5.10    0.37      45
8139            UI       0     236     729    1312     926     456     168      52      38       0
1                                            HEC-1 INPUT                                          PAGE208

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8140            UI       0       0       0       0       0       0       0       0       0       0
8141            UI       0       0       0       0       0       0       0       0       0       0
8142            UI       0       0       0       0       0       0       0       0       0       0
8143            UI       0       0       0       0       0       0       0       0       0       0
                *

8144            KK  DB94REDIVERT
8145            KM        Additional Retention based on 100yr 2hr retention.
8146            KM        C value is based on future land use, P=2.7, A=acres
8147            DT    RB94    52.2     0.0
8148            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8149            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8150            KK   CPB94COMBINE
8151            HC       2  72.583
                *

8152            KK     L63BASIN
8153            KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8154            BA   0.089
8155            LG    0.10    0.25    4.55    0.49      81
8156            UI       0     155     388     123      19       0       0       0       0       0
8157            UI       0       0       0       0       0       0       0       0       0       0
8158            UI       0       0       0       0       0       0       0       0       0       0
8159            UI       0       0       0       0       0       0       0       0       0       0
8160            UI       0       0       0       0       0       0       0       0       0       0
                *

8161            KK  DL63REDIVERT
8162            KM        Additional Retention based on 100yr 2hr retention.
8163            KM        C value is based on future land use, P=2.7, A=acres
8164            DT    RL63    10.7     0.0
8165            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8166            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8167            KK   DL572RETRIEVE
8168            DR  DL572S
                *

8169            KK  L57L63ROUTE
8170            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8171            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8172            RS       8    FLOW
8173            RC   0.035   0.035   0.035    2959  0.0054    0.00
8174            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8175            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *
1                                            HEC-1 INPUT                                          PAGE209

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8176            KK   DL581RETRIEVE
8177            DR  DL581S
                *

8178            KK  L58L63ROUTE
8179            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8180            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8181            RS       1    FLOW
8182            RC   0.035   0.035   0.035    1892  0.0084    0.00
8183            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8184            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

8185            KK   CPL63COMBINE
8186            HC       3  30.909
                *

8187            KK  DL63SEDIVERT
8188            KM        L303 south of Indian School split flow
8189            DT   DL63S     0.0     0.0
8190            DI     0.0   260.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
8191            DQ     0.0     0.0   740.0  1740.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8192            KK  L63B95ROUTE
8193            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8194            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8195            RS       1    FLOW
8196            RC   0.035   0.035   0.035    1213  0.0044    0.00
8197            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8198            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
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                 *
8199             KK     B95BASIN
8200             KM        BASIN BOUNDARY FROM FIELD VISIT, WALL ON SOUTH BOUNDARY
8201             BA   0.075
8202             LG    0.10     0.25     4.80     0.42       81
8203             UI       0      209      327       39        0        0        0        0        0        0
8204             UI       0        0        0        0        0        0        0        0        0        0
8205             UI       0        0        0        0        0        0        0        0        0        0
8206             UI       0        0        0        0        0        0        0        0        0        0
8207             UI       0        0        0        0        0        0        0        0        0        0
                 *

8208             KK  DB95REDIVERT
8209             KM        Additional Retention based on 100yr 2hr retention.
8210             KM        C value is based on future land use, P=2.7, A=acres
8211             DT    RB95      9.3      0.0
8212             DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8213             DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                 *
1                                                HEC-1 INPUT                                                PAGE210

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8214             KK   DL582RETRIEVE
8215             DR  DL582S
                 *

8216             KK  L58B95ROUTE
8217             KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8218             KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8219             RS       3    FLOW
8220             RC   0.035    0.035    0.035     2188   0.0061     0.00
8221             RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
8222             RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
                 *

8223             KK   CPB95COMBINE
8224             HC       3  30.984
                 *

8225             KK  B95B96ROUTE
8226             KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8227             KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8228             RS      11    FLOW
8229             RC   0.035    0.035    0.035    10740   0.0020     0.00
8230             RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
8231             RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
                 *

8232             KK     B96BASIN
8233             KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8234             KM        BY DEL RIO ENG (2006)
8235             BA   0.692
8236             LG    0.18     0.25     4.70     0.42       27
8237             UI       0      149      543      820     1351     1071      695      365      182       90
8238             UI      37       37        0        0        0        0        0        0        0        0
8239             UI       0        0        0        0        0        0        0        0        0        0
8240             UI       0        0        0        0        0        0        0        0        0        0
8241             UI       0        0        0        0        0        0        0        0        0        0
                 *

8242             KK  DB96REDIVERT
8243             KM        Retention volume estimated based on aerial
8244             DT    RB96     34.8      0.0
8245             DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8246             DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                 *

8247             KK   CPB96COMBINE
8248             HC       2  31.676
                 *
1                                                HEC-1 INPUT                                                PAGE211

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8249             KK  B96B97ROUTE
8250             KM        Cross-section: estimated from aerial and topo
8251             KM        V-ditch / Manning's N Value: grass - golf course
8252             RS      31    FLOW
8253             RC   0.025    0.025    0.025     6205   0.0020     0.00
8254             RX  100.00   145.00   190.00   240.00   340.00   390.00   435.00   455.00
8255             RY  1018.0  1017.75  1017.50  1015.00  1015.50  1017.50  1017.75  1018.00
                 *

8256             KK     B97BASIN
8257             KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8258             KM        BY DEL RIO ENG (2006)
8259             BA   0.931
8260             LG    0.23     0.25     4.70     0.39       25
8261             UI       0      112      321      561      736     1053     1333      972      748      549
8262             UI     309      192      125       72       35       35       34        0        0        0
8263             UI       0        0        0        0        0        0        0        0        0        0
8264             UI       0        0        0        0        0        0        0        0        0        0
8265             UI       0        0        0        0        0        0        0        0        0        0
                 *

8266             KK   CPB97COMBINE
8267             HC       2  32.607
                 *

8268             KK  DB97REDIVERT
8269             KM        Pebblecreek Phase II Master Drainage Report (west half)
8270             DT    RB97     94.0      0.0
8271             DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
8272             DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                 *

8273             KK   SRB97STORAGE
8274             KM        Storage per Palm Valley Phase 8 basin
8275             KO
8276             RS       1    STOR
8277             SV           15.40    58.50    67.00
8278             SQ           10.00    55.00  1000.00
8279             SE  1001.0  1003.00  1009.00  1010.00
8280             ST
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8281          KK  DB97SEDIVERT
8282          KM        Split flow: bleed pipe from basin to south, overflow will pond at RID th
8283          DT   DD97S     0.0     0.0
8284          DI     0.0     3.6     9.8    11.5    13.3    14.8    16.2  5000.0     0.0     0.0
8285          DQ     0.0     3.6     9.8    11.5    13.3    14.8    16.2    16.2     0.0     0.0
              *
1                                   HEC-1 INPUT                                                    PAGE212

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


8286          KK  B97B99ROUTE
8287          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8288          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8289          RS      75    FLOW
8290          RC   0.035   0.035   0.035    4047  0.0001    0.00
8291          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8292          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8293          KK     L60BASIN
8294          KM        BASIN BOUNDARY FROM 1990 TOPO
8295          BA   1.004
8296          LG    0.14    0.25    4.00    0.62      64
8297          UI       0     209     772    1165    1923    1571    1025     558     272     139
8298          UI      53      54       0       0       0       0       0       0       0       0
8299          UI       0       0       0       0       0       0       0       0       0       0
8300          UI       0       0       0       0       0       0       0       0       0       0
8301          UI       0       0       0       0       0       0       0       0       0       0
              *

8302          KK  DL60REDIVERT
8303          KM        Additional Retention based on 100yr 2hr retention.
8304          KM        C value is based on future land use, P=2.7, A=acres
8305          DT    RL60    98.2     0.0
8306          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8307          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8308          KK   DL552RETRIEVE
8309          DR  DL552S
              *

8310          KK  L55L60ROUTE
8311          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8312          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8313          RS      25    FLOW
8314          RC   0.035   0.035   0.035    9944  0.0054    0.00
8315          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8316          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8317          KK   DL561RETRIEVE
8318          DR  DL561S
              *

8319          KK  L56L60ROUTE
8320          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8321          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8322          RS       1    FLOW
8323          RC   0.035   0.035   0.035    7072  0.0049    0.00
8324          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8325          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                   HEC-1 INPUT                                                    PAGE213

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


8326          KK   CPL60COMBINE
8327          HC       3     7.5
              *

8328          KK   DL601DIVERT
8329          KM        Thomas at Citrus split flow
8330          DT  DL601S     0.0     0.0
8331          DI     0.0    67.0   791.7  2066.5  4118.1     0.0     0.0     0.0     0.0     0.0
8332          DQ     0.0    36.8   382.7   978.6  1804.2     0.0     0.0     0.0     0.0     0.0
              *

8333          KK   DL602DIVERT
8334          KM        Thomas at Citrus split flow
8335          DT  DL602S     0.0     0.0
8336          DI     0.0    30.3   409.0  1087.9  2314.0     0.0     0.0     0.0     0.0     0.0
8337          DQ     0.0     8.1    52.7   118.3   199.5     0.0     0.0     0.0     0.0     0.0
              *

8338          KK  L60L61ROUTE
8339          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8340          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8341          RS       9    FLOW
8342          RC   0.035   0.035   0.035    3617  0.0022    0.00
8343          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8344          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8345          KK     L61BASIN
8346          KM        BASIN BOUNDARY FROM 1990 TOPO
8347          BA   0.510
8348          LG    0.10    0.25    4.30    0.58      80
8349          UI       0     174     563     985    1073     644     285     133      43      33
8350          UI       0       0       0       0       0       0       0       0       0       0
8351          UI       0       0       0       0       0       0       0       0       0       0
8352          UI       0       0       0       0       0       0       0       0       0       0
8353          UI       0       0       0       0       0       0       0       0       0       0
              *

8354          KK  DL61REDIVERT
8355          KM        Additional Retention based on 100yr 2hr retention.
8356          KM        C value is based on future land use, P=2.7, A=acres
8357          DT    RL61    66.2     0.0
8358          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8359          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8360          KK   DL562RETRIEVE
8361          DR  DL562S
              *
1                                   HEC-1 INPUT                                                    PAGE214
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8362          KK  L56L61ROUTE
8363          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8364          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8365          RS      21    FLOW
8366          RC   0.035   0.035   0.035    7898  0.0042    0.00
8367          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8368          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8369          KK   CPL61COMBINE
8370          HC       3    8.01
              *

8371          KK  DL61SEDIVERT
8372          KM        Thomas at ag road split flow
8373          DT   DL61S     0.0     0.0
8374          DI     0.0   496.7  1797.8  4333.9  7784.2     0.0     0.0     0.0     0.0     0.0
8375          DQ     0.0   322.8  1118.2  2702.6  4870.5     0.0     0.0     0.0     0.0     0.0
              *

8376          KK  L61L62ROUTE
8377          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8378          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8379          RS      11    FLOW
8380          RC   0.035   0.035   0.035    3415  0.0031    0.00
8381          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8382          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8383          KK     L62BASIN
8384          KM        BASIN BOUNDARY FROM 1990 TOPO
8385          BA   0.494
8386          LG    0.10    0.25    4.55    0.49      79
8387          UI       0     179     578    1022    1009     602     244     117      34      33
8388          UI       0       0       0       0       0       0       0       0       0       0
8389          UI       0       0       0       0       0       0       0       0       0       0
8390          UI       0       0       0       0       0       0       0       0       0       0
8391          UI       0       0       0       0       0       0       0       0       0       0
              *

8392          KK  DL62REDIVERT
8393          KM        Additional Retention based on 100yr 2hr retention.
8394          KM        C value is based on future land use, P=2.7, A=acres
8395          DT    RL62    64.0     0.0
8396          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8397          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8398          KK   DL571RETRIEVE
8399          DR  DL571S
              *
1                                    HEC-1 INPUT                                          PAGE215

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8400          KK  L57L62ROUTE
8401          KM        Cross-section: Estimated side slopes and width
8402          KM        based on aerial and topo / Manning's N Value:
8403          KM        natural wash w/ heavy vegetation
8404          RS      16    FLOW
8405          RC   0.045   0.045   0.045    5320  0.0043    0.00
8406          RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
8407          RY  1050.5 1050.25 1050.00 1047.00 1047.10 1050.00 1050.25 1050.50
              *

8408          KK   CPL62COMBINE
8409          HC       3  17.406
              *

8410          KK  L62L68ROUTE
8411          KM        Cross-section: Estimated side slopes and width
8412          KM        based on aerial and topo / Manning's N Value:
8413          KM        natural wash w/ heavy vegetation
8414          RS       5    FLOW
8415          RC   0.045   0.045   0.045    5299  0.0045    0.00
8416          RX  100.00  110.00  120.00  130.00  140.00  150.00  170.00  190.00
8417          RY  1050.5 1050.25 1050.00 1047.00 1047.10 1049.00 1050.25 1050.50
              *

8418          KK     L64BASIN
8419          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8420          BA   0.196
8421          LG    0.10    0.25    4.50    0.51      84
8422          UI       0     131     393     574     287      89      27       0       0       0
8423          UI       0       0       0       0       0       0       0       0       0       0
8424          UI       0       0       0       0       0       0       0       0       0       0
8425          UI       0       0       0       0       0       0       0       0       0       0
8426          UI       0       0       0       0       0       0       0       0       0       0
              *

8427          KK  DL64REDIVERT
8428          KM        Additional Retention based on 100yr 2hr retention.
8429          KM        C value is based on future land use, P=2.7, A=acres
8430          DT    RL64    21.9     0.0
8431          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8432          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8433          KK  DL63SERETRIEVE
8434          DR   DL63S
              *

8435          KK  L63L64ROUTE
8436          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8437          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8438          RS       6    FLOW
8439          RC   0.035   0.035   0.035    5428  0.0037    0.00
8440          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8441          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
1                                    HEC-1 INPUT                                          PAGE216

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8442          KK   CPL64COMBINE
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8443          HC       2  31.105
              *

8444          KK  L64L67ROUTE
8445          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8446          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8447          RS       6    FLOW
8448          RC   0.035   0.035   0.035    6146  0.0037    0.00
8449          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8450          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8451          KK     L67BASIN
8452          KM        BASIN BOUNDARY FROM L303 AS-BUILT AND DETAILED L303 1' CI TOPO
8453          BA   0.101
8454          LG    0.10    0.25    4.65    0.46      88
8455          UI       0      63     184     293     159      55      17       8       0       0
8456          UI       0       0       0       0       0       0       0       0       0       0
8457          UI       0       0       0       0       0       0       0       0       0       0
8458          UI       0       0       0       0       0       0       0       0       0       0
8459          UI       0       0       0       0       0       0       0       0       0       0
              *

8460          KK  DL67REDIVERT
8461          KM        Additional Retention based on 100yr 2hr retention.
8462          KM        C value is based on future land use, P=2.7, A=acres
8463          DI    RL67    10.7     0.0
8464          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8465          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8466          KK   CPL67COMBINE
8467          HC       2  31.206
              *

8468          KK  L67L68ROUTE
8469          KM        Cross-section: Assumed 2' depth V-Ditch, width
8470          KM        based on aerial / Manning's N Value: clean earth; straight
8471          RS       1    FLOW
8472          RC   0.022   0.022   0.022     802  0.0025    0.00
8473          RX  100.00  125.00  150.00  158.00  162.00  170.00  190.00  210.00
8474          RY  1023.5 1022.25 1022.00 1020.00 1020.10 1022.00 1022.25 1023.50
              *

8475          KK   DL602RETRIEVE
8476          DR  DL602S
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8477          KK  L60L68ROUTE
8478          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8479          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8480          RS      37    FLOW
8481          RC   0.035   0.035   0.035   12200  0.0043    0.00
8482          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8483          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8484          KK  DL61SERETRIEVE
8485          DR   DL61S
              *

8486          KK  L61L68ROUTE
8487          KM        Cross-section: Assumed 3' depth V-Ditch, width based
8488          KM        aerial / Manning's N Value: clean earth; straight
8489          RS       9    FLOW
8490          RC   0.022   0.022   0.022    7340  0.0044    0.00
8491          RX  100.00  120.00  140.00  148.00  150.00  158.00  178.00  198.00
8492          RY  1040.5 1040.25 1040.00 1037.00 1037.10 1040.00 1040.25 1040.50
              *

8493          KK     L68BASIN
8494          KM        BASIN BOUNDARY FROM L303 AS-BUILT
8495          KM        AND DETAILED L303 1' CI TOPO, DETENTION FACILITY
8496          BA   1.000
8497          LG    0.10    0.25    4.40    0.54      34
8498          UI       0     153     612     926    1388    1738    1163     818     425     237
8499          UI     136      48      46      47       0       0       0       0       0       0
8500          UI       0       0       0       0       0       0       0       0       0       0
8501          UI       0       0       0       0       0       0       0       0       0       0
8502          UI       0       0       0       0       0       0       0       0       0       0
              *

8503          KK  DL68REDIVERT
8504          KM        Additional Retention based on 100yr 2hr retention.
8505          KM        C value is based on future land use, P=2.7, A=acres
8506          DI    RL68    32.9     0.0
8507          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8508          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8509          KK   CPL68COMBINE
8510          HC       5  34.214
              *

8511          KK  L68L72ROUTE
8512          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8513          KM        Manning's N Value: earth w/ sparse trees and brush
8514          RS       1    FLOW
8515          RC   0.032   0.032   0.032    1189  0.0050    0.00
8516          RX  100.00  120.00  140.00  152.00  160.00  172.00  192.00  212.00
8517          RY  1015.5 1014.25 1014.00 1011.00 1011.10 1014.00 1014.25 1015.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8518          KK     L72BASIN
8519          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
8520          KM        DRAINING TO CULVERT UNDER I-10
8521          BA   0.193
8522          LG    0.10    0.25    4.55    0.47      86
8523          UI       0      90     278     499     353     173      64      20      15       0
8524          UI       0       0       0       0       0       0       0       0       0       0
8525          UI       0       0       0       0       0       0       0       0       0       0
8526          UI       0       0       0       0       0       0       0       0       0       0
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8527          UI       0       0       0       0       0       0       0       0       0       0
              *

8528          KK  DL72REDIVERT
8529          KM        Retention volume estimated based on aerial
8530          DT    RL72      4.5     0.0
8531          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8532          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8533          KK   CPL72COMBINE
8534          HC       2  34.407
              *

8535          KK  DL72SEDIVERT
8536          KM        I-10 at Cotton split flow
8537          DT   DL72S      0.0     0.0
8538          DI     0.0    49.0   204.1   558.2  1073.4     0.0     0.0     0.0     0.0     0.0
8539          DQ     0.0    22.8    67.7   148.1   257.3     0.0     0.0     0.0     0.0     0.0
              *

8540          KK  L72B99ROUTE
8541          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8542          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8543          RS       3    FLOW
8544          RC   0.035   0.035   0.035    4010  0.0019    0.00
8545          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8546          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8547          KK     B99BASIN
8548          KM        BASIN BOUNDARY FROM RID, 1990 TOPO
8549          BA   0.158
8550          LG    0.10    0.24    4.60    0.49      52
8551          UI       0     188     577     351      84      19       0       0       0       0
8552          UI       0       0       0       0       0       0       0       0       0       0
8553          UI       0       0       0       0       0       0       0       0       0       0
8554          UI       0       0       0       0       0       0       0       0       0       0
8555          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8556          KK  DB99REDIVERT
8557          KM        Additional Retention based on 100yr 2hr retention.
8558          KM        C value is based on future land use, P=2.7, A=acres
8559          DT    RB99      8.8     0.0
8560          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8561          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8562          KK   CPB99COMBINE
8563          HC       3  36.263
              *

8564          KK  B99S11ROUTE
8565          KM        Cross-section: Cross-section determined from
8566          KM        aerial and 1991 topo / Manning's N Value: earth
8567          KM        w/ sparse trees and brush
8568          RS       1    FLOW
8569          RC   0.032   0.032   0.032     382  0.0001    0.00
8570          RX  100.00  102.00  104.00  134.00  224.00  274.00  276.00  278.00
8571          RY  1020.2 1020.10 1020.00 1008.00 1008.10 1020.00 1020.10 1020.20
              *

8572          KK     S11BASIN
8573          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
8574          BA   0.064
8575          LG    0.09    0.23    4.60    0.46      79
8576          UI       0      66     212     158      45      11       0       0       0       0
8577          UI       0       0       0       0       0       0       0       0       0       0
8578          UI       0       0       0       0       0       0       0       0       0       0
8579          UI       0       0       0       0       0       0       0       0       0       0
8580          UI       0       0       0       0       0       0       0       0       0       0
              *

8581          KK  DS11REDIVERT
8582          KM        Additional Retention based on 100yr 6hr retention.
8583          KM        C value is based on future land use, P=3.2, A=acres
8584          DT    RS11      5.1     0.0
8585          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8586          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8587          KK   CPS11COMBINE
8588          HC       2  36.327
              *

8589          KK   SRS11STORAGE
8590          KM        Storage behind canal
8591          KO
8592          RS       1    STOR
8593          SV            6.24   21.77   28.91
8594          SQ                          726.00
8595          SE  1007.4 1008.00 1008.70 1009.00
8596          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8597          KK  S11S14ROUTE
8598          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8599          KM        width based on aerial / Manning's N Value: clean straight earth
8600          RS       3    FLOW
8601          RC   0.022   0.022   0.022    4396  0.0036    0.00
8602          RX  100.00  105.00  110.00  122.00  172.00  184.00  189.00  194.00
8603          RY  1004.5 1004.25 1004.00 1001.00 1001.10 1004.00 1004.25 1004.50
              *

8604          KK     S12BASIN
8605          KM        BASIN BOUNDARY FROM 1990 TOPO, RID
8606          BA   0.203
8607          LG    0.10    0.24    4.80    0.42      55
8608          UI       0     252     762     434      97      24       0       0       0       0
8609          UI       0       0       0       0       0       0       0       0       0       0
8610          UI       0       0       0       0       0       0       0       0       0       0
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8611          UI       0       0       0       0       0       0       0       0       0       0
8612          UI       0       0       0       0       0       0       0       0       0       0
              *

8613          KK  DS12REDIVERT
8614          KM        Additional Retention based on 100yr 2hr retention.
8615          KM        C value is based on future land use, P=2.7, A=acres
8616          DT    RS12    10.1     0.0
8617          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8618          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8619          KK  DL72SERETRIEVE
8620          DR   DL72S
              *

8621          KK  L72S12ROUTE
8622          KM        Cross-section: assumed 2' v-ditch, width based
8623          KM        on aerial / Manning's N Value: clean straight earth
8624          RS       1    FLOW
8625          RC   0.022   0.022   0.022    2028  0.0049    0.00
8626          RX  100.00  120.00  140.00  152.00  168.00  180.00  200.00  220.00
8627          RY  1012.5 1012.25 1012.00 1009.00 1009.10 1012.00 1012.25 1012.50
              *

8628          KK   CPS12COMBINE
8629          HC       2   34.61
              *

8630          KK   SRS12STORAGE
8631          KM        Storage behind canal (WLB)
8632          KO
8633          RS       1    STOR
8634          SV            3.78    5.29   57.30
8635          SQ                   46.0016968.00
8636          SE  1006.7 1007.80 1008.00 1010.00
8637          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8638          KK  S12S13ROUTE
8639          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8640          KM        width based on aerial / Manning's N Value: clean straight earth
8641          RS       3    FLOW
8642          RC   0.022   0.022   0.022    3446  0.0055    0.00
8643          RX  100.00  125.00  150.00  170.00  210.00  270.00  290.00  310.00
8644          RY  1002.5 1002.25 1002.00  998.00  998.10 1002.00 1002.25 1002.50
              *

8645          KK     S13BASIN
8646          KM        BASIN BOUNDARY FROM COTTON LANE RV & GOLF RESORT MASTER DRAINAGE
8647          KM        REPORT DATED 5/97 BY KAMINSKI HUBBARD ENGINEERING
8648          BA   0.306
8649          LG   0.13    0.25    5.10    0.36      45
8650          UI       0     142     434     782     564     282     102      34      23       0
8651          UI       0       0       0       0       0       0       0       0       0       0
8652          UI       0       0       0       0       0       0       0       0       0       0
8653          UI       0       0       0       0       0       0       0       0       0       0
8654          UI       0       0       0       0       0       0       0       0       0       0
              *

8655          KK  DS13REDIVERT
8656          KM        Retention volume estimated based on aerial
8657          DT    RS13    23.2     0.0
8658          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8659          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8660          KK   CPS13COMBINE
8661          HC       2  34.916
              *

8662          KK  DS13SEDIVERT
8663          KM        Van Buren at Cotton split flow
8664          DT   DS13S     0.0     0.0
8665          DI     0.0   216.0  1302.0  2400.0     0.0     0.0     0.0     0.0     0.0     0.0
8666          DQ     0.0     0.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8667          KK  S13S14ROUTE
8668          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8669          KM        width based on aerial / Manning's N Value: clean straight earth
8670          RS       1    FLOW
8671          RC   0.022   0.022   0.022     963  0.0005    0.00
8672          RX  100.00  120.00  140.00  152.00  164.00  176.00  196.00  216.00
8673          RY  991.00  990.25  990.00  987.00  987.10  990.00  990.25  991.00
              *

8674          KK     S14BASIN
8675          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
8676          KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
8677          KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
8678          KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
8679          BA   0.361
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8680          LG   0.23    0.25    4.70    0.39      42
8681          UI       0     160     503     903     670     352     126      44      27       0
8682          UI       0       0       0       0       0       0       0       0       0       0
8683          UI       0       0       0       0       0       0       0       0       0       0
8684          UI       0       0       0       0       0       0       0       0       0       0
8685          UI       0       0       0       0       0       0       0       0       0       0
              *

8686          KK  DS14REDIVERT
8687          KM        Final Drainage Report for Glen River at Canyon Trails Parcel 3L
8688          KM        Final Drainage Report for Canyon Trails Court Homes
8689          KM        Remaining retention volume estimated from aerial
8690          DT    RS14    37.5     0.0
8691          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8692          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8693          KK   CPS14COMBINE
8694          HC       3  37.197
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                *

8695            KK  S14S16ROUTE
8696            KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8697            KM        width based on aerial / Manning's N Value: grass
8698            RS       3    FLOW
8699            RC   0.025   0.025   0.025    5363  0.0041    0.00
8700            RX  100.00  112.00  124.00  136.00  186.00  198.00  208.00  218.00
8701            RY  982.50  982.25  982.00  979.00  979.10  982.00  982.25  982.50
                *

8702            KK     B98BASIN
8703            KM        BASIN BOUNDARY FROM PALM VALLEY PHASE 8 DRAINAGE REPORT
8704            KM        BY DEL RIO ENG (2006)
8705            BA   0.267
8706            LG    0.25    0.25    4.70    0.36      30
8707            UI       0     102     327     588     534     310     118      51      19      19
8708            UI       0       0       0       0       0       0       0       0       0       0
8709            UI       0       0       0       0       0       0       0       0       0       0
8710            UI       0       0       0       0       0       0       0       0       0       0
8711            UI       0       0       0       0       0       0       0       0       0       0
                *

8712            KK  DB98REDIVERT
8713            KM        Retention volume estimated based on aerial
8714            DT    RB98    26.1     0.0
8715            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8716            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8717            KK  B98100ROUTE
8718            KM        Cross-section: Estimated based on aerial
8719            KM        Manning's N Value: street and ROW
8720            RS       1    FLOW
8721            RC   0.022   0.016   0.022    1163  0.0050    0.00
8722            RX  100.00  120.00  140.00  142.00  162.00  164.00  184.00  204.00
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8723            RY  1002.5 1002.25 1002.00 1001.50 1001.40 1001.90 1002.20 1002.50
                *

8724            KK    B100BASIN
8725            KM        BASIN BOUNDARY RID AND PALM VALLEY, 1990 TOPO
8726            BA   0.120
8727            LG    0.10    0.25    5.20    0.36      72
8728            UI       0     465     427       0       0       0       0       0       0       0
8729            UI       0       0       0       0       0       0       0       0       0       0
8730            UI       0       0       0       0       0       0       0       0       0       0
8731            UI       0       0       0       0       0       0       0       0       0       0
8732            UI       0       0       0       0       0       0       0       0       0       0
                *

8733            KK  DB100RDIVERT
8734            KM        Additional Retention based on 100yr 2hr retention.
8735            KM        C value is based on future land use, P=2.7, A=acres
8736            DT   RB100    11.3     0.0
8737            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8738            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8739            KK  DB97SERETRIEVE
8740            DR   DD97S
                *

8741            KK  CPB100COMBINE
8742            HC       3  32.994
                *

8743            KK   B100SROUTE
8744            KM        Cross-section: Cross-section determined from
8745            KM        aerial and 1991 topo / Manning's N Value: grass
8746            RS      90    FLOW
8747            RC   0.032   0.016   0.032    4838  0.0025    0.00
8748            RX  100.00  112.00  124.00  136.00  176.00  188.00  200.00  212.00
8749            RY  998.50  998.25  998.00  995.00  995.10  998.00  998.25  998.50
                *

8750            KK     S15BASIN
8751            KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS PHASE 1 &
8752            KM        INFRASTRUCTURE DATED 12/2/99 BY CVL, FINAL DRAINAGE REPORT FOR GLEN
8753            KM        RIVER AT CANYON TRAILS PARCEL 3L DATED 6/13/05 BY PDC AND FINAL DRAINAGE
8754            KM        REPORT FOR CANYON TRAILS COURT HOMES DATED 6/28/06
8755            BA   0.482
8756            LG    0.24    0.25    4.65    0.38      32
8757            UI       0     154     503     851    1039     628     313     137      53      31
8758            UI       0       0       0       0       0       0       0       0       0       0
8759            UI       0       0       0       0       0       0       0       0       0       0
8760            UI       0       0       0       0       0       0       0       0       0       0
8761            UI       0       0       0       0       0       0       0       0       0       0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8762            KK  DS15REDIVERT
8763            KM        Final Drainage Report for Broadstone at Canyon Trails
8764            KM        Drainage Report for The Rock of Refuge Church
8765            KM        Remaining retention volume estimated from aerial
8766            DT    RS15    34.5     0.0
8767            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8768            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

8769            KK   CPS15COMBINE
8770            HC       2  33.476
                *

8771            KK  S15S16ROUTE
8772            KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8773            KM        width based on aerial / Manning's N Value: grass
8774            RS       6    FLOW
8775            RC   0.025   0.025   0.025    6178  0.0029    0.00
8776            RX  100.00  108.00  116.00  128.00  178.00  190.00  202.00  222.00
8777            RY  977.50  977.25  977.00  975.00  975.10  977.00  977.25  977.50
                *

8778            KK     S16BASIN
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8779          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT
8780          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
8781          BA   0.683
8782          LG    0.23    0.25    5.20    0.31      32
8783          UI       0      82     235     412     540     773     978     712     549     403
8784          UI     227     141      92      52      26      25      25       0       0       0
8785          UI       0       0       0       0       0       0       0       0       0       0
8786          UI       0       0       0       0       0       0       0       0       0       0
8787          UI       0       0       0       0       0       0       0       0       0       0
              *

8788          KK  DS16REDIVERT
8789          KM        Final Drainage Report for Canyon Trails Unit 3 Infrastructure
8790          KM        Final Drainage Report for Curtis Commons
8791          KM        Remaining retention volume estimated from aerial
8792          DT    RS16    72.5     0.0
8793          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8794          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8795          KK   CPS16COMBINE
8796          HC       3  38.749
              *

8797          KK  S16S18ROUTE
8798          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8799          KM        width based on aerial / Manning's N Value: clean straight earth
8800          RS       3    FLOW
8801          RC   0.022   0.022   0.022    6594  0.0039    0.00
8802          RX  100.00  112.00  124.00  136.00  176.00  188.00  208.00  228.00
8803          RY  956.50  956.25  956.00  953.00  953.10  956.00  956.25  956.50
              *
1                                        HEC-1 INPUT                                          PAGE225

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8804          KK     S17BASIN
8805          KM        BASIN BOUNDARY FROM 1990 TOPO AND FINAL DRAINAGE REPORT
8806          KM        FOR CANYON TRAILS UNIT 3 INFRASTRUCTURE DATED 6/18/04 BY CVL
8807          BA   0.260
8808          LG    0.15    0.25    5.80    0.25      63
8809          UI       0     143     421     725     447     178      64      20       0       0
8810          UI       0       0       0       0       0       0       0       0       0       0
8811          UI       0       0       0       0       0       0       0       0       0       0
8812          UI       0       0       0       0       0       0       0       0       0       0
8813          UI       0       0       0       0       0       0       0       0       0       0
              *

8814          KK  DS17REDIVERT
8815          KM        Additional Retention based on 100yr 2hr retention.
8816          KM        C value is based on future land use, P=2.7, A=acres
8817          DT    RS17    29.7     0.0
8818          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8819          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8820          KK  S17S18ROUTE
8821          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8822          KM        width based on aerial / Manning's N Value: clean straight earth
8823          RS      15    FLOW
8824          RC   0.022   0.022   0.022    5337  0.0049    0.00
8825          RX  100.00  120.00  140.00  156.00  186.00  202.00  222.00  242.00
8826          RY  952.50  952.25  952.00  950.00  949.90  952.00  952.25  952.50
              *

8827          KK     S18BASIN
8828          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4
8829          KM        SOUTH INFRASTRUCTURE DATED 2/8/05 BY CVL AND MASTER DRAINAGE REPORT
8830          KM        FOR CANYON TRAILS DATED 11/12/99 BY CVL. AT THE OUTLET OF THIS BASIN
8831          KM        THERE IS A CULVERT UNDER LOWER BUCKEYE ROAD THAT DOES NOT GO
8832          KM        UNDER THE ROAD.  THE WATER WILL POND UP AND SPILL OVER LOWER
8833          KM        BUCKEYE ROAD.
8834          BA   0.740
8835          LG    0.25    0.25    4.90    0.32      22
8836          UI       0      89     255     446     585     837    1060     772     594     438
8837          UI     245     152     100      57      28      27      28       0       0       0
8838          UI       0       0       0       0       0       0       0       0       0       0
8839          UI       0       0       0       0       0       0       0       0       0       0
8840          UI       0       0       0       0       0       0       0       0       0       0
              *

8841          KK  DS18REDIVERT
8842          KM        Final Drainage Report for Canyon Trails Unit 4 South I
8843          KM        Infrastructure, Final Drainage Report for Canyon Trails Unit 4
8844          KM        South Parcel B, Final Drainage Report for Canyon Trails
8845          KM        Unit 4 South Parcel A, Final Drainage Report for
8846          KM        Canyon Trails Unit 4 South Parcels C & G, Final Drainage Report for
8847          KM        Canyon Trails Unit 4 South Parcel D, E and F, Drainage Report for Aldea
8848          KM        Additional Retention based on 100yr 6hr retention.
8849          KM        C value is based on future land use, P=3.2, A=acres
1                                        HEC-1 INPUT                                          PAGE226

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8850          DT    RS18    68.0     0.0
8851          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8852          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8853          KK   CPS18COMBINE
8854          HC       3  39.749
              *

8855          KK  S18S21ROUTE
8856          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8857          KM        width based on aerial / Manning's N Value: clean straight earth
8858          RS       2    FLOW
8859          RC   0.022   0.022   0.022    5383  0.0045    0.00
8860          RX  100.00  120.00  140.00  148.00  168.00  172.00  182.00  198.00
8861          RY  931.00  930.25  930.00  928.00  927.90  930.00  930.25  931.00
              *

8862          KK     S19BASIN
8863          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
8864          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
8865          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
8866          BA   0.806
8867          LG    0.22    0.25    4.50    0.44      38
8868          UI       0     113     406     631     875    1359    1006     735     512     239
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8869          UI     158      93      34      35      35       0       0       0       0       0
8870          UI       0       0       0       0       0       0       0       0       0       0
8871          UI       0       0       0       0       0       0       0       0       0       0
8872          UI       0       0       0       0       0       0       0       0       0       0
              *

8873          KK  DS19REDIVERT
8874          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel F
8875          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel B3
8876          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel E
8877          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel H
8878          KM        Additional Retention based on 100yr 6hr retention.
8879          KM        C value is based on future land use, P=3.2, A=acres
8880          DT    RS19   104.0     0.0
8881          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8882          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8883          KK  DS13SERETRIEVE
8884          DR   DS13S
              *

8885          KK  S13S19ROUTE
8886          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8887          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8888          RS       9    FLOW
8889          RC   0.035   0.035   0.035    6794  0.0047    0.00
8890          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8891          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8892          KK   CPS19COMBINE
8893          HC       2  35.722
              *

8894          KK  S19S20ROUTE
8895          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8896          KM        width based on aerial / Manning's N Value: clean straight earth
8897          RS       5    FLOW
8898          RC   0.022   0.022   0.022    5288  0.0049    0.00
8899          RX  100.00  112.00  124.00  132.00  134.00  142.00  162.00  182.00
8900          RY  957.00  956.25  956.00  954.00  953.90  956.00  956.25  957.00
              *

8901          KK     S20BASIN
8902          KM        BASIN BOUNDARY FROM FINAL DRAINAGE REPORT FOR UNITS I, II, & III
8903          KM        COTTONFLOWER COMMUNITY DATED 8/24/99 BY AMERICAN ENGINEERING COMPANY
8904          BA   0.608
8905          LG    0.24    0.25    4.65    0.39      34
8906          UI       0      80     270     434     585     926     803     586     432     247
8907          UI     136      90      42      25      25      24       0       0       0       0
8908          UI       0       0       0       0       0       0       0       0       0       0
8909          UI       0       0       0       0       0       0       0       0       0       0
8910          UI       0       0       0       0       0       0       0       0       0       0
              *

8911          KK  DS20REDIVERT
8912          KM        Final Drainage Report for Units I, II, & III - Cottonflower
8913          KM        Community, Final Drainage Report for Sin Lomas
8914          KM        Additional Retention based on 100yr 6hr retention.
8915          KM        C value is based on future land use, P=3.2, A=acres
8916          DT    RS20    45.7     0.0
8917          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8918          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8919          KK   CPS20COMBINE
8920          HC       2   36.33
              *

8921          KK  S20S21ROUTE
8922          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8923          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
8924          RS      19    FLOW
8925          RC   0.035   0.035   0.035    7033  0.0047    0.00
8926          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8927          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8928          KK     S21BASIN
8929          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
8930          BA   0.159
8931          LG    0.15    0.25    4.60    0.45      69
8932          UI       0      85     256     439     274     113      42      13       0       0
8933          UI       0       0       0       0       0       0       0       0       0       0
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8934          UI       0       0       0       0       0       0       0       0       0       0
8935          UI       0       0       0       0       0       0       0       0       0       0
8936          UI       0       0       0       0       0       0       0       0       0       0
              *

8937          KK  DS21REDIVERT
8938          KM        Additional Retention based on 100yr 2hr retention.
8939          KM        C value is based on future land use, P=2.7, A=acres
8940          DT    RS21    20.1     0.0
8941          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8942          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8943          KK   CPS21COMBINE
8944          HC       3  41.322
              *

8945          KK  DS21SEDIVERT
8946          KM        Converging basins at road, assume 50-50 split
8947          DT   DS21S     0.0     0.0
8948          DI     0.0   100.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0
8949          DQ     0.0    50.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

8950          KK  S21S23ROUTE
8951          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
8952          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
```

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8953          RS       7    FLOW
8954          RC   0.035   0.035   0.035    4426  0.0010    0.00
8955          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
8956          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

8957          KK    B101BASIN
8958          KM        BASIN BOUNDARY FROM 1990 TOPO AND ADOT MAPPING
8959          KM        INCLUDING CULVERT LOCATIONS FROM I-10 WIDENING PROJECT
8960          BA   0.076
8961          LG    0.10    0.25    4.80    0.42      85
8962          UI       0     253     302      31       0       0       0       0       0       0
8963          UI       0       0       0       0       0       0       0       0       0       0
8964          UI       0       0       0       0       0       0       0       0       0       0
8965          UI       0       0       0       0       0       0       0       0       0       0
8966          UI       0       0       0       0       0       0       0       0       0       0
              *

8967          KK  DB101RDIVERT
8968          KM        Additional Retention based on 100yr 2hr retention.
8969          KM        C value is based on future land use, P=2.7, A=acres
8970          DT   RB101     8.1     0.0
8971          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
8972          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

8973          KK  SRB101STORAGE
8974          KM        Storage behind I-10
8975          KO
8976          RS       1    STOR
8977          SV            0.70    5.68    7.84   10.00
8978          SQ           16.00  227.00  435.00 1468.00
8979          SE  1005.5 1006.90 1009.50 1010.00 1011.00
8980          ST
              *

8981          KK   B101SROUTE
8982          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
8983          KM        width based on aerial / Manning's N Value: grass
8984          RS       9    FLOW
8985          RC   0.025   0.025   0.025    4663  0.0034    0.00
8986          RX  100.00  110.00  120.00  132.00  162.00  174.00  184.00  194.00
8987          RY  1006.5 1006.25 1006.00 1003.00 1003.10 1006.00 1006.25 1006.50
              *

8988          KK     S06BASIN
8989          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR CANYON TRAILS UNIT 2 &
8990          KM        INFRASTRUCTURE DATED 7/20/02 BY CVL, DRAINAGE REPORT FOR CANYON TRAILS
8991          KM        UNIT 3A DATED 3/28/03 BY CVL, FINAL DRAINAGE REPORT FOR TRAVIS PARK AT
8992          KM        CANYON TRAILS PARCEL 3M1
8993          BA   0.390
8994          LG    0.25    0.25    4.80    0.34      28
8995          UI       0      91     323     492     802     582     377     173      95      39
8996          UI      21      21       0       0       0       0       0       0       0       0
8997          UI       0       0       0       0       0       0       0       0       0       0
8998          UI       0       0       0       0       0       0       0       0       0       0
8999          UI       0       0       0       0       0       0       0       0       0       0
              *

9000          KK  DS06REDIVERT
9001          KM        Borrow Pit (volume estimated from 1990 topo), Drainage Report
9002          KM        for Canyon Trails Unit 3A (portion of retention used), Final
9003          KM        Drainage Report for Travis Park at Canyon Trails Parcel 3M
9004          KM        (portion of retention used), Preliminary Drainage Report Arizona
9005          KM        Public Service Company Wildflower Substation, Drainage Report
9006          KM        or Verle Naber, Remaining retention volume estimated from aerial
9007          KM        Additional Retention based on 100yr 6hr retention.
9008          KM        C value is based on future land use, P=3.2, A=acres
9009          DT    RS06   657.1     0.0
9010          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9011          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9012          KK   CPS06COMBINE
9013          HC       2   0.466
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9014          KK  S06S07ROUTE
9015          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9016          KM        width based on aerial / Manning's N Value: earth with
9017          KM        sparse trees and shrubs
9018          RS      14    FLOW
9019          RC   0.032   0.032   0.032    6891  0.0033    0.00
9020          RX  100.00  104.00  108.00  120.00  130.00  142.00  146.00  150.00
9021          RY  990.50  990.25  990.00  987.00  987.10  990.00  990.25  990.50
              *

9022          KK     S07BASIN
9023          KM        BASIN BOUNDARY FROM MASTER DRAINAGE PLAN
9024          KM        FOR WILDFLOWER COMMUNITY DATED 4/96 BY KEOGH ENGINEERING
9025          BA   0.423
9026          LG    0.24    0.25    4.70    0.38      36
9027          UI       0      62     240     359     518     741     509     363     227     106
9028          UI      70      30      19      19       0       0       0       0       0       0
9029          UI       0       0       0       0       0       0       0       0       0       0
9030          UI       0       0       0       0       0       0       0       0       0       0
9031          UI       0       0       0       0       0       0       0       0       0       0
              *

9032          KK  DS07REDIVERT
9033          KM        Master Drainage Plan Wildflower Community
9034          KM        Additional Retention based on 100yr 6hr retention.
9035          KM        C value is based on future land use, P=3.2, A=acres
9036          DT    RS07    40.7     0.0
9037          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9038          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9039          KK   CPS07COMBINE
9040          HC       2   0.889
              *
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9041          KK  S07S08ROUTE
9042          KM        Cross-section: Estimated 3' deep and 4:1 side
9043          KM        slopes, width based on aerial / Manning's N Value
9044          KM        earth with sparse trees and shrubs
9045          RS      11    FLOW
9046          RC   0.032   0.032   0.032    5382  0.0039    0.00
9047          RX  100.00  102.00  104.00  116.00  126.00  138.00  158.00  178.00
9048          RY  952.50  952.25  952.00  949.00  949.10  952.00  952.25  952.50
              *

9049          KK     S08BASIN
9050          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
9051          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
9052          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
9053          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE PH
9054          BA   0.267
9055          LG    0.23    0.25    4.65    0.39      33
9056          UI       0      60     216     326     533     406     265     130      67      30
9057          UI      15      15       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE231

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9058          UI       0       0       0       0       0       0       0       0       0       0
9059          UI       0       0       0       0       0       0       0       0       0       0
9060          UI       0       0       0       0       0       0       0       0       0       0
              *

9061          KK  DS08REDIVERT
9062          KM        Drainage Design Report for Pueblo Verde (portion of retention
9063          KM        used), Remaining retention volume estimated from aerial
9064          DT    RS08    33.5     0.0
9065          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9066          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9067          KK   CPS08COMBINE
9068          HC       2   1.156
              *

9069          KK  S08S09ROUTE
9070          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9071          KM        width based on aerial / Manning's N Value: clean straight earth
9072          RS       7    FLOW
9073          RC   0.022   0.022   0.022    5017  0.0080    0.00
9074          RX  100.00  102.00  104.00  116.00  136.00  148.00  158.00  166.00
9075          RY  936.50  936.25  936.00  933.00  933.10  936.00  936.25  936.50
              *

9076          KK     S09BASIN
9077          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
9078          KM        FOR SARIVAL VILLAGE PARCEL 7 DATED 7/27/04 BY CMX
9079          BA   0.370
9080          LG    0.17    0.25    4.60    0.44      42
9081          UI       0     130     420     740     766     461     195      94      26      24
9082          UI       0       0       0       0       0       0       0       0       0       0
9083          UI       0       0       0       0       0       0       0       0       0       0
9084          UI       0       0       0       0       0       0       0       0       0       0
9085          UI       0       0       0       0       0       0       0       0       0       0
              *

9086          KK  DS09REDIVERT
9087          KM        Drainage Report for Sarival Village Parcel 7, Preliminary
9088          KM        Drainage Report Sarival Crossing Business Park, Drainage
9089          KM        Report for Gordon-Darby Goodyear, Drainage Report for
9090          KM        Parcel #500-06-314, Remaining retention volume
9091          KM        estimated from aerial
9092          KM        Additional Retention based on 100yr 6hr retention.
9093          KM        C value is based on future land use, P=3.2, A=acres
9094          DT    RS09    38.7     0.0
9095          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9096          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
1                                          HEC-1 INPUT                                          PAGE232

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9097          KK   CPS09COMBINE
9098          HC       2   1.526
              *

9099          KK   SRS09STORAGE
9100          KM        Storage behind UPRR
9101          KO
9102          RS       1    STOR
9103          SV            6.00   20.90   43.80   78.60
9104          SQ                          750.00 3076.00
9105          SE  909.00  910.00  911.00  912.60  913.10
9106          ST
              *

9107          KK   DS091DIVERT
9108          KM        MC85/RR Tracks/Sarival split flow
9109          DT  DS091W     0.0     0.0
9110          DI     0.0   750.6  3075.7  7642.2 13750.8     0.0     0.0     0.0     0.0     0.0
9111          DQ     0.0   501.7  2037.5  5216.1  9516.4     0.0     0.0     0.0     0.0     0.0
              *

9112          KK   DS092DIVERT
9113          KM        MC85/RR Tracks/Sarival split flow
9114          DT  DS092W     0.0     0.0
9115          DI     0.0   248.9  1038.2  2426.1  4234.3     0.0     0.0     0.0     0.0     0.0
9116          DQ     0.0     1.9    27.9    69.2   121.4     0.0     0.0     0.0     0.0     0.0
              *

9117          KK  S09S23ROUTE
9118          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9119          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9120          RS       1    FLOW
9121          RC   0.035   0.035   0.035    2041  0.0002    0.00
9122          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9123          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9124          KK     S22BASIN
9125          KM        BASIN BOUNDARY FROM DRAINAGE REPORT
9126          KM        FOR SARIVAL GARDENS DATED 11/1/99 BY CLOUSE ENGINEERING INC.
9127          BA   0.267
9128          LG    0.30    0.25    4.60    0.34       5
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9129          UI       0      38     140     217     303     455     329     239     161      74
9130          UI      49      26      12      12      12       0       0       0       0       0
9131          UI       0       0       0       0       0       0       0       0       0       0
9132          UI       0       0       0       0       0       0       0       0       0       0
9133          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9134          KK  DS22REDIVERT
9135          KM        Drainage Report for Sarival Gardens
9136          KM        Additional Retention based on 100yr 6hr retention.
9137          KM        C value is based on future land use, P=3.2, A=acres
9138          DT    RS22    11.8     0.0
9139          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9140          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9141          KK  S22S23ROUTE
9142          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9143          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9144          RS      11    FLOW
9145          RC   0.035   0.035   0.035    7322  0.0049    0.00
9146          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9147          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9148          KK     S23BASIN
9149          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR ESTRELLA-INDUSTRIAL
9150          KM        PARK DATED 1/4/00 BY CVL AND MASTER DRAINAGE REPORT FOR GOODYEAR
9151          KM        CROSSING INDUSTRIAL PARK DATED 11/29/07 BY V3
9152          BA   1.029
9153          LG    0.21    0.25    4.50    0.43      34
9154          UI       0     410    1283    2355    2008    1164     436     177      72       0
9155          UI       0       0       0       0       0       0       0       0       0       0
9156          UI       0       0       0       0       0       0       0       0       0       0
9157          UI       0       0       0       0       0       0       0       0       0       0
9158          UI       0       0       0       0       0       0       0       0       0       0
              *

9159          KK  DS23REDIVERT
9160          KM        Master Drainage Report for Estrella - Industrial Park
9161          KM        Additional Retention based on 100yr 6hr retention.
9162          KM        C value is based on future land use, P=3.2, A=acres
9163          DT    RS23   129.0     0.0
9164          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9165          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9166          KK   CPS23COMBINE
9167          HC       4  44.144
              *

9168          KK   SRS23STORAGE
9169          KM        Storage behind UPRR (WLB)
9170          KO
9171          RS       1    STOR
9172          SV            0.04    0.10    0.12    0.26   58.75  156.65
9173          SQ           11.00   14.00   23.00  370.00 7710.0038388.00
9174          SE  904.40  905.20  905.50  906.00  908.10  910.00  911.20
9175          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9176          KK  S23S24ROUTE
9177          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9178          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9179          RS       5    FLOW
9180          RC   0.035   0.035   0.035    3907  0.0027    0.00
9181          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9182          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9183          KK     S03BASIN
9184          KM        BASIN BOUNDARY FROM MASTER DRAINAGE STUDY FOR ESTRELLA VISTA PARCELS
9185          KM        A THRU H AND PARCEL 8 DATED 8/31/98 BY NEIL MCGILL CONSULTANTS, DRAINAGE
9186          KM        DESIGN REPORT FOR PUEBLO VERDE DATED 5/3/05 BY HOSKIN-RYAN
9187          KM        CONSULTANTS AND DRAINAGE REPORT FOR SARIVAL VILLAGE
9188          KM        PHASE D DATED 1/4/02 BY CMX
9189          BA   0.719
9190          LG    0.23    0.25    4.80    0.36      40
9191          UI       0      76     175     345     441     570     831     856     653     507
9192          UI     392     268     137     112      77      35      23      24      23      23
9193          UI       0       0       0       0       0       0       0       0       0       0
9194          UI       0       0       0       0       0       0       0       0       0       0
9195          UI       0       0       0       0       0       0       0       0       0       0
              *

9196          KK  DS03REDIVERT
9197          KM        Master Drainage Study Estrella Vista Parcels A Through H
9198          KM        and Parcel 8, Drainage Design Report for Pueblo Verde
9199          KM        (portion of retention used), Drainage Report for Sarival Village
9200          KM        Parcel 2, Drainage Report for Sarival Village Parcel 4
9201          KM        Drainage Report for Sarival Village Parcel 5
9202          KM        Additional Retention based on 100yr 6hr retention.
9203          KM        C value is based on future land use, P=3.2, A=acres
9204          DT    RS03    66.0     0.0
9205          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9206          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9207          KK   DS021RETRIEVE
9208          DR  DS021S
              *

9209          KK  S02S03ROUTE
9210          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9211          KM        width based on aerial / Manning's N Value: clean straight earth
9212          RS      15    FLOW
9213          RC   0.022   0.022   0.022    5334  0.0037    0.00
9214          RX  100.00  114.00  128.00  140.00  150.00  162.00  182.00  202.00
9215          RY  970.50  970.25  970.00  967.00  967.10  970.00  970.10  970.20
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9216          KK   CPS03COMBINE
9217          HC       2   1.593
              *

9218          KK  S03S04ROUTE
9219          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9220          KM        width based on aerial / Manning's N Value: earth
9221          KM        with sparse trees and shrubs
9222          RS      42    FLOW
9223          RC   0.032   0.032   0.032    5843  0.0065    0.00
9224          RX  100.00  120.00  140.00  210.00  470.00  482.00  492.00  502.00
9225          RY  918.00  917.75  917.50  916.00  916.10  918.00  918.20  918.25
              *

9226          KK     S04BASIN
9227          KM        BASIN BOUNDARY FROM DRAINAGE REPORT FOR SARIVAL VILLAGE PHASE B1 AND
9228          KM        B2 DATED 10/3/01 BY CMX AND DRAINAGE REPORT FOR SARVIAL VILLAGE PARCEL 6
9229          KM        DATED 10/3/01 BY CMX
9230          BA   0.702
9231          LG    0.16    0.25    4.70    0.41      49
9232          UI       0     244     789    1381    1459     886     378     180      54      45
9233          UI       0       0       0       0       0       0       0       0       0       0
9234          UI       0       0       0       0       0       0       0       0       0       0
9235          UI       0       0       0       0       0       0       0       0       0       0
9236          UI       0       0       0       0       0       0       0       0       0       0
              *

9237          KK  DS04REDIVERT
9238          KM        Drainage Report for Sarival Village Parcel 6, Arizona Galvanizing
9239          KM        Drainage Report, Hydrologic and Hydraulics Report for Estrella
9240          KM        Crossings Business Park, Remaining retention volume estimated from aeria
9241          KM        Additional Retention based on 100yr 6hr retention.
9242          KM        C value is based on future land use, P=3.2, A=acres
9243          DT    RS04    79.5     0.0
9244          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9245          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9246          KK   CPS04COMBINE
9247          HC       2   2.295
              *

9248          KK   SRS04STORAGE
9249          KM        Storage behind UPRR (WLB)
9250          KO
9251          RS       1    STOR
9252          SV            0.08    8.33   14.16   23.37
9253          SQ           50.00  285.00  778.00 4586.00
9254          SE  908.50  910.10  914.00  915.00  916.00
9255          ST
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9256          KK  S04S10ROUTE
9257          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9258          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9259          RS      15    FLOW
9260          RC   0.035   0.035   0.035    6250  0.0016    0.00
9261          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9262          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9263          KK   DS091RETRIEVE
9264          DR  DS091W
              *

9265          KK  S09S10ROUTE
9266          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9267          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9268          RS       1    FLOW
9269          RC   0.035   0.035   0.035    3792  0.0007    0.00
9270          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9271          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9272          KK     S05BASIN
9273          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
9274          KM        AND TRAVELS WEST
9275          BA   0.212
9276          LG    0.11    0.25    4.90    0.41      57
9277          UI       0     105     317     563     381     174      67      18      16       0
9278          UI       0       0       0       0       0       0       0       0       0       0
9279          UI       0       0       0       0       0       0       0       0       0       0
9280          UI       0       0       0       0       0       0       0       0       0       0
9281          UI       0       0       0       0       0       0       0       0       0       0
              *

9282          KK  DS05REDIVERT
9283          KM        Additional Retention based on 100yr 2hr retention.
9284          KM        C value is based on future land use, P=2.7, A=acres
9285          DT    RS05    22.6     0.0
9286          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9287          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9288          KK  S05S10ROUTE
9289          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9290          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9291          RS      38    FLOW
9292          RC   0.035   0.035   0.035    7221  0.0015    0.00
9293          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9294          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9295          KK     S10BASIN
9296          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND BUCKEYE CANAL
9297          KM        AND TRAVELS WEST
9298          BA   0.615
9299          LG    0.10    0.25    4.80    0.42      46
9300          UI       0     103     418     613     994    1025     691     452     208     124
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9301          UI      57      31      31       0       0       0       0       0       0       0
9302          UI       0       0       0       0       0       0       0       0       0       0
9303          UI       0       0       0       0       0       0       0       0       0       0
9304          UI       0       0       0       0       0       0       0       0       0       0
              *

9305          KK  DS10REDIVERT
9306          KM        Additional Retention based on 100yr 6hr retention.
9307          KM        C value is based on future land use, P=3.2, A=acres
9308          DT    RS10    71.6     0.0
9309          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9310          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9311          KK   CPS10COMBINE
9312          HC       4   4.648
              *

9313          KK  S10S24ROUTE
9314          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9315          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9316          RS       8    FLOW
9317          RC   0.035   0.035   0.035    2857  0.0014    0.00
9318          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9319          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9320          KK   DS092RETRIEVE
9321          DR  DS092W
              *

9322          KK  S09S24ROUTE
9323          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9324          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9325          RS       1    FLOW
9326          RC   0.035   0.035   0.035    4898  0.0018    0.00
9327          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9328          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9329          KK     S24BASIN
9330          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS BEHIND
9331          KM        BUCKEYE CANAL AND OVERTOPS
9332          BA   0.416
9333          LG    0.23    0.25    5.00    0.33      38
9334          UI       0     166     519     952     811     471     176      72      28       0
9335          UI       0       0       0       0       0       0       0       0       0       0
9336          UI       0       0       0       0       0       0       0       0       0       0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9337          UI       0       0       0       0       0       0       0       0       0       0
9338          UI       0       0       0       0       0       0       0       0       0       0
              *

9339          KK  DS24REDIVERT
9340          KM        Additional Retention based on 100yr 6hr retention.
9341          KM        C value is based on future land use, P=3.2, A=acres
9342          DT    RS24    40.9     0.0
9343          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9344          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9345          KK   CPS24COMBINE
9346          HC       4  47.682
              *

9347          KK  S24S25ROUTE
9348          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9349          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9350          RS      13    FLOW
9351          RC   0.035   0.035   0.035    7959  0.0015    0.00
9352          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9353          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9354          KK     S25BASIN
9355          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9356          BA   0.591
9357          LG    0.23    0.23    6.20    0.20      45
9358          UI       0     119     437     661    1086     937     621     365     170      92
9359          UI      31      31       0       0       0       0       0       0       0       0
9360          UI       0       0       0       0       0       0       0       0       0       0
9361          UI       0       0       0       0       0       0       0       0       0       0
9362          UI       0       0       0       0       0       0       0       0       0       0
              *

9363          KK  DS25REDIVERT
9364          KM        Additional Retention based on 100yr 2hr retention.
9365          KM        C value is based on future land use, P=2.7, A=acres
9366          DT    RS25    67.9     0.0
9367          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9368          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9369          KK   CPS25COMBINE
9370          HC       2  48.273
              *

9371          KK     S81BASIN
9372          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9373          BA   0.130
9374          LG    0.25    0.23    6.20    0.20      33
9375          UI       0      85     257     380     193      61      19      11       0       0
9376          UI       0       0       0       0       0       0       0       0       0       0
9377          UI       0       0       0       0       0       0       0       0       0       0
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9378          UI       0       0       0       0       0       0       0       0       0       0
9379          UI       0       0       0       0       0       0       0       0       0       0
              *

9380          KK  DS81REDIVERT
9381          KM        Additional Retention based on 100yr 2hr retention.
9382          KM        C value is based on future land use, P=2.7, A=acres
9383          DT    RS81    13.2     0.0
9384          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
```

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9385          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9386          KK     S82BASIN
9387          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
9388          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
9389          BA   0.204
9390          LG    0.22    0.17    6.80    0.16      53
9391          UI       0      72     231     408     422     255     107      52      14      14
9392          UI       0       0       0       0       0       0       0       0       0       0
9393          UI       0       0       0       0       0       0       0       0       0       0
9394          UI       0       0       0       0       0       0       0       0       0       0
9395          UI       0       0       0       0       0       0       0       0       0       0
              *

9396          KK  DS82REDIVERT
9397          KM        Additional Retention based on 100yr 6hr retention.
9398          KM        C value is based on future land use, P=3.2, A=acres
9399          DT    RS82    25.4     0.0
9400          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9401          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9402          KK  S82S83ROUTE
9403          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9404          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9405          RS      73    FLOW
9406          RC   0.035   0.035   0.035    9162  0.0008    0.00
9407          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9408          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9409          KK     S83BASIN
9410          KM        BASIN BOUNDARY FROM SR801 2006 TOPO, FLOW PONDS
9411          KM        BEHIND EXTENSION CANAL, OVERTOPS AND ENTERS GILA RIVER
9412          BA   0.215
9413          LG    0.23    0.25    5.60    0.25      31
9414          UI       0      24      60     111     146     189     286     242     188     142
9415          UI     107      57      40      27      16       8       7       7       7       0
9416          UI       0       0       0       0       0       0       0       0       0       0
9417          UI       0       0       0       0       0       0       0       0       0       0
9418          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9419          KK  DS83REDIVERT
9420          KM        Additional Retention based on 100yr 2hr retention.
9421          KM        C value is based on future land use, P=2.7, A=acres
9422          DT    RS83    10.7     0.0
9423          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9424          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9425          KK   CPS83COMBINE
9426          HC       2   0.419
              *

9427          KK     S84BASIN
9428          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
9429          BA   0.207
9430          LG    0.20    0.13    8.40    0.08      15
9431          UI       0      49     173     264     426     309     199      91      48      20
9432          UI      11      12       0       0       0       0       0       0       0       0
9433          UI       0       0       0       0       0       0       0       0       0       0
9434          UI       0       0       0       0       0       0       0       0       0       0
9435          UI       0       0       0       0       0       0       0       0       0       0
              *

9436          KK  DS84REDIVERT
9437          KM        Additional Retention based on 100yr 2hr retention.
9438          KM        C value is based on future land use, P=2.7, A=acres
9439          DT    RS84     6.8     0.0
9440          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9441          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9442          KK   DUMMYCOMBINE
9443          HC       4
              *

9444          KK   DUMMYCOMBINE
9445          HC       3
              *

9446          KK     W28BASIN
9447          KM        BASIN BOUNDARY FROM 1990 TOPO, BEAUTIFUL AZ ESTATES
9448          BA   0.992
9449          LG    0.28    0.25    4.45    0.42      18
9450          UI       0     116     313     570     732    1007    1410    1065     830     615
9451          UI     409     202     157     106      36      36      35      36       0       0
9452          UI       0       0       0       0       0       0       0       0       0       0
9453          UI       0       0       0       0       0       0       0       0       0       0
9454          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE241

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9455          KK  DW28REDIVERT
9456          KM        Preliminary Drainage Report for Jackrabbit Estates
9457          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
9458          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
9459          KM        Additional Retention based on 100yr 2hr retention.
9460          KM        C value is based on future land use, P=2.7, A=acres
9461          DT    RW28    63.4     0.0
9462          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9463          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9464          KK  W28W29ROUTE
9465          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
9466          KM        width based on aerial / Manning's N Value: earth
9467          KM        w/ sparse trees and shrubs
9468          RS      18    FLOW
9469          RC   0.032   0.032   0.032    6604  0.0035    0.00
9470          RX  100.00  118.00  136.00  144.00  152.00  160.00  180.00  400.00
```

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9471          RY  1148.5 1148.25 1148.00 1146.00 1146.10 1147.00 1147.10 1148.50
              *

9472          KK     W29BASIN
9473          KM        BASIN BOUNDARY FROM 1990 TOPO, JACKRABBIT ESTATES
9474          BA   0.640
9475          LG    0.28    0.25    4.10    0.52      18
9476          UI       0      79     236     412     533     789     915     654     496     353
9477          UI     175     126      79      31      25      24      24       0       0       0
9478          UI       0       0       0       0       0       0       0       0       0       0
9479          UI       0       0       0       0       0       0       0       0       0       0
9480          UI       0       0       0       0       0       0       0       0       0       0
              *

9481          KK  DW29REDIVERT
9482          KM        Preliminary Drainage Report for Jackrabbit Estates
9483          KM        (RETENTION ESTIMATED AT 40 % FROM AERIAL OF NEW
9484          KM        DEVELOPMENT. NO OBVIOUS RETENTION IN OLD DEVELOPMENT)
9485          KM        Additional Retention based on 100yr 2hr retention.
9486          KM        C value is based on future land use, P=2.7, A=acres
9487          DT    RW29    46.6     0.0
9488          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9489          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9490          KK   CPW29COMBINE
9491          HC       2   1.632
              *

9492          KK  W29W30ROUTE
9493          KM        Cross-section: Estimated 1.5' deep and 4:1 side slopes
9494          KM        width based on aerial / Manning's N Value: clean straight earth
9495          RS       5    FLOW
9496          RC   0.022   0.022   0.022    2938  0.0068    0.00
9497          RX  100.00  102.00  104.00  116.00  122.00  134.00  144.00  150.00
9498          RY  1117.2 1116.10 1116.00 1114.50 1114.60 1116.00 1116.10 1117.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9499          KK     W30BASIN
9500          KM        BASIN BOUNDARY FROM 1990 TOPO
9501          BA   0.266
9502          LG    0.28    0.25    4.30    0.44      14
9503          UI       0      72     250     392     573     376     221      91      47      15
9504          UI      16       0       0       0       0       0       0       0       0       0
9505          UI       0       0       0       0       0       0       0       0       0       0
9506          UI       0       0       0       0       0       0       0       0       0       0
9507          UI       0       0       0       0       0       0       0       0       0       0
              *

9508          KK  DW30REDIVERT
9509          KM        Additional Retention based on 100yr 2hr retention.
9510          KM        C value is based on future land use, P=2.7, A=acres
9511          DT    RW30     5.9     0.0
9512          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9513          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9514          KK   CPW30COMBINE
9515          HC       2   1.898
              *

9516          KK  W30L59ROUTE
9517          KM        Cross-section: Width and side slopes based on aerial
9518          KM        and topo / Manning's N Value: earth w/ sparse trees and shrubs
9519          RS       2    FLOW
9520          RC   0.032   0.032   0.032    2996  0.0087    0.00
9521          RX  100.00  115.00  130.00  170.00  194.00  234.00  254.00  274.00
9522          RY  1095.0 1094.50 1094.00 1092.00 1092.10 1094.00 1094.25 1094.50
              *

9523          KK     L59BASIN
9524          KM        BASIN BOUNDARY FROM LITCHFIELD FARMS
9525          BA   0.502
9526          LG    0.30    0.25    4.00    0.47       5
9527          UI       0      65     214     353     463     742     671     490     363     224
9528          UI     113      80      42      20      20      20       0       0       0       0
9529          UI       0       0       0       0       0       0       0       0       0       0
9530          UI       0       0       0       0       0       0       0       0       0       0
9531          UI       0       0       0       0       0       0       0       0       0       0
              *

9532          KK  DL59REDIVERT
9533          KM        Retention volume estimated based on aerial
9534          DT    RL59    37.7     0.0
9535          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9536          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9537          KK   DL551RETRIEVE
9538          DR  DL551S
              *

9539          KK  L55L59ROUTE
9540          KM        Cross-section: Assumed 2' depth, width based on
9541          KM        aerial, wall included / Manning's N Value:
9542          KM        earth w/ sparse trees and brush; street LOB
9543          RS       1    FLOW
9544          RC   0.016   0.032   0.032    5728  0.0038    0.00
9545          RX  100.00  112.00  124.00  132.00  138.00  146.00  148.00  150.00
9546          RY  1104.5 1104.25 1104.00 1102.00 1102.10 1104.00 1104.25 1105.00
              *

9547          KK   CPL59COMBINE
9548          HC       3   2.897
              *

9549          KK  L59L65ROUTE
9550          KM        Cross-section: Assumed 3' depth, width based on aerial
9551          KM        Manning's N Value: earth w/ sparse trees and brush
9552          RS       5    FLOW
9553          RC   0.032   0.032   0.032    6594  0.0067    0.00
9554          RX  100.00  115.00  130.00  146.00  154.00  170.00  190.00  210.00
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9555          RY  1074.5 1074.25 1074.00 1071.00 1071.10 1074.00 1074.25 1074.50
              *

9556          KK     W31BASIN
9557          KM        BASIN BOUNDARY FROM 1990 TOPO
9558          BA   0.233
9559          LG    0.30    0.25    4.00    0.50       9
9560          UI       0      49     179     270     446     365     238     129      63      32
9561          UI      13      12       0       0       0       0       0       0       0       0
9562          UI       0       0       0       0       0       0       0       0       0       0
9563          UI       0       0       0       0       0       0       0       0       0       0
9564          UI       0       0       0       0       0       0       0       0       0       0
              *

9565          KK  DW31REDIVERT
9566          KM        Additional Retention based on 100yr 6hr retention.
9567          KM        C value is based on future land use, P=3.2, A=acres
9568          DT    RW31     4.1     0.0
9569          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9570          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9571          KK  W31W32ROUTE
9572          KM        Cross-section: Side slopes and width based
9573          KM        on aerial and topo / Manning's N Value:
9574          KM        earth w/ sparse trees and shrubs
9575          RS       5    FLOW
9576          RC   0.032   0.032   0.032    6659  0.0070    0.00
9577          RX  100.00  115.00  130.00  146.00  162.00  178.00  198.00  218.00
9578          RY  1090.5 1090.25 1090.00 1087.00 1087.10 1090.00 1090.25 1090.50
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9579          KK     W32BASIN
9580          KM        BASIN BOUNDARY FROM 1990 TOPO
9581          BA   0.613
9582          LG    0.28    0.25    4.10    0.50      15
9583          UI       0      66     155     304     387     505     746     714     552     423
9584          UI     325     206     114      89      66      20      20      21      20       0
9585          UI       0       0       0       0       0       0       0       0       0       0
9586          UI       0       0       0       0       0       0       0       0       0       0
9587          UI       0       0       0       0       0       0       0       0       0       0
              *

9588          KK  DW32REDIVERT
9589          KM        Additional Retention based on 100yr 2hr retention.
9590          KM        C value is based on future land use, P=2.7, A=acres
9591          DT    RW32    12.7     0.0
9592          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9593          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9594          KK   CPW32COMBINE
9595          HC       2   0.846
              *

9596          KK  DW32SEDIVERT
9597          KM        Diversion under I-10 at culvert
9598          DT   DW32S     0.0     0.0
9599          DI     0.0  1500.0  1842.0  2604.0  3698.0  5158.0     0.0     0.0     0.0     0.0
9600          DQ     0.0  1500.0  1524.0  1524.0  1534.6  1569.2     0.0     0.0     0.0     0.0
              *

9601          KK  W32L65ROUTE
9602          KM        Cross-section: Natural Desert Wash w/ vegatation
9603          RS       1    FLOW
9604          RC   0.035   0.035   0.035    1714  0.0047    0.00
9605          RX  100.00  150.00  200.00  285.00  313.00  316.00  318.00  319.00
9606          RY  1050.0 1049.50 1049.00 1048.00 1048.00 1049.00 1049.50 1050.00
              *

9607          KK     L65BASIN
9608          KM        BASIN BOUNDARY FROM 1990 TOPO
9609          BA   0.545
9610          LG    0.17    0.25    4.10    0.59      55
9611          UI       0     169     560     931    1174     724     372     159      66      34
9612          UI       0       0       0       0       0       0       0       0       0       0
9613          UI       0       0       0       0       0       0       0       0       0       0
9614          UI       0       0       0       0       0       0       0       0       0       0
9615          UI       0       0       0       0       0       0       0       0       0       0
              *
1                                          HEC-1 INPUT                                          PAGE245

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9616          KK  DL65REDIVERT
9617          KM        Additional Retention based on 100yr 2hr retention.
9618          KM        C value is based on future land use, P=2.7, A=acres
9619          DT    RL65    48.2     0.0
9620          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9621          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9622          KK   CPL65COMBINE
9623          HC       3   4.288
              *

9624          KK  L65S34ROUTE
9625          KM        Cross-section: ROW V-Ditch, assumed 3' depth
9626          KM        width based on aerial / Manning's N Value:
9627          KM        street  ROW and clean w sparse trees/brush
9628          RS       3    FLOW
9629          RC   0.016   0.032   0.032    4295  0.0072    0.00
9630          RX  100.00  112.00  122.00  134.00  142.00  154.00  174.00  194.00
9631          RY  1025.0 1024.25 1024.00 1021.00 1021.10 1024.00 1024.25 1025.00
              *

9632          KK  DW32SERETRIEVE
9633          DR   DW32S
              *

9634          KK  W32S34ROUTE
9635          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
9636          KM        width based on aerial / Manning's N Value: clean straight earth
9637          RS       3    FLOW
9638          RC   0.022   0.022   0.022    6007  0.0065    0.00
```

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9639          RX  100.00  120.00  140.00  152.00  156.00  168.00  183.00  198.00
9640          RY  1043.0 1042.25 1042.00 1039.00 1039.10 1042.00 1042.10 1043.00
              *

9641          KK     S34BASIN
9642          KM        BASIN BOUNDARY FROM 1990 TOPO
9643          BA   0.906
9644          LG    0.19    0.25    4.55    0.45      53
9645          UI       0     146     593     881    1374    1538    1031     700     335     196
9646          UI     100      44      44       0       0       0       0       0       0       0
9647          UI       0       0       0       0       0       0       0       0       0       0
9648          UI       0       0       0       0       0       0       0       0       0       0
9649          UI       0       0       0       0       0       0       0       0       0       0
              *

9650          KK  DS34REDIVERT
9651          KM        Additional Retention based on 100yr 2hr retention.
9652          KM        C value is based on future land use, P=2.7, A=acres
9653          DT    RS34    49.4     0.0
9654          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9655          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9656          KK   CPS34COMBINE
9657          HC       3   5.194
              *

9658          KK  DS34SEDIVERT
9659          KM        Van Buren at Perryville split flow
9660          DT   DS34S     0.0     0.0
9661          DI     0.0   693.9  1872.9  4178.4  7379.2     0.0     0.0     0.0     0.0     0.0
9662          DQ     0.0   360.6  1020.0  2351.2  4235.0     0.0     0.0     0.0     0.0     0.0
              *

9663          KK  S34S44ROUTE
9664          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9665          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9666          RS       2    FLOW
9667          RC   0.035   0.035   0.035    1833  0.0058    0.00
9668          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9669          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9670          KK     L66BASIN
9671          KM        BASIN BOUNDARY FROM 1990 TOPO
9672          BA   0.998
9673          LG    0.10    0.25    4.45    0.53      71
9674          UI       0     148     573     864    1263    1738    1205     838     513     251
9675          UI     158      62      45      45       0       0       0       0       0       0
9676          UI       0       0       0       0       0       0       0       0       0       0
9677          UI       0       0       0       0       0       0       0       0       0       0
9678          UI       0       0       0       0       0       0       0       0       0       0
              *

9679          KK  DL66REDIVERT
9680          KM        Additional Retention based on 100yr 2hr retention.
9681          KM        C value is based on future land use, P=2.7, A=acres
9682          DT    RL66    93.8     0.0
9683          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9684          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9685          KK   DL601RETRIEVE
9686          DR  DL601S
              *

9687          KK  L60L66ROUTE
9688          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9689          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9690          RS      12    FLOW
9691          RC   0.035   0.035   0.035    7024  0.0053    0.00
9692          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9693          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9694          KK   CPL66COMBINE
9695          HC       2   8.498
              *

9696          KK  L66L71ROUTE
9697          KM        Cross-section: assumed 3' depth, width based on aerial
9698          KM        Manning's N Value: clean earth; straight; street LOB
9699          RS       1    FLOW
9700          RC   0.016   0.022   0.022    1163  0.0043    0.00
9701          RX  100.00  108.00  116.00  124.00  130.00  138.00  158.00  178.00
9702          RY  1027.0 1026.10 1026.00 1024.00 1024.40 1026.00 1026.25 1027.00
              *

9703          KK     L71BASIN
9704          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
9705          BA   0.108
9706          LG    0.19    0.25    4.65    0.41      49
9707          UI       0      98     314     286     101      26      11       0       0       0
9708          UI       0       0       0       0       0       0       0       0       0       0
9709          UI       0       0       0       0       0       0       0       0       0       0
9710          UI       0       0       0       0       0       0       0       0       0       0
9711          UI       0       0       0       0       0       0       0       0       0       0
              *

9712          KK  DL71REDIVERT
9713          KM        Arizona Storage Preliminary Drainage Report
9714          KM        Additional Retention based on 100yr 6hr retention.
9715          KM        C value is based on future land use, P=3.2, A=acres
9716          DT    RL71     1.4     0.0
9717          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9718          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9719          KK   CPL71COMBINE
9720          HC       2   8.606
              *
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```
9721          KK  L71S35ROUTE
9722          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9723          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9724          RS       7    FLOW
9725          RC   0.035   0.035   0.035    6714  0.0027    0.00
9726          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9727          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9728          KK     L69BASIN
9729          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
9730          BA   0.058
9731          LG    0.14    0.25    4.15    0.60      61
9732          UI       0     110     258      70      10       0       0       0       0       0
9733          UI       0       0       0       0       0       0       0       0       0       0
9734          UI       0       0       0       0       0       0       0       0       0       0
9735          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE248

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9736          UI       0       0       0       0       0       0       0       0       0       0
              *

9737          KK   SRL69STORAGE
9738          KM        Storage behind I-10
9739          KO
9740          RS       1    STOR
9741          SV            3.47   10.56   14.12   23.26
9742          SQ          100.00  188.00  244.00 1303.00
9743          SE  1037.6 1040.00 1041.50 1042.00 1043.00
9744          ST
              *

9745          KK  L69S35ROUTE
9746          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9747          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9748          RS       7    FLOW
9749          RC   0.035   0.035   0.035    6040  0.0053    0.00
9750          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9751          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9752          KK     L70BASIN
9753          KM        BASIN BOUNDARY FROM I-10 TOPO, MCDOWELL ROAD, I-10 CULVERT LOCATIONS
9754          BA   0.048
9755          LG    0.14    0.25    4.45    0.50      59
9756          UI       0     119     217      31       0       0       0       0       0       0
9757          UI       0       0       0       0       0       0       0       0       0       0
9758          UI       0       0       0       0       0       0       0       0       0       0
9759          UI       0       0       0       0       0       0       0       0       0       0
9760          UI       0       0       0       0       0       0       0       0       0       0
              *

9761          KK   SRL70STORAGE
9762          KM        Storage behind I-10
9763          KO
9764          RS       1    STOR
9765          SV            0.23    1.37    1.97    4.62
9766          SQ           18.00   75.00  115.00 1063.00
9767          SE  1032.9 1034.00 1035.50 1036.00 1037.00
9768          ST
              *

9769          KK  L70S35ROUTE
9770          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9771          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9772          RS       6    FLOW
9773          RC   0.035   0.035   0.035    5486  0.0051    0.00
9774          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9775          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9776          KK     S35BASIN
9777          KM        ROUTING FROM I-10 CULVERT WASH LOMR STUDY, FCDMC
9778          BA   0.743
9779          LG    0.27    0.25    4.55    0.39      17
9780          UI       0     244     792    1358    1591     963     448     204      75      47
9781          UI       0       0       0       0       0       0       0       0       0       0
9782          UI       0       0       0       0       0       0       0       0       0       0
9783          UI       0       0       0       0       0       0       0       0       0       0
9784          UI       0       0       0       0       0       0       0       0       0       0
              *

9785          KK  DS35REDIVERT
9786          KM        Additional Retention based on 100yr 2hr retention.
9787          KM        C value is based on future land use, P=2.7, A=acres
9788          DT    RS35    32.9     0.0
9789          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9790          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9791          KK   CPS35COMBINE
9792          HC       4   9.455
              *

9793          KK  S35S44ROUTE
9794          KM        Cross-section: Clean straight earth
9795          RS       9    FLOW
9796          RC   0.022   0.022   0.022    3189  0.0006    0.00
9797          RX  100.00  101.00  102.00  384.00  562.00  580.00  581.00  582.00
9798          RY  1006.0 1005.00 1004.50 1004.00 1003.90 1004.50 1005.00 1006.00
              *

9799          KK     S44BASIN
9800          KM        BASIN BOUNDARY FROM 1990 TOPO, I-10 CULVERT WASH FDS
9801          BA   0.078
9802          LG    0.25    0.23    4.80    0.34      14
9803          UI       0      34     109     195     145      76      27      10       6       0
9804          UI       0       0       0       0       0       0       0       0       0       0
9805          UI       0       0       0       0       0       0       0       0       0       0
9806          UI       0       0       0       0       0       0       0       0       0       0
9807          UI       0       0       0       0       0       0       0       0       0       0
              *

9808          KK  DS44REDIVERT
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9809          KM        Additional Retention based on 100yr 2hr retention.
9810          KM        C value is based on future land use, P=2.7, A=acres
9811          DT    RS44     2.4      0.0
9812          DI     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
9813          DQ     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


9814          KK   CPS44COMBINE
9815          HC       3   14.23
              *

9816          KK   SRS44STORAGE
9817          KM        Storage behind canal (I-10 Culvert Wash)
9818          KO
9819          RS       1    STOR
9820          SV            12.20    42.30    67.40   241.40
9821          SQ                              420.00 1290.00
9822          SE  1007.5 1009.00 1010.00 1011.00 1012.00
9823          ST
              *

9824          KK  S44S45ROUTE
9825          KM        Cross-section: Estimated 2' deep and 3:1 side
9826          KM        slopes, width based on aerial / Manning's N
9827          KM        Value: clean straight earth
9828          RS      16    FLOW
9829          RC   0.022    0.022    0.022     5749  0.0002     0.00
9830          RX  100.00   106.00   112.00   118.00   120.00   126.00   146.00   366.00
9831          RY  1005.0 1003.90 1003.00   997.00   997.10 1001.00 1002.00 1005.00
              *

9832          KK  DS34SERETRIEVE
9833          DR   DS34S
              *

9834          KK  S34S45ROUTE
9835          KM        Cross-section: Estimated 3' deep and 4:1
9836          KM        side slopes, width based on aerial / Manning's
9837          KM        N Value: clean straight earth
9838          RS       6    FLOW
9839          RC   0.022    0.022    0.022     7089  0.0013     0.00
9840          RX  100.00   101.00   106.00   112.00   122.00   128.00   130.00   134.00
9841          RY  1004.0 1000.10 1000.00   997.00   997.10 1000.00 1000.10 1004.00
              *

9842          KK     S45BASIN
9843          KM        BLUE HORIZONS
9844          BA   0.490
9845          LG    0.23     0.24     4.60     0.40       29
9846          UI       0       58      165      292      376      542      692      519      400      295
9847          UI     173      101       70       43       18       18       18        0        0        0
9848          UI       0        0        0        0        0        0        0        0        0        0
9849          UI       0        0        0        0        0        0        0        0        0        0
9850          UI       0        0        0        0        0        0        0        0        0        0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


9851          KK  DS45REDIVERT
9852          KM        Final Drainage Report for Vista De Montana
9853          KM        Additional Retention based on 100yr 2hr retention.
9854          KM        C value is based on future land use, P=2.7, A=acres
9855          DT    RS45    86.8      0.0
9856          DI     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
9857          DQ     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
              *

9858          KK   CPS45COMBINE
9859          HC       3   14.72
              *

9860          KK  S45S46ROUTE
9861          KM        Cross-section: Estimated 3' deep and 4:1 side
9862          KM        slopes, width based on aerial / Manning's N
9863          KM        Value: clean straight earth
9864          RS       2    FLOW
9865          RC   0.022    0.022    0.022     1537  0.0010     0.00
9866          RX  100.00   108.00   116.00   128.00   134.00   146.00   166.00   286.00
9867          RY  1005.5 1004.25 1004.00 1001.00 1001.10 1002.00 1003.00 1005.50
              *

9868          KK     S46BASIN
9869          KM        BLUE HORIZONS
9870          BA   0.904
9871          LG    0.25     0.25     3.95     0.40       25
9872          UI       0      125      442      693      952     1490     1151      835      590      287
9873          UI     187      114       38       39       39        0        0        0        0        0
9874          UI       0        0        0        0        0        0        0        0        0        0
9875          UI       0        0        0        0        0        0        0        0        0        0
9876          UI       0        0        0        0        0        0        0        0        0        0
              *

9877          KK  DS46REDIVERT
9878          KM        Final Drainage Report for Blue Horizons Phase 1
9879          KM        (100-year, 6-hour)
9880          KM        Additional Retention based on 100yr 2hr retention.
9881          KM        C value is based on future land use, P=2.7, A=acres
9882          DT    RS46   126.9      0.0
9883          DI     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
9884          DQ     0.0    500.0   5000.0 50000.0     0.0      0.0      0.0      0.0      0.0      0.0
              *

9885          KK   CPS46COMBINE
9886          HC       2  15.624
              *

9887          KK   SRS46STORAGE
9888          KM        Storage behind canal (WLB) Blue Horizons basins
9889          KO
9890          RS       1    STOR
9891          SV            0.32     4.52    15.06    24.62
9892          SQ                              845.00 4777.00
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9893          SE  1001.5 1002.00 1003.00 1004.00 1004.50
9894          ST
              *

9895          KK  S46S47ROUTE
9896          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9897          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9898          RS       7    FLOW
9899          RC   0.035   0.035   0.035    9400  0.0059    0.00
9900          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9901          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9902          KK     S47BASIN
9903          KM        BASIN BOUNDARY FROM 1990 TOPO
9904          BA   0.477
9905          LG    0.15    0.25    4.10    0.61      61
9906          UI       0     100     364     545     912     739     492     274     132      68
9907          UI      25      25       0       0       0       0       0       0       0       0
9908          UI       0       0       0       0       0       0       0       0       0       0
9909          UI       0       0       0       0       0       0       0       0       0       0
9910          UI       0       0       0       0       0       0       0       0       0       0
              *

9911          KK  DS47REDIVERT
9912          KM        Additional Retention based on 100yr 2hr retention.
9913          KM        C value is based on future land use, P=2.7, A=acres
9914          DT    RS47    38.3     0.0
9915          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9916          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9917          KK   CPS47COMBINE
9918          HC       2  16.101
              *

9919          KK  S47S48ROUTE
9920          KM        Cross-section: Estimated 2' deep and 4:1 side
9921          KM        slopes, width based on aerial / Manning's N
9922          KM        Value: clean straight earth, street LOB
9923          RS       4    FLOW
9924          RC   0.016   0.022   0.022    5291  0.0076    0.00
9925          RX  100.00  108.00  116.00  122.00  126.00  132.00  152.00  272.00
9926          RY  951.00  950.50  950.00  948.00  948.10  949.00  949.50  951.00
              *

9927          KK     S48BASIN
9928          KM        BASIN BOUNDARY FROM 1990 TOPO
9929          BA   0.359
9930          LG    0.22    0.25    4.30    0.48      30
9931          UI       0     106     354     574     773     494     269     112      51      22
9932          UI      22       0       0       0       0       0       0       0       0       0
9933          UI       0       0       0       0       0       0       0       0       0       0
9934          UI       0       0       0       0       0       0       0       0       0       0
9935          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

9936          KK  DS48REDIVERT
9937          KM        Additional Retention based on 100yr 2hr retention.
9938          KM        C value is based on future land use, P=2.7, A=acres
9939          DT    RS48    12.7     0.0
9940          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9941          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9942          KK   CPS48COMBINE
9943          HC       2   16.46
              *

9944          KK   DS48SDIVERT
9945          KM        Broadway at Jackrabbit Trail split flow
9946          DT   DS48S     0.0     0.0
9947          DI     0.0  1258.3  3015.3  5339.9  8214.3     0.0     0.0     0.0     0.0     0.0
9948          DQ     0.0     4.3    62.7   189.5   448.6     0.0     0.0     0.0     0.0     0.0
              *

9949          KK  S48S50ROUTE
9950          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9951          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9952          RS      26    FLOW
9953          RC   0.035   0.035   0.035    5774  0.0058    0.00
9954          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9955          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

9956          KK     S49BASIN
9957          KM        BASIN BOUNDARY FROM 1990 TOPO
9958          BA   0.376
9959          LG    0.25    0.25    4.65    0.38      25
9960          UI       0      76     281     423     701     592     392     227     107      57
9961          UI      20      20       0       0       0       0       0       0       0       0
9962          UI       0       0       0       0       0       0       0       0       0       0
9963          UI       0       0       0       0       0       0       0       0       0       0
9964          UI       0       0       0       0       0       0       0       0       0       0
              *

9965          KK  DS49REDIVERT
9966          KM        Additional Retention based on 100yr 6hr retention.
9967          KM        C value is based on future land use, P=3.2, A=acres
9968          DT    RS49    26.0     0.0
9969          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
9970          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

9971          KK  S49S50ROUTE
9972          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
9973          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
9974          RS      34    FLOW
9975          RC   0.035   0.035   0.035    4711  0.0062    0.00
9976          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
9977          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 9978          KK     S50BASIN
 9979          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
 9980          BA   0.307
 9981          LG    0.22    0.25    4.70    0.38      35
 9982          UI       0     105     339     593     645     388     172      80      26      19
 9983          UI       0       0       0       0       0       0       0       0       0       0
 9984          UI       0       0       0       0       0       0       0       0       0       0
 9985          UI       0       0       0       0       0       0       0       0       0       0
 9986          UI       0       0       0       0       0       0       0       0       0       0
               *

 9987          KK  DS50REDIVERT
 9988          KM        Additional Retention based on 100yr 2hr retention.
 9989          KM        C value is based on future land use, P=2.7, A=acres
 9990          DT    RS50    23.7     0.0
 9991          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 9992          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

 9993          KK   CPS50COMBINE
 9994          HC       3  17.143
               *

 9995          KK   SRS50STORAGE
 9996          KM        Storage behind UPRR (WLB)
 9997          KO
 9998          RS       1    STOR
 9999          SV            0.24   17.91   40.51
10000          SQ           74.00  252.00 1465.00
10001          SE  887.00  891.90  895.00  896.00
10002          ST
               *

10003          KK  S50S51ROUTE
10004          KM        Cross-section: Estimated 3' deep and 4:1 side
10005          KM        slopes, width based on aerial / Manning's N
10006          KM        Value: earth w/ sparse trees and shrubs
10007          RS       1    FLOW
10008          RC   0.032   0.032   0.032     296  0.0068    0.00
10009          RX  100.00  106.00  112.00  125.00  146.00  156.00  200.00  203.00
10010          RY  894.20  894.10  894.00  886.00  886.10  894.00  894.10  894.20
               *

10011          KK     S36BASIN
10012          KM        BASIN BOUNDARY IS NOT I-10 DUE TO LOCALIZED DEPRESSION
10013          KM        DRAINING TO CULVERT UNDER I-10
10014          BA   0.291
10015          LG    0.11    0.25    4.35    0.55      45
10016          UI       0     151     465     799     503     215      78      23       0       0
10017          UI       0       0       0       0       0       0       0       0       0       0
10018          UI       0       0       0       0       0       0       0       0       0       0
10019          UI       0       0       0       0       0       0       0       0       0       0
10020          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10021          KK  DS36REDIVERT
10022          KM        Master Drainage Report for Cotton Lane RV and Golf Resort
10023          KM        Additional Retention based on 100yr 6hr retention.
10024          KM        C value is based on future land use, P=3.2, A=acres
10025          DT    RS36   124.6     0.0
10026          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10027          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10028          KK   SRS36STORAGE
10029          KM        Borrow pit (WLB)
10030          KO
10031          RS       1    STOR
10032          SV            6.32   19.56  300.91  635.31  899.95  942.11  979.46
10033          SQ                                            715.00 2198.00
10034          SE  970.40  972.00  980.00  990.00 1000.00 1007.00 1008.00 1008.80
10035          ST
               *

10036          KK  S36S37ROUTE
10037          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10038          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10039          RS       1    FLOW
10040          RC   0.035   0.035   0.035    8118  0.0059    0.00
10041          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10042          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10043          KK     S37BASIN
10044          KM        BASIN BOUNDARY FROM 1990 TOPO
10045          BA   1.030
10046          LG    0.25    0.25    4.65    0.38      22
10047          UI       0     193     741    1108    1814    1663    1107     688     303     186
10048          UI      62      53      52       0       0       0       0       0       0       0
10049          UI       0       0       0       0       0       0       0       0       0       0
10050          UI       0       0       0       0       0       0       0       0       0       0
10051          UI       0       0       0       0       0       0       0       0       0       0
               *

10052          KK  DS37REDIVERT
10053          KM        Additional Retention based on 100yr 2hr retention.
10054          KM        C value is based on future land use, P=2.7, A=acres
10055          DT    RS37    60.9     0.0
10056          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10057          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10058          KK   CPS37COMBINE
10059          HC       2   1.321
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10060          KK  S37S38ROUTE
10061          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10062          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
```

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10063          RS        8    FLOW
10064          RC    0.035   0.035   0.035    7295  0.0047    0.00
10065          RX    25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10066          RY   1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10067          KK     S38BASIN
10068          KM        BASIN BOUNDARY FROM 1990 TOPO
10069          BA    0.778
10070          LG     0.24    0.25    4.70    0.38      24
10071          UI        0     167     611     922    1519    1203     782     410     206     100
10072          UI       41      42       0       0       0       0       0       0       0       0
10073          UI        0       0       0       0       0       0       0       0       0       0
10074          UI        0       0       0       0       0       0       0       0       0       0
10075          UI        0       0       0       0       0       0       0       0       0       0
               *

10076          KK  DS38REDIVERT
10077          KM        Additional Retention based on 100yr 2hr retention.
10078          KM        C value is based on future land use, P=2.7, A=acres
10079          DT    RS38    52.6     0.0
10080          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10081          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10082          KK   CPS38COMBINE
10083          HC       2   2.099
               *

10084          KK  S38S39ROUTE
10085          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10086          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10087          RS        8    FLOW
10088          RC    0.035   0.035   0.035    7034  0.0061    0.00
10089          RX    25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10090          RY   1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10091          KK     S39BASIN
10092          KM        BASIN BOUNDARY FROM 1990 TOPO
10093          BA    0.597
10094          LG     0.24    0.25    4.70    0.37      24
10095          UI        0     104     414     609     985     986     665     428     193     118
10096          UI       50      29      30       0       0       0       0       0       0       0
10097          UI        0       0       0       0       0       0       0       0       0       0
10098          UI        0       0       0       0       0       0       0       0       0       0
10099          UI        0       0       0       0       0       0       0       0       0       0
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10100          KK  DS39REDIVERT
10101          KM        Additional Retention based on 100yr 6hr retention.
10102          KM        C value is based on future land use, P=3.2, A=acres
10103          DT    RS39    45.4     0.0
10104          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10105          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10106          KK   CPS39COMBINE
10107          HC       2   2.696
               *

10108          KK  S39S43ROUTE
10109          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10110          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10111          RS       13    FLOW
10112          RC    0.035   0.035   0.035    7214  0.0029    0.00
10113          RX    25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10114          RY   1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10115          KK     S40BASIN
10116          KM        BASIN BOUNDARY FROM 1990 TOPO
10117          BA    0.512
10118          LG     0.10    0.25    4.70    0.44      78
10119          UI        0     267     798    1393     897     388     147      40       0       0
10120          UI        0       0       0       0       0       0       0       0       0       0
10121          UI        0       0       0       0       0       0       0       0       0       0
10122          UI        0       0       0       0       0       0       0       0       0       0
10123          UI        0       0       0       0       0       0       0       0       0       0
               *

10124          KK  DS40REDIVERT
10125          KM        Additional Retention based on 100yr 2hr retention.
10126          KM        C value is based on future land use, P=2.7, A=acres
10127          DT    RS40    54.7     0.0
10128          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10129          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10130          KK  S40S41ROUTE
10131          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10132          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10133          RS        8    FLOW
10134          RC    0.035   0.035   0.035    7050  0.0070    0.00
10135          RX    25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10136          RY   1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10137          KK     S41BASIN
10138          KM        BASIN BOUNDARY FROM 1990 TOPO AND COTTONWOOD UNIT 1 - FINAL DRAINAGE
10139          KM        REPORT (3RD REVIEW) DATED 12/7/05 BY DEA
10140          BA    1.003
10141          LG     0.25    0.25    4.65    0.37      23
10142          UI        0     141     521     802    1125    1709    1242     902     611     285
10143          UI      189     103      43      44      44       0       0       0       0       0
10144          UI        0       0       0       0       0       0       0       0       0       0
10145          UI        0       0       0       0       0       0       0       0       0       0
10146          UI        0       0       0       0       0       0       0       0       0       0
               *

10147          KK  DS41REDIVERT
10148          KM        Additional Retention based on 100yr 2hr retention.
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10149          KM        C value is based on future land use, P=2.7, A=acres
10150          DT    RS41    64.2     0.0
10151          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10152          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10153          KK   CPS41COMBINE
10154          HC       2   1.515
               *

10155          KK  S41S42ROUTE
10156          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10157          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10158          RS       7    FLOW
10159          RC   0.035   0.035   0.035    7065  0.0064    0.00
10160          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10161          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10162          KK     S42BASIN
10163          KM        BASIN BOUNDARY FROM 1990 TOPO
10164          BA   0.508
10165          LG    0.23    0.25    4.60    0.41      37
10166          UI       0     135     462     718    1085     725     445     184     102      30
10167          UI      29       0       0       0       0       0       0       0       0       0
10168          UI       0       0       0       0       0       0       0       0       0       0
10169          UI       0       0       0       0       0       0       0       0       0       0
10170          UI       0       0       0       0       0       0       0       0       0       0
               *

10171          KK  DS42REDIVERT
10172          KM        Additional Retention based on 100yr 6hr retention.
10173          KM        C value is based on future land use, P=3.2, A=acres
10174          DT    RS42    39.1     0.0
10175          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10176          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
1                                    HEC-1 INPUT                                                PAGE259

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10177          KK   CPS42COMBINE
10178          HC       2   2.023
               *

10179          KK  S42S43ROUTE
10180          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10181          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10182          RS       4    FLOW
10183          RC   0.035   0.035   0.035    4082  0.0039    0.00
10184          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10185          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10186          KK     S43BASIN
10187          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
10188          BA   0.347
10189          LG    0.17    0.25    4.80    0.39      39
10190          UI       0     121     395     693     719     433     183      87      25      22
10191          UI       0       0       0       0       0       0       0       0       0       0
10192          UI       0       0       0       0       0       0       0       0       0       0
10193          UI       0       0       0       0       0       0       0       0       0       0
10194          UI       0       0       0       0       0       0       0       0       0       0
               *

10195          KK  DS43REDIVERT
10196          KM        Additional Retention based on 100yr 2hr retention.
10197          KM        C value is based on future land use, P=2.7, A=acres
10198          DT    RS43    27.5     0.0
10199          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10200          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10201          KK   CPS43COMBINE
10202          HC       3   5.066
               *

10203          KK   SRS43STORAGE
10204          KM        Storage behind UPRR (WLB)
10205          KO
10206          RS       1    STOR
10207          SV            0.22   18.80   41.67   62.23   82.48
10208          SQ           24.00   57.00   67.00  798.00 3073.00
10209          SE  894.50  896.00  898.00  898.90  899.50  900.00
10210          ST
               *

10211          KK  S43S51ROUTE
10212          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10213          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10214          RS       8    FLOW
10215          RC   0.035   0.035   0.035    4282  0.0006    0.00
10216          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10217          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
1                                    HEC-1 INPUT                                                PAGE260

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10218          KK     S28BASIN
10219          KM        BASIN BOUNDARY FROM MASTER DRAINAGE REPORT FOR CANYON TRAILS DATED
10220          KM        11/12/99 BY CVL, FINAL DRAINAGE REPORT FOR CANYON TRAILS UNIT 4 WEST
10221          KM        PHASE 3 & 4 INFRASTRUCTURE DATED 3/16/07 BY CVL
10222          BA   0.136
10223          LG    0.23    0.25    4.45    0.45      31
10224          UI       0     190     542     256      50       0       0       0       0       0
10225          UI       0       0       0       0       0       0       0       0       0       0
10226          UI       0       0       0       0       0       0       0       0       0       0
10227          UI       0       0       0       0       0       0       0       0       0       0
10228          UI       0       0       0       0       0       0       0       0       0       0
               *

10229          KK  DS28REDIVERT
10230          KM        Final Drainage Report for Canyon Trails Unit 4 West Parcel G
10231          KM        Additional Retention based on 100yr 6hr retention.
10232          KM        C value is based on future land use, P=3.2, A=acres
10233          DT    RS28    21.1     0.0
10234          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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10235          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10236          KK  S28S29ROUTE
10237          KM        Cross-section: Estimated 2' deep and 4:1 side slopes
10238          KM        width based on aerial / Manning's N Value: clean straight earth
10239          RS       1    FLOW
10240          RC   0.022   0.022   0.022    5299  0.0070    0.00
10241          RX  100.00  140.00  180.00  192.00  193.00  205.00  225.00  245.00
10242          RY  958.50  958.25  958.00  956.00  956.10  958.00  958.10  958.20
               *

10243          KK     S29BASIN
10244          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10245          BA   0.623
10246          LG    0.26    0.25    4.65    0.38      18
10247          UI       0     100     401     600     925    1072     714     484     235     137
10248          UI      71      30      30       0       0       0       0       0       0       0
10249          UI       0       0       0       0       0       0       0       0       0       0
10250          UI       0       0       0       0       0       0       0       0       0       0
10251          UI       0       0       0       0       0       0       0       0       0       0
               *

10252          KK  DS29REDIVERT
10253          KM        Additional Retention based on 100yr 2hr retention.
10254          KM        C value is based on future land use, P=2.7, A=acres
10255          DT    RS29    29.1     0.0
10256          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10257          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
1                                          HEC-1 INPUT                                          PAGE261

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10258          KK   CPS29COMBINE
10259          HC       2   0.759
               *

10260          KK  S29S30ROUTE
10261          KM        Cross-section: Estimated 2' deep and 4:1 side
10262          KM        slopes, width based on aerial / Manning's N
10263          KM        Value: clean straight earth, street LOB
10264          RS       3    FLOW
10265          RC   0.016   0.022   0.022    5305  0.0066    0.00
10266          RX  100.00  120.00  140.00  152.00  156.00  168.00  208.00  248.00
10267          RY  932.50  932.25  932.00  930.00  930.10  932.00  932.25  932.50
               *

10268          KK     S30BASIN
10269          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10270          BA   0.465
10271          LG    0.25    0.25    4.60    0.39      25
10272          UI       0      90     337     509     840     745     494     300     134      80
10273          UI      24      24      24       0       0       0       0       0       0       0
10274          UI       0       0       0       0       0       0       0       0       0       0
10275          UI       0       0       0       0       0       0       0       0       0       0
10276          UI       0       0       0       0       0       0       0       0       0       0
               *

10277          KK  DS30REDIVERT
10278          KM        Additional Retention based on 100yr 2hr retention.
10279          KM        C value is based on future land use, P=2.7, A=acres
10280          DT    RS30    36.1     0.0
10281          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10282          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10283          KK   CPS30COMBINE
10284          HC       2   1.224
               *

10285          KK  S30S32ROUTE
10286          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10287          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10288          RS       2    FLOW
10289          RC   0.035   0.035   0.035    1828  0.0015    0.00
10290          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10291          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10292          KK     S31BASIN
10293          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10294          BA   0.440
10295          LG    0.24    0.25    4.55    0.41      30
10296          UI       0     117     400     622     940     628     386     158      89      26
10297          UI      25       0       0       0       0       0       0       0       0       0
10298          UI       0       0       0       0       0       0       0       0       0       0
10299          UI       0       0       0       0       0       0       0       0       0       0
1                                          HEC-1 INPUT                                          PAGE262

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10300          UI       0       0       0       0       0       0       0       0       0       0
               *

10301          KK  DS31REDIVERT
10302          KM        Additional Retention based on 100yr 2hr retention.
10303          KM        C value is based on future land use, P=2.7, A=acres
10304          DT    RS31    35.8     0.0
10305          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10306          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10307          KK  S31S32ROUTE
10308          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10309          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10310          RS      14    FLOW
10311          RC   0.035   0.035   0.035    1829  0.0015    0.00
10312          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10313          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10314          KK     S32BASIN
10315          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10316          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
10317          BA   0.147
10318          LG    0.15    0.25    4.80    0.39      41
10319          UI       0      50     163     283     310     185      83      38      12       9
10320          UI       0       0       0       0       0       0       0       0       0       0
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10321          UI       0       0       0       0       0       0       0       0       0       0
10322          UI       0       0       0       0       0       0       0       0       0       0
10323          UI       0       0       0       0       0       0       0       0       0       0
               *

10324          KK  DS32REDIVERT
10325          KM        Additional Retention based on 100yr 2hr retention.
10326          KM        C value is based on future land use, P=2.7, A=acres
10327          DT    RS32    11.2     0.0
10328          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10329          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10330          KK   CPS32COMBINE
10331          HC       3   1.811
               *

10332          KK     S26BASIN
10333          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10334          BA   0.428
10335          LG    0.17    0.25    4.60    0.44      52
10336          UI       0     145     467     813     903     546     246     114      37      28
10337          UI       0       0       0       0       0       0       0       0       0       0
10338          UI       0       0       0       0       0       0       0       0       0       0
10339          UI       0       0       0       0       0       0       0       0       0       0
10340          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10341          KK  DS26REDIVERT
10342          KM        Retention volume estimated based on aerial
10343          DT    RS26    44.9     0.0
10344          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10345          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10346          KK  DS21SERETRIEVE
10347          DR   DS21S
               *

10348          KK  S21S26ROUTE
10349          KM        Cross-section: Side slopes and width based
10350          KM        on aerial and topo / Manning's N Value: earth
10351          KM        w/ sparse trees and shrubs, parking lot ROB
10352          RS       5    FLOW
10353          RC   0.032   0.032   0.016    3015  0.0017    0.00
10354          RX  100.00  105.00  110.00  200.00  287.00  334.00  734.00  735.00
10355          RY  912.00  911.00  910.00  906.00  906.10  910.00  911.90  912.00
               *

10356          KK   CPS26COMBINE
10357          HC       2   41.75
               *

10358          KK  DS26SEDIVERT
10359          KM        175th alignment at RR tracks split flow
10360          DT   DS26S     0.0     0.0
10361          DI     0.0    37.5   197.1   950.1  2315.7     0.0     0.0     0.0     0.0     0.0
10362          DQ     0.0     0.0     0.0   231.5   781.2     0.0     0.0     0.0     0.0     0.0
               *

10363          KK  S26S27ROUTE
10364          KM        Cross-section: Based on aerial and topo
10365          KM        Manning's N Value: clean earth; straight;
10366          KM        earth w/ sparse trees and shrubs LOB and ROB
10367          RS       1    FLOW
10368          RC   0.035   0.022   0.035    2621  0.0031    0.00
10369          RX  100.00  110.00  120.00  130.00  295.00  575.00  585.00  595.00
10370          RY  906.00  905.50  905.00  904.00  904.10  905.80  905.90  906.00
               *

10371          KK     S27BASIN
10372          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10373          KM        FLOW PONDS BEHIND AND OVERTOPS UPRR
10374          BA   0.109
10375          LG    0.10    0.25    4.80    0.42      55
10376          UI       0     145     425     216      45       0       0       0       0       0
10377          UI       0       0       0       0       0       0       0       0       0       0
10378          UI       0       0       0       0       0       0       0       0       0       0
10379          UI       0       0       0       0       0       0       0       0       0       0
10380          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10381          KK  DS27REDIVERT
10382          KM        Additional Retention based on 100yr 2hr retention.
10383          KM        C value is based on future land use, P=2.7, A=acres
10384          DT    RS27    11.9     0.0
10385          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10386          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10387          KK   CPS27COMBINE
10388          HC       2  41.859
               *

10389          KK  CP3227COMBINE
10390          HC       2   43.67
               *

10391          KK  SR3227STORAGE
10392          KM        Storage Route at UPRR
10393          KO
10394          RS       1    STOR
10395          SV            0.17   40.13  133.48  154.54  192.63
10396          SQ           90.00  120.00  242.00  937.00 1741.00
10397          SE  894.50  898.00  900.00  901.70  902.00  902.50
10398          ST
               *

10399          KK  S32S33ROUTE
10400          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10401          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10402          RS      12    FLOW
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10403          RC   0.035   0.035   0.035    7419  0.0008    0.00
10404          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10405          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10406          KK     S33BASIN
10407          KM        BASIN BOUNDARY FROM SR801 2006 TOPO
10408          KM        SOUTHERN BOUNDARY IS BOUNDED BY BUCKEYE CANAL
10409          BA   0.422
10410          LG    0.11    0.23    6.20    0.24      60
10411          UI       0      56     190     307     411     662     547     404     296     162
10412          UI      95      61      25      18      17       0       0       0       0       0
10413          UI       0       0       0       0       0       0       0       0       0       0
10414          UI       0       0       0       0       0       0       0       0       0       0
10415          UI       0       0       0       0       0       0       0       0       0       0
               *

10416          KK  DS33REDIVERT
10417          KM        Additional Retention based on 100yr 2hr retention.
10418          KM        C value is based on future land use, P=2.7, A=acres
10419          DT    RS33    78.0     0.0
10420          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10421          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10422          KK  DS26SERETRIEVE
10423          DR   DS26S
               *

10424          KK  S26S33ROUTE
10425          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
10426          KM        Manning's N Value: avg value for cultivated areas from Estimated
10427          KM        Manning's Roughness Coefficient for Stream Channels and Flood Plains in
10428          RS       1    FLOW
10429          RC   0.038   0.038   0.038    8161  0.0011    0.00
10430          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
10431          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
               *

10432          KK   CPS33COMBINE
10433          HC       3  44.092
               *

10434          KK  S33S51ROUTE
10435          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10436          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10437          RS      10    FLOW
10438          RC   0.035   0.035   0.035    5152  0.0005    0.00
10439          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10440          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10441          KK     S51BASIN
10442          KM        Boundary based on Aerial
10443          BA   0.124
10444          LG    0.15    0.17    6.80    0.18      56
10445          UI       0      85     253     363     178      56      15       0       0       0
10446          UI       0       0       0       0       0       0       0       0       0       0
10447          UI       0       0       0       0       0       0       0       0       0       0
10448          UI       0       0       0       0       0       0       0       0       0       0
10449          UI       0       0       0       0       0       0       0       0       0       0
               *

10450          KK  DS51REDIVERT
10451          KM        Additional Retention based on 100yr 2hr retention.
10452          KM        C value is based on future land use, P=2.7, A=acres
10453          DT    RS51    12.2     0.0
10454          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10455          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10456          KK   CPS51COMBINE
10457          HC       4  58.925
               *
1                                          HEC-1 INPUT                                          PAGE266

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10458          KK   SRS51STORAGE
10459          KM        Storage behind canal (WLB)
10460          KO
10461          RS       1    STOR
10462          SV            3.80   61.42   88.60  116.74  146.56  179.56
10463          SQ                                  1011.00 3120.00 5732.00
10464          SE  890.20  892.00  894.00  894.50  895.00  895.50  899.00
10465          ST
               *

10466          KK  S51S54ROUTE
10467          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10468          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10469          RS       4    FLOW
10470          RC   0.035   0.035   0.035    3530  0.0018    0.00
10471          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10472          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10473          KK     S52BASIN
10474          KM        BASIN BOUNDARY FROM 1990 TOPO
10475          KM        FLOW PONDS BEHIND AND OVERTOPS BUCKEYE CANAL
10476          BA   0.417
10477          LG    0.29    0.15    7.60    0.10       6
10478          UI       0      51     146     259     338     485     594     433     335     238
10479          UI     129      86      53      28      16      15      15       0       0       0
10480          UI       0       0       0       0       0       0       0       0       0       0
10481          UI       0       0       0       0       0       0       0       0       0       0
10482          UI       0       0       0       0       0       0       0       0       0       0
               *

10483          KK  DS52REDIVERT
10484          KM        Additional Retention based on 100yr 2hr retention.
10485          KM        C value is based on future land use, P=2.7, A=acres
10486          DT    RS52    24.4     0.0
10487          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10488          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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10489           KK  S52S54ROUTE
10490           KM        Cross-section: side slopes, width based on aerial
10491           KM        and topo / Manning's N Value: clean straight earth
10492           KM        ag field ROB
10493           RS       4    FLOW
10494           RC   0.022   0.022   0.038    2643  0.0015    0.00
10495           RX  100.00  115.00  130.00  135.00  145.00  367.00  802.00 1237.00
10496           RY  886.00  885.00  884.00  882.00  882.10  884.00  885.00  886.00
                *
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 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10497           KK     S54BASIN
10498           KM        BASIN BOUNDARY FROM 1990 TOPO
10499           BA   0.419
10500           LG    0.10    0.20    6.40    0.22      75
10501           UI       0     454    1428    1009     270      61       0       0       0       0
10502           UI       0       0       0       0       0       0       0       0       0       0
10503           UI       0       0       0       0       0       0       0       0       0       0
10504           UI       0       0       0       0       0       0       0       0       0       0
10505           UI       0       0       0       0       0       0       0       0       0       0
                *

10506           KK  DS54REDIVERT
10507           KM        Additional Retention based on 100yr 6hr retention.
10508           KM        C value is based on future land use, P=3.2, A=acres
10509           DT    RS54    42.5     0.0
10510           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10511           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

10512           KK   CPS54COMBINE
10513           HC       3  59.761
                *

10514           KK  S54S55ROUTE
10515           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10516           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10517           RS       6    FLOW
10518           RC   0.035   0.035   0.035    5190  0.0011    0.00
10519           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10520           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

10521           KK     S53BASIN
10522           KM        BASIN BOUNDARY FROM 1990 TOPO
10523           BA   0.401
10524           LG    0.28    0.15    7.60    0.10      12
10525           UI       0      59     228     344     505     693     483     344     210     101
10526           UI      64      27      18      18       0       0       0       0       0       0
10527           UI       0       0       0       0       0       0       0       0       0       0
10528           UI       0       0       0       0       0       0       0       0       0       0
10529           UI       0       0       0       0       0       0       0       0       0       0
                *

10530           KK  DS53REDIVERT
10531           KM        Additional Retention based on 100yr 6hr retention.
10532           KM        C value is based on future land use, P=3.2, A=acres
10533           DT    RS53    25.4     0.0
10534           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10535           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
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 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10536           KK  S53S55ROUTE
10537           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10538           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10539           RS      11    FLOW
10540           RC   0.035   0.035   0.035    7019  0.0019    0.00
10541           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10542           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

10543           KK     S55BASIN
10544           KM        BASIN BOUNDARY FROM 1990 TOPO
10545           BA   0.754
10546           LG    0.10    0.15    8.00    0.12      77
10547           UI       0     153     573     857    1420    1178     782     444     210     113
10548           UI      39      40       0       0       0       0       0       0       0       0
10549           UI       0       0       0       0       0       0       0       0       0       0
10550           UI       0       0       0       0       0       0       0       0       0       0
10551           UI       0       0       0       0       0       0       0       0       0       0
                *

10552           KK  DS55REDIVERT
10553           KM        Additional Retention based on 100yr 2hr retention.
10554           KM        C value is based on future land use, P=2.7, A=acres
10555           DT    RS55    79.1     0.0
10556           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10557           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

10558           KK   CPS55COMBINE
10559           HC       3  60.916
                *

10560           KK  S55S74ROUTE
10561           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10562           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10563           RS      13    FLOW
10564           RC   0.035   0.035   0.035   10902  0.0007    0.00
10565           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10566           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

10567           KK     W59BASIN
10568           KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN
10569           KM        WOOD/PATEL 2006, NEW 2' CI TOPO OBTAINED 2008
10570           BA   0.168
10571           LG    0.10    0.25    4.10    0.64      64
10572           UI       0     165     529     425     136      32       0       0       0       0
10573           UI       0       0       0       0       0       0       0       0       0       0
10574           UI       0       0       0       0       0       0       0       0       0       0
```

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10575          UI       0       0       0       0       0       0       0       0       0       0
10576          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10577          KK  DW59REDIVERT
10578          KM        Additional Retention based on 100yr 2hr retention.
10579          KM        C value is based on future land use, P=2.7, A=acres
10580          DT    RW59    15.9     0.0
10581          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10582          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10583          KK  W59W60ROUTE
10584          KM        Cross-section: Estimated 2' deep and 4:1 side
10585          KM        slopes, width based on aerial / Manning's N
10586          KM        Value: earth w/ sparse trees and shrubs
10587          RS       3    FLOW
10588          RC   0.032   0.032   0.032     841  0.0006    0.00
10589          RX  100.00  102.00  104.00  112.00  122.00  130.00  140.00  300.00
10590          RY  1097.0 1096.25 1096.00 1094.00 1094.10 1096.00 1096.10 1097.00
               *

10591          KK     W61BASIN
10592          BA   0.389
10593          LG    0.23    0.25    4.15    0.51      31
10594          UI       0     294     911    1125     479     146      36       0       0       0
10595          UI       0       0       0       0       0       0       0       0       0       0
10596          UI       0       0       0       0       0       0       0       0       0       0
10597          UI       0       0       0       0       0       0       0       0       0       0
10598          UI       0       0       0       0       0       0       0       0       0       0
               *

10599          KK  DW61REDIVERT
10600          KM        Additional Retention based on 100yr 2hr retention.
10601          KM        C value is based on future land use, P=2.7, A=acres
10602          DT    RW61    27.4     0.0
10603          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10604          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10605          KK  DW61SEDIVERT
10606          KM        Divert culvert flows under I-10
10607          DT   DW61S     0.0     0.0
10608          DI     0.0   188.0  1000.0  2000.0  3000.0     0.0     0.0     0.0     0.0     0.0
10609          DQ     0.0   188.0   190.0   195.0   200.0     0.0     0.0     0.0     0.0     0.0
               *

10610          KK     W60BASIN
10611          KM        BASIN BOUNDARY FROM SIENNA HILLS AKA TESOTA HILLS
10612          KM        PRELIM DRAINAGE REPORT, CMX, 2006
10613          BA   0.161
10614          LG    0.11    0.25    3.95    0.40      76
10615          UI       0     183     565     378      95      19       0       0       0       0
10616          UI       0       0       0       0       0       0       0       0       0       0
10617          UI       0       0       0       0       0       0       0       0       0       0
10618          UI       0       0       0       0       0       0       0       0       0       0
10619          UI       0       0       0       0       0       0       0       0       0       0
               *
1                                          HEC-1 INPUT                                          PAGE270

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10620          KK  DW60REDIVERT
10621          KM        Additional Retention based on 100yr 2hr retention.
10622          KM        C value is based on future land use, P=2.7, A=acres
10623          DT    RW60    16.4     0.0
10624          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10625          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10626          KK   CPW60COMBINE
10627          HC       3   0.718
               *

10628          KK   SRW60STORAGE
10629          KM        Storage behind I-10
10630          KO
10631          RS       1    STOR
10632          SV            0.23    2.30   11.40   29.80   51.60   51.60
10633          SQ           12.00   45.00  100.00  140.00  152.00 7400.00
10634          SE  1095.0 1096.00 1097.00 1098.00 1099.00 1100.00 1101.00
10635          ST
               *

10636          KK  W60S61ROUTE
10637          KM        Cross-section: Estimated 3' deep and 4:1 side
10638          KM        slopes, width based on aerial / Manning's N
10639          KM        Value: earth w/ sparse trees and shrubs
10640          RS       6    FLOW
10641          RC   0.032   0.032   0.032    3609  0.0094    0.00
10642          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
10643          RY  1000.0  999.75  999.25  999.00  999.00  999.25  999.75 1000.00
               *

10644          KK     S61BASIN
10645          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10646          BA   0.234
10647          LG    0.11    0.25    4.15    0.64      45
10648          UI       0     319     922     452      93       0       0       0       0       0
10649          UI       0       0       0       0       0       0       0       0       0       0
10650          UI       0       0       0       0       0       0       0       0       0       0
10651          UI       0       0       0       0       0       0       0       0       0       0
10652          UI       0       0       0       0       0       0       0       0       0       0
               *

10653          KK  DS61REDIVERT
10654          KM        Additional Retention based on 100yr 2hr retention.
10655          KM        C value is based on future land use, P=2.7, A=acres
10656          DT    RS61     7.5     0.0
10657          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10658          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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10659          KK   CPS61COMBINE
10660          HC       2   0.952
               *

10661          KK  S61S62ROUTE
10662          KM        Cross-section: Estimated 3' deep, side slopes
10663          KM        and width based on aerial and topo / Manning's
10664          KM        N Value: earth w/ sparse trees and shrubs
10665          RS       1    FLOW
10666          RC   0.032   0.032   0.032    2298  0.0070    0.00
10667          RX  100.00  120.00  140.00  170.00  194.00  224.00  244.00  264.00
10668          RY  1054.5 1054.25 1054.00 1051.00 1051.10 1054.00 1054.25 1054.50
               *

10669          KK     S62BASIN
10670          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10671          BA   0.132
10672          LG    0.10    0.25    4.20    0.58      80
10673          UI       0     225     568     193      29       0       0       0       0       0
10674          UI       0       0       0       0       0       0       0       0       0       0
10675          UI       0       0       0       0       0       0       0       0       0       0
10676          UI       0       0       0       0       0       0       0       0       0       0
10677          UI       0       0       0       0       0       0       0       0       0       0
               *

10678          KK  DS62REDIVERT
10679          KM        Additional Retention based on 100yr 2hr retention.
10680          KM        C value is based on future land use, P=2.7, A=acres
10681          DT    RS62    13.2     0.0
10682          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10683          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10684          KK   CPS62COMBINE
10685          HC       2   1.084
               *

10686          KK  S62S64ROUTE
10687          KM        Cross-section: Estimated 2' deep, side slopes
10688          KM        and width based on aerial / Manning's N Value:
10689          KM        earth w/ sparse trees and shrubs
10690          RS       3    FLOW
10691          RC   0.032   0.032   0.032    5430  0.0074    0.00
10692          RX  100.00  108.00  116.00  128.00  144.00  168.00  188.00  208.00
10693          RY  1012.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.00
               *

10694          KK     S63BASIN
10695          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10696          BA   0.599
10697          LG    0.14    0.25    4.20    0.58      37
10698          UI       0     235     739    1345    1183     687     259     110      41       0
10699          UI       0       0       0       0       0       0       0       0       0       0
10700          UI       0       0       0       0       0       0       0       0       0       0
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10701          UI       0       0       0       0       0       0       0       0       0       0
10702          UI       0       0       0       0       0       0       0       0       0       0
               *

10703          KK  DS63REDIVERT
10704          KM        Additional Retention based on 100yr 2hr retention.
10705          KM        C value is based on future land use, P=2.7, A=acres
10706          DT    RS63    12.1     0.0
10707          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10708          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10709          KK  S63S64ROUTE
10710          KM        Cross-section: Estimated 2' deep and 4:1 side
10711          KM        slopes, width based on aerial / Manning's N Value
10712          KM        clean straight earth
10713          RS       1    FLOW
10714          RC   0.022   0.022   0.022    2415  0.0046    0.00
10715          RX  100.00  120.00  140.00  152.00  155.00  167.00  179.00  191.00
10716          RY  1013.5 1012.25 1012.00 1010.00 1010.10 1012.00 1012.50 1013.50
               *

10717          KK     S64BASIN
10718          KM        BASIN BOUNDARY FROM 1990 TOPO, FIELD VISIT
10719          BA   0.475
10720          LG    0.16    0.25    4.25    0.55      67
10721          UI       0     234     712    1261     853     390     151      39      36       0
10722          UI       0       0       0       0       0       0       0       0       0       0
10723          UI       0       0       0       0       0       0       0       0       0       0
10724          UI       0       0       0       0       0       0       0       0       0       0
10725          UI       0       0       0       0       0       0       0       0       0       0
               *

10726          KK  DS64REDIVERT
10727          KM        Additional Retention based on 100yr 2hr retention.
10728          KM        C value is based on future land use, P=2.7, A=acres
10729          DT    RS64    51.5     0.0
10730          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10731          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10732          KK   CPS64COMBINE
10733          HC       3   2.158
               *

10734          KK  S64S67ROUTE
10735          KM        Cross-section: Estimated 1' deep, side slopes
10736          KM        and width based on aerial / Manning's N Value:
10737          KM        clean straight earth
10738          RS       4    FLOW
10739          RC   0.022   0.022   0.022    3576  0.0017    0.00
10740          RX  100.00  220.00  340.00  352.00  354.00  366.00  476.00  586.00
10741          RY  1006.0 1004.10 1004.00 1003.00 1003.10 1004.00 1004.10 1006.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10742          KK     S67BASIN
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10743          KM        BASIN BOUNDARY FROM 1990 TOPO
10744          BA   0.159
10745          LG    0.20     0.24     4.25     0.50       41
10746          UI       0      110      333      465      225       67       19        0        0        0
10747          UI       0        0        0        0        0        0        0        0        0        0
10748          UI       0        0        0        0        0        0        0        0        0        0
10749          UI       0        0        0        0        0        0        0        0        0        0
10750          UI       0        0        0        0        0        0        0        0        0        0
               *

10751          KK  DS67REDIVERT
10752          KM        Additional Retention based on 100yr 2hr retention.
10753          KM        C value is based on future land use, P=2.7, A=acres
10754          DT    RS67     10.8      0.0
10755          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10756          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
               *

10757          KK   CPS67COMBINE
10758          HC       2    2.317
               *

10759          KK   SRS67STORAGE
10760          KM        Ponding behind canal (WLB)
10761          KO
10762          RS       1     STOR
10763          SV             0.39    11.45    14.26    19.91
10764          SQ                             128.00  2344.00
10765          SE  998.70 1000.00 1001.50 1001.80 1002.00
10766          ST
               *

10767          KK  S67S68ROUTE
10768          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10769          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10770          RS       5     FLOW
10771          RC   0.035    0.035    0.035     6920   0.0058     0.00
10772          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
10773          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
               *

10774          KK     S68BASIN
10775          KM        BASIN BOUNDARY FROM 1990 TOPO
10776          BA   0.338
10777          LG    0.24     0.25     4.20     0.50       25
10778          UI       0       70      260      393      647      529      345      188       91       47
10779          UI      18       18        0        0        0        0        0        0        0        0
10780          UI       0        0        0        0        0        0        0        0        0        0
10781          UI       0        0        0        0        0        0        0        0        0        0
10782          UI       0        0        0        0        0        0        0        0        0        0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10783          KK  DS68REDIVERT
10784          KM        Additional Retention based on 100yr 2hr retention.
10785          KM        C value is based on future land use, P=2.7, A=acres
10786          DT    RS68     10.1      0.0
10787          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10788          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
               *

10789          KK   CPS68COMBINE
10790          HC       2    2.655
               *

10791          KK  S68S69ROUTE
10792          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10793          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10794          RS       4     FLOW
10795          RC   0.035    0.035    0.035     7032   0.0076     0.00
10796          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
10797          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
               *

10798          KK     S69BASIN
10799          KM        BASIN BOUNDARY FROM 1990 TOPO
10800          BA   0.468
10801          LG    0.12     0.25     4.00     0.65       58
10802          UI       0      150      488      826     1009      610      303      134       52       29
10803          UI       0        0        0        0        0        0        0        0        0        0
10804          UI       0        0        0        0        0        0        0        0        0        0
10805          UI       0        0        0        0        0        0        0        0        0        0
10806          UI       0        0        0        0        0        0        0        0        0        0
               *

10807          KK  DS69REDIVERT
10808          KM        Additional Retention based on 100yr 2hr retention.
10809          KM        C value is based on future land use, P=2.7, A=acres
10810          DT    RS69     33.7      0.0
10811          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
10812          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
               *

10813          KK   CPS69COMBINE
10814          HC       2    3.123
               *

10815          KK  S69S70ROUTE
10816          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10817          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10818          RS       3     FLOW
10819          RC   0.035    0.035    0.035     6632   0.0072     0.00
10820          RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
10821          RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10822          KK     S70BASIN
10823          KM        BASIN BOUNDARY FROM 1990 TOPO, OVERTOPPING
10824          KM        LOCATION AT LOW PT (ELEV~896)
10825          BA   0.750
10826          LG    0.14     0.25     4.50     0.48       58
10827          UI       0      298      937     1715     1464      848      318      129       52        0
10828          UI       0        0        0        0        0        0        0        0        0        0
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10829          UI       0       0       0       0       0       0       0       0       0       0
10830          UI       0       0       0       0       0       0       0       0       0       0
10831          UI       0       0       0       0       0       0       0       0       0       0
               *

10832          KK  DS70REDIVERT
10833          KM        Additional Retention based on 100yr 2hr retention.
10834          KM        C value is based on future land use, P=2.7, A=acres
10835          DT    RS70    80.1     0.0
10836          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10837          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10838          KK   CPS70COMBINE
10839          HC       2   3.873
               *

10840          KK  S70S71ROUTE
10841          KM        Cross-section: Side slopes and width
10842          KM        based on aerial and topo / Manning's N Value:
10843          KM        earth w/ sparse trees and shrubs
10844          RS       3    FLOW
10845          RC   0.032   0.032   0.032    4352  0.0009    0.00
10846          RX  100.00  106.00  112.00  128.00  142.00  362.00  372.00  382.00
10847          RY  892.20  892.10  892.00  890.00  889.90  892.00  882.10  882.20
               *

10848          KK     S71BASIN
10849          KM        BASIN BOUNDARY FROM 1990 TOPO, PONDING AT BUCKEYE CANAL
10850          KM        AND AIRPORT ROAD RESULTING IN A SPLIT FLOW
10851          BA   0.130
10852          LG    0.18    0.25    4.65    0.41      44
10853          UI       0      45     146     256     271     163      70      34      10       8
10854          UI       0       0       0       0       0       0       0       0       0       0
10855          UI       0       0       0       0       0       0       0       0       0       0
10856          UI       0       0       0       0       0       0       0       0       0       0
10857          UI       0       0       0       0       0       0       0       0       0       0
               *

10858          KK  DS71REDIVERT
10859          KM        Additional Retention based on 100yr 2hr retention.
10860          KM        C value is based on future land use, P=2.7, A=acres
10861          DT    RS71     9.8     0.0
10862          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10863          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10864          KK   CPS71COMBINE
10865          HC       2   4.003
               *

10866          KK   SRS71STORAGE
10867          KM        Ponding behind canal (WLB)
10868          KO
10869          RS       1    STOR
10870          SV            0.80    4.80   10.88   13.66   28.52   90.59
10871          SQ          495.00  715.00 1245.00 1453.00 7983.0039402.00
10872          SE  888.50  892.50  894.00  895.50  896.00  898.00  900.00
10873          ST
               *

10874          KK  DS71SWDIVERT
10875          KM        RID at Airport Road split flow
10876          DT   DS71W     0.0     0.0
10877          DI     0.0   795.5  1462.6  2330.9  3348.7     0.0     0.0     0.0     0.0     0.0
10878          DQ     0.0     0.0    21.5    60.7   111.5     0.0     0.0     0.0     0.0     0.0
               *

10879          KK  S71S74ROUTE
10880          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10881          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10882          RS       1    FLOW
10883          RC   0.035   0.035   0.035    7213  0.0041    0.00
10884          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10885          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10886          KK     S56BASIN
10887          KM        BASIN BOUNDARY FROM 1990 TOPO
10888          BA   0.606
10889          LG    0.18    0.25    4.00    0.60      55
10890          UI       0     194     642    1097    1293     788     378     171      64      38
10891          UI       0       0       0       0       0       0       0       0       0       0
10892          UI       0       0       0       0       0       0       0       0       0       0
10893          UI       0       0       0       0       0       0       0       0       0       0
10894          UI       0       0       0       0       0       0       0       0       0       0
               *

10895          KK  DS56REDIVERT
10896          KM        Additional Retention based on 100yr 6hr retention.
10897          KM        C value is based on future land use, P=3.2, A=acres
10898          DT    RS56    43.0     0.0
10899          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10900          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
1                                        HEC-1 INPUT                                          PAGE277

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10901          KK  S56S57ROUTE
10902          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10903          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10904          RS       4    FLOW
10905          RC   0.035   0.035   0.035    7035  0.0072    0.00
10906          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10907          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10908          KK     S57BASIN
10909          KM        BASIN BOUNDARY FROM 1990 TOPO
10910          BA   0.767
10911          LG    0.19    0.25    4.10    0.56      45
10912          UI       0     184     648     995    1584    1143     723     328     179      68
10913          UI      43      43       0       0       0       0       0       0       0       0
10914          UI       0       0       0       0       0       0       0       0       0       0
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10915          UI       0       0       0       0       0       0       0       0       0       0
10916          UI       0       0       0       0       0       0       0       0       0       0
               *

10917          KK  DS57REDIVERT
10918          KM        Additional Retention based on 100yr 2hr retention.
10919          KM        C value is based on future land use, P=2.7, A=acres
10920          DT    RS57    44.5     0.0
10921          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10922          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10923          KK   CPS57COMBINE
10924          HC       2   1.373
               *

10925          KK  S57S58ROUTE
10926          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10927          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10928          RS       3    FLOW
10929          RC   0.035   0.035   0.035    4656  0.0063    0.00
10930          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10931          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10932          KK   DS48SRETRIEVE
10933          DR   DS48S
               *

10934          KK  S48S58ROUTE
10935          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10936          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10937          RS      31    FLOW
10938          RC   0.035   0.035   0.035    3817  0.0063    0.00
10939          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10940          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10941          KK     S58BASIN
10942          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
10943          BA   0.204
10944          LG    0.16    0.25    4.50    0.47      58
10945          UI       0     101     305     542     366     168      64      17      16       0
10946          UI       0       0       0       0       0       0       0       0       0       0
10947          UI       0       0       0       0       0       0       0       0       0       0
10948          UI       0       0       0       0       0       0       0       0       0       0
10949          UI       0       0       0       0       0       0       0       0       0       0
               *

10950          KK  DS58REDIVERT
10951          KM        Additional Retention based on 100yr 2hr retention.
10952          KM        C value is based on future land use, P=2.7, A=acres
10953          DT    RS58    20.9     0.0
10954          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10955          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10956          KK   CPS58COMBINE
10957          HC       3  18.037
               *

10958          KK   SRS58STORAGE
10959          KM        Storage behind UPRR (WLB)
10960          KO
10961          RS       1    STOR
10962          SV            0.19    0.54    3.31    7.74
10963          SQ          138.00  153.00 1483.00 3332.00
10964          SE  894.40  898.00  898.40  900.00  900.50
10965          ST
               *

10966          KK  S58S59ROUTE
10967          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
10968          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
10969          RS       4    FLOW
10970          RC   0.035   0.035   0.035    4174  0.0019    0.00
10971          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
10972          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

10973          KK     S59BASIN
10974          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
10975          KM        AND OVERTOPS BUCKEYE CANAL
10976          BA   0.165
10977          LG    0.15    0.25    4.70    0.41      55
10978          UI       0     275     706     249      38       0       0       0       0       0
10979          UI       0       0       0       0       0       0       0       0       0       0
10980          UI       0       0       0       0       0       0       0       0       0       0
10981          UI       0       0       0       0       0       0       0       0       0       0
10982          UI       0       0       0       0       0       0       0       0       0       0
               *
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 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

10983          KK  DS59REDIVERT
10984          KM        Additional Retention based on 100yr 2hr retention.
10985          KM        C value is based on future land use, P=2.7, A=acres
10986          DT    RS59    17.0     0.0
10987          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
10988          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

10989          KK   CPS59COMBINE
10990          HC       2  18.202
               *

10991          KK   SRS59STORAGE
10992          KM        Storage behind canal (WLB)
10993          KO
10994          RS       1    STOR
10995          SV            0.08   14.16   18.99   64.86
10996          SQ                           21.00 2267.00
10997          SE  889.90  890.00  891.70  892.00  894.00
10998          ST
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                *

10999           KK  S59S74ROUTE
11000           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11001           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11002           RS      17    FLOW
11003           RC   0.035   0.035   0.035   10696  0.0022    0.00
11004           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11005           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

11006           KK     S72BASIN
11007           KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
11008           BA   0.401
11009           LG    0.17    0.15    8.80    0.08      54
11010           UI       0      61     254     374     571     696     466     319     163      93
11011           UI      51      19      19      19       0       0       0       0       0       0
11012           UI       0       0       0       0       0       0       0       0       0       0
11013           UI       0       0       0       0       0       0       0       0       0       0
11014           UI       0       0       0       0       0       0       0       0       0       0
                *

11015           KK  DS72REDIVERT
11016           KM        Additional Retention based on 100yr 2hr retention.
11017           KM        C value is based on future land use, P=2.7, A=acres
11018           DT    RS72    35.9     0.0
11019           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11020           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                          PAGE280

 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11021           KK  S72S73ROUTE
11022           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11023           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11024           RS       7    FLOW
11025           RC   0.035   0.035   0.035    4179  0.0013    0.00
11026           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11027           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

11028           KK     S73BASIN
11029           KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
11030           BA   0.276
11031           LG    0.15    0.15    8.80    0.08      65
11032           UI       0     105     332     600     554     325     126      57      18      19
11033           UI       0       0       0       0       0       0       0       0       0       0
11034           UI       0       0       0       0       0       0       0       0       0       0
11035           UI       0       0       0       0       0       0       0       0       0       0
11036           UI       0       0       0       0       0       0       0       0       0       0
                *

11037           KK  DS73REDIVERT
11038           KM        Additional Retention based on 100yr 2hr retention.
11039           KM        C value is based on future land use, P=2.7, A=acres
11040           DT    RS73    23.5     0.0
11041           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11042           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

11043           KK   CPS73COMBINE
11044           HC       2   0.677
                *

11045           KK  S73S74ROUTE
11046           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11047           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11048           RS      19    FLOW
11049           RC   0.035   0.035   0.035    7093  0.0011    0.00
11050           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11051           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

11052           KK     S74BASIN
11053           KM        BASIN BOUNDARY FROM 1990 TOPO
11054           BA   1.608
11055           LG    0.16    0.15    7.30    0.14      58
11056           UI       0     183     473     875    1131    1527    2211    1761    1376    1031
11057           UI     741     381     286     183      87      56      56      56       0       0
11058           UI       0       0       0       0       0       0       0       0       0       0
11059           UI       0       0       0       0       0       0       0       0       0       0
11060           UI       0       0       0       0       0       0       0       0       0       0
                *
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 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11061           KK  DS74REDIVERT
11062           KM        Additional Retention based on 100yr 2hr retention.
11063           KM        C value is based on future land use, P=2.7, A=acres
11064           DT    RS74   143.6     0.0
11065           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11066           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

11067           KK   CPS74COMBINE
11068           HC       5  68.946
                *

11069           KK   DS741DIVERT
11070           KM        MC85 at Airport Road split flow
11071           DT  DS741W     0.0     0.0
11072           DI     0.0   332.5  1924.0  5255.7 11178.0     0.0     0.0     0.0     0.0     0.0
11073           DQ     0.0   142.5   854.3  2357.0  5037.5     0.0     0.0     0.0     0.0     0.0
                *

11074           KK   DS742DIVERT
11075           KM        MC85 at Airport Road split flow
11076           DT  DS742W     0.0     0.0
11077           DI     0.0   190.0  1069.7  2898.7  6140.5     0.0     0.0     0.0     0.0     0.0
11078           DQ     0.0    21.2    60.0   110.2   169.7     0.0     0.0     0.0     0.0     0.0
                *

11079           KK  S74S79ROUTE
11080           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11081           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11082           RS       5    FLOW
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11083          RC   0.035   0.035   0.035    6897  0.0012    0.00
11084          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11085          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

11086          KK  DW61SERETRIEVE
11087          DR   DW61S
               *

11088          KK  W61S65ROUTE
11089          KM        Cross-section: Estimated 2' deep, side slopes
11090          KM        and width based on aerial and topo / Manning's
11091          KM        N Value: earth w/ sparse trees and shrubs
11092          RS      31    FLOW
11093          RC   0.032   0.032   0.032    9453  0.0077    0.00
11094          RX  100.00  135.00  170.00  186.00  336.00  352.00  372.00  392.00
11095          RY  1052.5 1052.25 1052.00 1050.00 1050.10 1052.00 1053.00 1054.00
               *
1                                          HEC-1 INPUT                                                    PAGE282

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11096          KK     S65BASIN
11097          KM        BASIN BOUNDARY FROM 1990 TOPO
11098          BA   0.879
11099          LG    0.16    0.25    4.40    0.51      51
11100          UI       0     125     465     719    1005    1513    1084     775     519     241
11101          UI     160      84      38      39      39       0       0       0       0       0
11102          UI       0       0       0       0       0       0       0       0       0       0
11103          UI       0       0       0       0       0       0       0       0       0       0
11104          UI       0       0       0       0       0       0       0       0       0       0
               *

11105          KK  DS65REDIVERT
11106          KM        Additional Retention based on 100yr 2hr retention.
11107          KM        C value is based on future land use, P=2.7, A=acres
11108          DT    RS65    60.7     0.0
11109          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11110          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11111          KK   CPS65COMBINE
11112          HC       2   1.268
               *

11113          KK  S65S66ROUTE
11114          KM        Cross-section: Estimated 3' deep and 4:1 side
11115          KM        slopes, width based on aerial / Manning's N
11116          KM        Value: clean straight earth
11117          RS       8    FLOW
11118          RC   0.032   0.032   0.032    6405  0.0056    0.00
11119          RX  100.00  150.00  250.00  299.00  300.00  350.00  400.00  450.00
11120          RY  1000.5  999.75  999.25  999.00  999.10  999.25  999.75 1000.50
               *

11121          KK     S66BASIN
11122          KM        SUNDANCE, RBF, 2004
11123          BA   0.655
11124          LG    0.21    0.25    3.95    0.40      35
11125          UI       0     128     481     721    1206    1035     690     415     189     108
11126          UI      34      33       0       0       0       0       0       0       0       0
11127          UI       0       0       0       0       0       0       0       0       0       0
11128          UI       0       0       0       0       0       0       0       0       0       0
11129          UI       0       0       0       0       0       0       0       0       0       0
               *

11130          KK  DS66REDIVERT
11131          KM        Sundance
11132          KM        Additional Retention based on 100yr 2hr retention.
11133          KM        C value is based on future land use, P=2.7, A=acres
11134          DT    RS66    96.2     0.0
11135          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11136          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
1                                          HEC-1 INPUT                                                    PAGE283

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11137          KK   CPS66COMBINE
11138          HC       2   1.923
               *

11139          KK   SRS66STORAGE
11140          KM        Ponding behind road/canal, does not incl Sundance retention values
11141          KO
11142          RS       1    STOR
11143          SV           26.50   36.70   50.00
11144          SQ                 1414.00 2600.00
11145          SE  1000.0 1002.00 1003.00 1003.50
11146          ST
               *

11147          KK  S66S75ROUTE
11148          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11149          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11150          RS       6    FLOW
11151          RC   0.035   0.035   0.035    3934  0.0095    0.00
11152          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11153          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

11154          KK     S75BASIN
11155          KM        BASIN BOUNDARY FROM 1990 TOPO
11156          BA   0.338
11157          LG    0.20    0.25    4.00    0.57      43
11158          UI       0      83     292     448     708     497     313     136      77      26
11159          UI      19       0       0       0       0       0       0       0       0       0
11160          UI       0       0       0       0       0       0       0       0       0       0
11161          UI       0       0       0       0       0       0       0       0       0       0
11162          UI       0       0       0       0       0       0       0       0       0       0
               *

11163          KK  DS75REDIVERT
11164          KM        Additional Retention based on 100yr 2hr retention.
11165          KM        C value is based on future land use, P=2.7, A=acres
11166          DT    RS75    23.8     0.0
11167          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11168          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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11169           KK   CPS75COMBINE
11170           HC       2   2.261
                *

11171           KK  S75S76ROUTE
11172           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11173           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11174           RS       8    FLOW
11175           RC   0.035   0.035   0.035    7024  0.0081    0.00
11176           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11177           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *
1                                          HEC-1 INPUT                                                    PAGE284

 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


11178           KK     S76BASIN
11179           KM        BASIN BOUNDARY FROM 1990 TOPO
11180           BA   1.006
11181           LG    0.10    0.25    4.15    0.63      80
11182           UI       0     322    1049    1776    2170    1311     650     288     111      63
11183           UI       0       0       0       0       0       0       0       0       0       0
11184           UI       0       0       0       0       0       0       0       0       0       0
11185           UI       0       0       0       0       0       0       0       0       0       0
11186           UI       0       0       0       0       0       0       0       0       0       0
                *

11187           KK  DS76REDIVERT
11188           KM        Additional Retention based on 100yr 2hr retention.
11189           KM        C value is based on future land use, P=2.7, A=acres
11190           DT    RS76   109.4     0.0
11191           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11192           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

11193           KK   CPS76COMBINE
11194           HC       2   3.267
                *

11195           KK  S76S77ROUTE
11196           KM        Cross-section: Estimated 2' deep, side
11197           KM        slopes and width based on aerial / Manning's
11198           KM        N Value: clean straight earth
11199           RS       6    FLOW
11200           RC   0.022   0.022   0.022    7144  0.0052    0.00
11201           RX  100.00  103.00  106.00  116.00  148.00  158.00  178.00  198.00
11202           RY  900.00  899.00  898.00  896.00  896.10  898.00  898.10  898.20
                *

11203           KK     S77BASIN
11204           KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND AND OVERTOPS UPRR
11205           BA   0.911
11206           LG    0.13    0.25    4.50    0.49      49
11207           UI       0     212     743    1143    1853    1369     888     416     223      96
11208           UI      50      51       0       0       0       0       0       0       0       0
11209           UI       0       0       0       0       0       0       0       0       0       0
11210           UI       0       0       0       0       0       0       0       0       0       0
11211           UI       0       0       0       0       0       0       0       0       0       0
                *

11212           KK  DS77REDIVERT
11213           KM        Additional Retention based on 100yr 2hr retention.
11214           KM        C value is based on future land use, P=2.7, A=acres
11215           DT    RS77    62.0     0.0
11216           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11217           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *
1                                          HEC-1 INPUT                                                    PAGE285

 LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


11218           KK   CPS77COMBINE
11219           HC       2   4.178
                *

11220           KK   SRS77STORAGE
11221           KM        Storage behind UPRR (WLB)
11222           KO
11223           RS       1    STOR
11224           SV                    0.09    5.76   14.59   29.99
11225           SQ                  640.00 1680.00 2001.00 2916.00
11226           SE  889.10  890.90  894.10  896.10  897.10  898.00
11227           ST
                *

11228           KK  S77S78ROUTE
11229           KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11230           KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11231           RS       6    FLOW
11232           RC   0.035   0.035   0.035    4140  0.0019    0.00
11233           RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11234           RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

11235           KK     S78BASIN
11236           KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW PONDS BEHIND
11237           KM        AND OVERTOPS BUCKEYE CANAL
11238           BA   0.176
11239           LG    0.15    0.25    4.70    0.41      55
11240           UI       0      55     182     304     382     232     116      51      21      11
11241           UI       0       0       0       0       0       0       0       0       0       0
11242           UI       0       0       0       0       0       0       0       0       0       0
11243           UI       0       0       0       0       0       0       0       0       0       0
11244           UI       0       0       0       0       0       0       0       0       0       0
                *

11245           KK  DS78REDIVERT
11246           KM        Additional Retention based on 100yr 2hr retention.
11247           KM        C value is based on future land use, P=2.7, A=acres
11248           DT    RS78    17.8     0.0
11249           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11250           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

11251           KK  DS71SWRETRIEVE
11252           DR   DS71W
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                 *

11253            KK  S71S78ROUTE
11254            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11255            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11256            RS       1    FLOW
11257            RC   0.035   0.035   0.035    7129  0.0004    0.00
11258            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11259            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *
1                                          HEC-1 INPUT                                          PAGE286

 LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11260            KK   CPS78COMBINE
11261            HC       3   7.968
                 *

11262            KK   SRS78STORAGE
11263            KM        Storage behind canal (WLB)
11264            KO
11265            RS       1    STOR
11266            SV            4.41   24.14   68.62
11267            SQ                          3900.00
11268            SE  886.80  888.00  889.00  890.00
11269            ST
                 *

11270            KK  S78S79ROUTE
11271            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11272            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11273            RS       6    FLOW
11274            RC   0.035   0.035   0.035    5782  0.0059    0.00
11275            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11276            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *

11277            KK     S79BASIN
11278            KM        BASIN BOUNDARY FROM 1990 TOPO
11279            BA   0.918
11280            LG    0.25    0.15    7.30    0.13      24
11281            UI       0     118     380     631     829    1312    1241     910     672     439
11282            UI     207     154      88      36      37      36       0       0       0       0
11283            UI       0       0       0       0       0       0       0       0       0       0
11284            UI       0       0       0       0       0       0       0       0       0       0
11285            UI       0       0       0       0       0       0       0       0       0       0
                 *

11286            KK  DS79REDIVERT
11287            KM        Additional Retention based on 100yr 2hr retention.
11288            KM        C value is based on future land use, P=2.7, A=acres
11289            DT    RS79    62.1     0.0
11290            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11291            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

11292            KK   CPS79COMBINE
11293            HC       3  73.829
                 *

11294            KK  S79S80ROUTE
11295            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11296            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11297            KM        areas from Estimated Manning's Roughness Coefficient
11298            KM        for Stream Channels and Flood Plains in MC
11299            RS       5    FLOW
11300            RC   0.035   0.035   0.035    3563  0.0007    0.00
11301            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1                                          HEC-1 INPUT                                          PAGE287

 LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11302            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *

11303            KK     S92BASIN
11304            KM        BASIN BOUNDARY FROM 1990 TOPO, SUZY DEAN DITCH
11305            BA   0.689
11306            LG    0.14    0.15    8.40    0.10      64
11307            UI       0     138     510     771    1267    1092     724     424     199     107
11308            UI      36      37       0       0       0       0       0       0       0       0
11309            UI       0       0       0       0       0       0       0       0       0       0
11310            UI       0       0       0       0       0       0       0       0       0       0
11311            UI       0       0       0       0       0       0       0       0       0       0
                 *

11312            KK  DS92REDIVERT
11313            KM        Additional Retention based on 100yr 2hr retention.
11314            KM        C value is based on future land use, P=2.7, A=acres
11315            DT    RS92    66.4     0.0
11316            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11317            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                 *

11318            KK   DS741RETRIEVE
11319            DR  DS741W
                 *

11320            KK  S74S92ROUTE
11321            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11322            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11323            RS       2    FLOW
11324            RC   0.035   0.035   0.035    1374  0.0010    0.00
11325            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11326            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *

11327            KK   CPS92COMBINE
11328            HC       2  69.635
                 *

11329            KK  S92S80ROUTE
11330            KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11331            KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11332            RS      38    FLOW
11333            RC   0.035   0.035   0.035    7549  0.0011    0.00
11334            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11335            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                 *
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11336          KK   DS742RETRIEVE
11337          DR  DS742W
               *
1                                        HEC-1 INPUT                                                    PAGE288

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11338          KK  S74S80ROUTE
11339          KM        Cross-section: Assumed 25' bottom width, 4:1 sideslopes,
11340          KM        6' depth, 2/1.5 longer route; Mannings N Value: 0.035
11341          RS      15    FLOW
11342          RC   0.035   0.035   0.035    7859  0.0008    0.00
11343          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
11344          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
               *

11345          KK     S80BASIN
11346          KM        BASIN BOUNDARY FROM 1990 TOPO, PORTION OF SOUTHERN BOUNDARY
11347          KM        IS BOUNDED BY SUZY DEAN DITCH
11348          BA   0.435
11349          LG    0.28    0.25    5.00    0.32      17
11350          UI       0      50     134     244     313     424     611     471     369     275
11351          UI     187      98      72      50      18      15      16      15       0       0
11352          UI       0       0       0       0       0       0       0       0       0       0
11353          UI       0       0       0       0       0       0       0       0       0       0
11354          UI       0       0       0       0       0       0       0       0       0       0
               *

11355          KK  DS80REDIVERT
11356          KM        Additional Retention based on 100yr 2hr retention.
11357          KM        C value is based on future land use, P=2.7, A=acres
11358          DT    RS80    22.9     0.0
11359          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11360          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11361          KK   CPS80COMBINE
11362          HC       4  74.953
               *

11363          KK     S89BASIN
11364          KM        BASIN BOUNDARY FROM 1990 TOPO, EASTERN BOUNDARY
11365          KM        IS BOUNDED BY SUZY DEAN DITCH
11366          BA   0.197
11367          LG    0.29    0.15    8.80    0.07      13
11368          UI       0      50     172     262     416     287     183      77      43      15
11369          UI      11       0       0       0       0       0       0       0       0       0
11370          UI       0       0       0       0       0       0       0       0       0       0
11371          UI       0       0       0       0       0       0       0       0       0       0
11372          UI       0       0       0       0       0       0       0       0       0       0
               *

11373          KK  DS89REDIVERT
11374          KM        Additional Retention based on 100yr 2hr retention.
11375          KM        C value is based on future land use, P=2.7, A=acres
11376          DT    RS89    11.8     0.0
11377          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11378          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *
1                                        HEC-1 INPUT                                                    PAGE289

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11379          KK     S90BASIN
11380          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
11381          BA   0.093
11382          LG    0.18    0.15    8.00    0.11      50
11383          UI       0      69     212     270     119      36       9       0       0       0
11384          UI       0       0       0       0       0       0       0       0       0       0
11385          UI       0       0       0       0       0       0       0       0       0       0
11386          UI       0       0       0       0       0       0       0       0       0       0
11387          UI       0       0       0       0       0       0       0       0       0       0
               *

11388          KK  DS90REDIVERT
11389          KM        Additional Retention based on 100yr 2hr retention.
11390          KM        C value is based on future land use, P=2.7, A=acres
11391          DT    RS90     8.2     0.0
11392          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11393          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11394          KK  S90S91ROUTE
11395          KM        Cross-section: Estimated 12' deep, side slopes and width based on
11396          KM        aerial and topo / Manning's N Value: clean straight earth
11397          RS       4    FLOW
11398          RC   0.022   0.022   0.022    2156  0.0009    0.00
11399          RX  100.00  115.00  130.00  150.00  162.00  182.00  192.00  202.00
11400          RY  868.20  868.10  868.00  856.00  856.10  868.00  868.10  868.20
               *

11401          KK     S91BASIN
11402          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW ENTERS SUZY DEAN DITCH
11403          KM        AND EXITS MODEL
11404          BA   0.215
11405          LG    0.18    0.14    8.40    0.09      46
11406          UI       0      57     197     307     463     308     182      77      42      12
11407          UI      13       0       0       0       0       0       0       0       0       0
11408          UI       0       0       0       0       0       0       0       0       0       0
11409          UI       0       0       0       0       0       0       0       0       0       0
11410          UI       0       0       0       0       0       0       0       0       0       0
               *

11411          KK  DS91REDIVERT
11412          KM        Additional Retention based on 100yr 2hr retention.
11413          KM        C value is based on future land use, P=2.7, A=acres
11414          DT    RS91    14.7     0.0
11415          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11416          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11417          KK   CPS91COMBINE
11418          HC       2   0.308
               *
1                                        HEC-1 INPUT                                                    PAGE290

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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11419          KK     S88BASIN
11420          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
11421          BA   0.071
11422          LG    0.28    0.17    6.80    0.15      16
11423          UI       0      41     122     202     117      44      15       6       0       0
11424          UI       0       0       0       0       0       0       0       0       0       0
11425          UI       0       0       0       0       0       0       0       0       0       0
11426          UI       0       0       0       0       0       0       0       0       0       0
11427          UI       0       0       0       0       0       0       0       0       0       0
               *

11428          KK  DS88REDIVERT
11429          KM        Additional Retention based on 100yr 6hr retention.
11430          KM        C value is based on future land use, P=3.2, A=acres
11431          DT    RS88     3.6     0.0
11432          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11433          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11434          KK     S87BASIN
11435          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
11436          BA   0.121
11437          LG    0.19    0.15    8.00    0.11      44
11438          UI       0      43     139     249     246     150      62      29       8       8
11439          UI       0       0       0       0       0       0       0       0       0       0
11440          UI       0       0       0       0       0       0       0       0       0       0
11441          UI       0       0       0       0       0       0       0       0       0       0
11442          UI       0       0       0       0       0       0       0       0       0       0
               *

11443          KK  DS87REDIVERT
11444          KM        Additional Retention based on 100yr 2hr retention.
11445          KM        C value is based on future land use, P=2.7, A=acres
11446          DT    RS87     9.7     0.0
11447          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11448          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11449          KK     S86BASIN
11450          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
11451          BA   0.202
11452          LG    0.29    0.15    7.30    0.11       5
11453          UI       0      75     241     435     407     240      93      44      14      13
11454          UI       0       0       0       0       0       0       0       0       0       0
11455          UI       0       0       0       0       0       0       0       0       0       0
11456          UI       0       0       0       0       0       0       0       0       0       0
11457          UI       0       0       0       0       0       0       0       0       0       0
               *
1                                                HEC-1 INPUT                                                    PAGE291

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

11458          KK  DS86REDIVERT
11459          KM        Additional Retention based on 100yr 2hr retention.
11460          KM        C value is based on future land use, P=2.7, A=acres
11461          DT    RS86    11.9     0.0
11462          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11463          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11464          KK     S85BASIN
11465          KM        BASIN BOUNDARY FROM 1990 TOPO, FLOW DIRECTLY ENTERS GILA RIVER
11466          BA   0.336
11467          LG    0.30    0.15    7.00    0.12       5
11468          UI       0      44     144     238     312     498     451     326     242     148
11469          UI      75      52      27      14      14      13       0       0       0       0
11470          UI       0       0       0       0       0       0       0       0       0       0
11471          UI       0       0       0       0       0       0       0       0       0       0
11472          UI       0       0       0       0       0       0       0       0       0       0
               *

11473          KK  DS85REDIVERT
11474          KM        Additional Retention based on 100yr 2hr retention.
11475          KM        C value is based on future land use, P=2.7, A=acres
11476          DT    RS85    20.3     0.0
11477          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
11478          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
               *

11479          KK   DUMMYCOMBINE
11480          HC       5
               *

11481          KK   DUMMYCOMBINE
11482          HC       4
               *
11483          ZZ
1
               SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   33         N07
                .
                .
   45           .-------->    RN07
   42      DN07RE
                .
                .
   50           .-------->  DN07AS
   48       DN07A
                .
                .
   55           .-------->  DN07BS
   53       DN07B
                .
                .
   60           .-------->  DN07CS
   58       DN07C
                .
                .
   65           .-------->  DN07DS
   63       DN07D
                V
                V
```

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68      N07N06
          .
          .
75        .        N01
          .          .
          .          .
88        .          .-------->    RN01
85        .      DN01RE
          .          .
          .          .
91        .          .        N02A
          .          .          .
          .          .          .
105       .          .          .-------->   RN02A
102       .          .      DN02AR
          .          .          V
          .          .          V
108       .          .      N2AN01
          .          .          .
          .          .          .
115       .      CPN01............
          .          V
          .          V
117       .      N01N02
          .          .
          .          .
125       .          .         N02
          .          .          .
          .          .          .
139       .          .          .-------->    RN02
135       .          .      DN02RE
          .          .          .
          .          .          .
142       .          .          .        N03A
          .          .          .          .
          .          .          .          .
156       .          .          .          .-------->   RN03A
153       .          .          .      DN03AR
          .          .          .          V
          .          .          .          V
159       .          .          .      N3AN02
          .          .          .          .
          .          .          .          .
165       .      CPN02........................
          .          V
          .          V
167       .      N02N3B
          .          .
          .          .
174       .          .        N03B
          .          .          .
          .          .          .
186       .          .          .-------->   RN03B
184       .          .      DN3BRE
          .          .          .
          .          .          .
189       .      CPN03B............
          .          V
          .          V
191       .      N3BN04
          .          .
          .          .
198       .          .         N04
          .          .          .
          .          .          .
208       .          .          .         N03
          .          .          .          .
          .          .          .          .
222       .          .          .          .-------->    RN03
218       .          .          .      DN03RE
          .          .          .          V
          .          .          .          V
225       .          .          .      N03N04
          .          .          .          .
          .          .          .          .
231       .          .          .          .        N04A
          .          .          .          .          .
          .          .          .          .          .
245       .          .          .          .          .-------->   RN04A
242       .          .          .          .      DN04AR
          .          .          .          .          V
          .          .          .          .          V
248       .          .          .          .      N4AN04
          .          .          .          .          .
          .          .          .          .          .
255       .          .          .          .          .        N04B
          .          .          .          .          .          .
          .          .          .          .          .          .
267       .          .          .          .          .          .-------->   RN04B
264       .          .          .          .          .      DN04BR
          .          .          .          .          .          V
          .          .          .          .          .          V
270       .          .          .          .          .      N4BN04
          .          .          .          .          .          .
          .          .          .          .          .          .
277       .      CPN04.............................................
          .          .
          .          .
283       .          .-------->    RN04
279       .      DN04RE
          .          V
          .          V
286       .      N04N05
          .          .
          .          .
292       .          .         N05
          .          .          .
          .          .          .
305       .          .          .-------->    RN05
301       .          .      DN05RE
          .          .          .
          .          .          .
309       .          .          .          .<-------  DN07AS
308       .          .          .       DN07A
          .          .          .          V
          .          .          .          V
310       .          .          .      N7AN05
          .          .          .          .
          .          .          .          .
317       .          .          .          .           .<-------  DN07BS
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316                                                  DN07B
                                                       V
                                                       V
318                                                N7BN05
                                                       .
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325                                                    .<-------  DN07CS
324                                                DN07C
                                                       V
                                                       V
326                                                N7CN05
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332                 CPN05.............................................
                        V
                        V
334                 N05N06
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341                     N06
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354                     .------->    RN06
351                 DN06RE
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357          CPN06.......................
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359                 N08
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368                     N10
                        V
                        V
378                 N10N11
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384                     .        N11
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394                 CPN11............
                        V
                        V
396                 N11N09
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403                     .        N09
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412                     .          .        N14
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428                     .          .          .------->    RN14
423                     .          .      DN14RE
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431                 CPN09........................
                        V
                        V
433                 N09N18
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439                     .        N18
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449                 CPN18............
                        V
                        V
451                 N18N15
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457                     .        N12
                        .          V
                        .          V
467                     .      N12N13
                        .          .
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473                     .          .        N13
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483                     .      CPN13............
                        .          V
                        .          V
485                     .      N13N15
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491                     .          .        N16
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504                     .          .          .------->    RN16
501                     .          .      DN16RE
                        .          .          V
                        .          .          V
507                     .          .      N16N15
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513                     .          .          .        N15
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523                 CPN15.................................
                        V
                        V
525                 N15N17
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531                     .        N17
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541                 CPN17............
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543                     .        N20
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555                     .          .------->    RN20
552                     .      DN20RE
                        .          V
                        .          V
558                     .      N20N21
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565                 N21
                     .
577                  .------->   RN21
574              DN21RE
                     .
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580         CPN21............
                     .
585                  .------->   DN21S
582         DN21SE
                     V
                     V
588         N21N25
                     .
595                 N22
                     .
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605                  .<-------   DN21S
604              DN21SE
                     V
                     V
606              N21N22
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613             CPN22............
                     V
                     V
615             N22N25
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622                 N25
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635                  .------->   RN25
632              DN25RE
                     .
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638         CPN25........................
                     V
                     V
640         N25N26
                     .
647                 N26
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660                  .------->   RN26
657              DN26RE
                     .
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663         CPN26............
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665                 N19
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675                 N23
                     .
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688                  .------->   RN23
685              DN23RE
                     V
                     V
691              N23N24
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698                 N24
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711                  .------->   RN24
708              DN24RE
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714             CPN24............
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716                 N27
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729                  .------->   RN27
726              DN27RE
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732         DUMMY...................................
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734     DUMMY...................................
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736         D03
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751          .------->   RD03
745     DD03RE
                     V
                     V
754     D03D04
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761          .       D04
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779          .       .------->   RD04
772          .    DD04RE
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782     CPD04............
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786          .------->   DD04S
784     DD04SE
                     V
                     V
789     D04D05
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796          .          .
             .          .        D05
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810          .          .          .-------->    RD05
806          .          .     DD05RE
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813          .      CPD05............
             .          V
             .          V
815          .     D05D14
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             .          .
826          .          .-------->  DD141S
822          .      DD141
             .          V
             .          V
829          .     D05D15
             .          .
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836          .          .        D11
             .          .          .
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853          .          .          .-------->    RD11
846          .          .     DD11RE
             .          .          .
             .          .          .
858          .          .          .-------->  DD111S
856          .          .      DD111
             .          .          .
             .          .          .
863          .          .          .-------->  DD112S
861          .          .      DD112
             .          .          V
             .          .          V
866          .          .     D11D12
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873          .          .          .        D12
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891          .          .          .          .-------->    RD12
883          .          .          .     DD12RE
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894          .          .      CPD12............
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             .          .          .
898          .          .          .-------->  DD121S
896          .          .      DD121
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903          .          .          .-------->  DD122S
901          .          .      DD122
             .          .          V
             .          .          V
906          .          .     D12D13
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914          .          .          .        D13
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930          .          .          .          .-------->    RD13
923          .          .          .     DD13RE
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934          .          .          .          .          .<-------   DD04S
933          .          .          .          .      DD04SE
             .          .          .          .          V
             .          .          .          .          V
935          .          .          .          .      D04D13
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942          .          .      CPD13........................
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946          .          .          .-------->  DD131S
944          .          .      DD131
             .          .          .
             .          .          .
951          .          .          .-------->  DD132S
949          .          .      DD132
             .          .          V
             .          .          V
954          .          .     D13D14
             .          .          .
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961          .          .          .        D14
             .          .          .          .
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974          .          .          .          .-------->    RD14
970          .          .          .     DD14RE
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             .          .          .          .
978          .          .          .          .          .<-------  DD141S
977          .          .          .          .       DD141
             .          .          .          .          V
             .          .          .          .          V
979          .          .          .          .      D0514A
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987          .          .      CPD14........................
             .          .          V
             .          .          V
989          .          .      SRD14
             .          .          .
             .          .          .
1000         .          .          .-------->  DD142S
998          .          .      DD142
             .          .          V
             .          .          V
1003         .          .     D14D15
             .          .          .
             .          .          .
1010         .          .          .        D15
             .          .          .          .
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1022         .          .          .          .-------->    RD15
1019         .          .          .     DD15RE
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1025            .     CPD15.......................
                .        V
                .        V
1027            .    D15D26
                .        V
                .        V
1034            .    D15D28
                .        .
                .        .
1041            .        .        D28
                .        .          .
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1053            .        .          .-------->   RD28
1050            .        .     DD28RE
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                .        .          .
1056            .     CPD28...........
                .        V
                .        V
1058            .    D28AFR
                .        .
                .        .
1064       DUMMY............
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1066            .       L01
                .        .
                .        .
1079            .        .-------->   RL01
1075            .    DL01RE
                .        V
                .        V
1082            .    L01L03
                .        .
                .        .
1090            .        .        L03
                .        .          .
                .        .          .
1103            .        .          .-------->   RL03
1099            .        .     DL03RE
                .        .          .
                .        .          .
1106            .        .          .        L20
                .        .          .          .
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1118            .        .          .          .-------->   RL20
1116            .        .          .     DL20RE
                .        .          .          V
                .        .          .          V
1121            .        .          .     L20L03
                .        .          .          .
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1129            .     CPL03.......................
                .        .
                .        .
1134            .        .-------->   DL03S
1131            .    DL03SE
                .        V
                .        V
1137            .    L03L04
                .        .
                .        .
1144            .        .        L04
                .        .          .
                .        .          .
1155            .        .          .-------->   RL04
1153            .        .     DL04RE
                .        .          .
                .        .          .
1158            .     CPL04...........
                .        .
                .        .
1162            .        .-------->   DL04S
1160            .    DL04SE
                .        V
                .        V
1165            .    L04L05
                .        .
                .        .
1172            .        .        L05
                .        .          .
                .        .          .
1185            .        .          .-------->   RL05
1181            .        .     DL05RE
                .        .          .
                .        .          .
1188            .     CPL05...........
                .        .
                .        .
1192            .        .-------->  DL051S
1190            .     DL051
                .        .
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1197            .        .-------->  DL052S
1195            .     DL052
                .        V
                .        V
1200            .    L05D06
                .        .
                .        .
1207            .        .        L02
                .        .          .
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1218            .        .          .-------->   RL02
1216            .        .     DL02RE
                .        .          V
                .        .          V
1221            .        .     L02D06
                .        .          .
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1229            .        .          .        D06
                .        .          .          .
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1240            .        .          .          .-------->   RD06
1238            .        .          .     DD06RE
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1243            .     CPD06.......................
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1248            .          .-------->   DD06S
1245            .     DD06SE
                .          V
                .          V
1251            .     D06D07
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1259            .          .        D07
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1270            .          .          .-------->    RD07
1268            .          .     DD07RE
                .          .          .
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1273            .      CPD07............
                .          V
                .          V
1275            .     D07D02
                .          .
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1282            .          .        D01
                .          .          .
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1293            .          .          .-------->    RD01
1291            .          .     DD01RE
                .          .          V
                .          .          V
1296            .          .     D01D02
                .          .          .
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1303            .          .          .        D02
                .          .          .          .
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1314            .          .          .          .-------->    RD02
1312            .          .          .     DD02RE
                .          .          .          .
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1317            .      CPD02........................
                .          V
                .          V
1319            .     D02D10
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1327            .          .        D09
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1340            .          .          .-------->    RD09
1336            .          .     DD09RE
                .          .          V
                .          .          V
1343            .          .     D09D10
                .          .          .
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1351            .          .          .          .<--------   DD06S
1350            .          .          .     DD06SE
                .          .          .          V
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1352            .          .          .     D06D10
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1358            .          .          .          .         D10
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1375            .          .          .          .           .-------->    RD10
1368            .          .          .          .      DD10RE
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1378            .      CPD10....................................
                .          V
                .          V
1380            .     D10D19
                .          .
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1388            .          .        L09
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1403            .          .          .-------->    RL09
1397            .          .     DL09RE
                .          .          .
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1407            .          .          .          .<--------  DL051S
1406            .          .          .      DL051
                .          .          .          V
                .          .          .          V
1408            .          .          .     L05L09
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1415            .          .      CPL09............
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1419            .          .          .-------->  DL091S
1417            .          .      DL091
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1424            .          .          .-------->  DL092S
1422            .          .      DL092
                .          .          V
                .          .          V
1427            .          .     L09D08
                .          .          .
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1434            .          .          .        D08
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1450            .          .          .          .-------->    RD08
1443            .          .          .     DD08RE
                .          .          .          .
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1454            .          .          .          .           .<--------  DL052S
1453            .          .          .          .       DL052
                .          .          .          .           V
                .          .          .          .           V
1455            .          .          .          .      L05D08
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1462            .          .      CPD08........................
                .          .          V
                .          .          V
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1465                D08D16
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1472                  L06
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1502                  .------->    RL06
1481            DL06RE
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1507                  .------->   DL06S
1505            DL06SE
                      V
                      V
1510            L06L07
                      .
1517                  .        L07
                      .          .
1541                  .          .------->    RL07
1526                  .     DL07RE
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1545                  .          .          .<-------   DL03S
1544                  .          .     DL03SE
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1546                  .          .     L0307A
                      .          .          V
                      .          .          V
1554                  .          .     L0307B
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1561            CPL07.......................
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1565                  .------->   DL07S
1563            DL07SE
                      V
                      V
1568            L07L08
                      .
1575                  .        L08
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1593                  .          .------->    RL08
1584                  .     DL08RE
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1597                  .          .          .<-------   DL04S
1596                  .          .     DL04SE
                      .          .          V
                      .          .          V
1598                  .          .     L04L08
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1605            CPL08.......................
                      V
                      V
1607            L08L12
                      .
1614                  .        L10
                      .          .
1632                  .          .------->    RL10
1624                  .     DL10RE
                      .          V
                      .          V
1635                  .     L10L11
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1643                  .          .          .<-------   DL06S
1642                  .          .     DL06SE
                      .          .          V
                      .          .          V
1644                  .          .     L06L11
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1651                  .          .          .        L11
                      .          .          .          .
1668                  .          .          .          .------->    RL11
1661                  .          .          .     DL11RE
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1672                  .          .          .          .          .<-------   DL07S
1671                  .          .          .          .     DL07SE
                      .          .          .          .          V
                      .          .          .          .          V
1673                  .          .          .          .     L07L11
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1681                  .     CPL11.....................................
                      .          .
1685                  .          .------->   DL11S
1683                  .     DL11SE
                      .          V
                      .          V
1688                  .     L11L12
                      .          .
1695                  .          .        L12
                      .          .          .
1709                  .          .          .------->    RL12
1704                  .          .     DL12RE
                      .          .          .
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1712            CPL12.......................
                      .
1716                  .------->  DL121S
1714            DL121
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1721                  .------->  DL122S
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1719                    DL122
                          V
                          V
1724                  L12L13
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1731                      .        L13
                          .          .
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1744                      .          .-------->    RL13
1741                      .     DL13RE
                          .          .
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1748                      .          .           .<-------  DL091S
1747                      .          .       DL091
                          .          .           V
                          .          .           V
1749                      .          .      L09L13
                          .          .           .
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1756                    CPL13.......................
                          .
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1761                      .-------->  DL131S
1758                    DL131
                          .
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1767                      .-------->  DL132S
1764                    DL132
                          V
                          V
1770                  L13D16
                          .
                          .
1777                      .        D16
                          .          .
                          .          .
1789                      .          .-------->    RD16
1786                      .     DD16RE
                          .          .
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1793                      .          .           .<-------  DL092S
1792                      .          .       DL092
                          .          .           V
                          .          .           V
1794                      .          .      L09D16
                          .          .           .
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1801                CPD16.................................
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                          .
1805                      .-------->  DD161S
1803                DD161
                          .
                          .
1810                      .-------->  DD162S
1808                DD162
                        V
                        V
1813              D16D18
                          .
                          .
1820                      .        D18
                          .          .
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1831                      .          .-------->    RD18
1829                    DD18RE
                          .          .
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1834                CPD18...........
                        V
                        V
1836              D18D19
                          .
                          .
1843                      .        D17
                          .          .
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1855                      .          .-------->    RD17
1852                    DD17RE
                          .          V
                          .          V
1858                    D17D19
                          .          .
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1866                      .          .        D19
                          .          .          .
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1885                      .          .          .-------->    RD19
1875                      .          .     DD19RE
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1888            CPD19.................................
                    .
                    .
1892                .-------->  DD191S
1890            DD191
                    .
                    .
1897                .-------->  DD192S
1895            DD192
                    V
                    V
1900          D19D20
                    .
                    .
1907                .        D20
                    .          .
                    .          .
1923                .          .-------->    RD20
1916              DD20RE
                    .          .
                    .          .
1927                .          .           .<-------  DD111S
1926                .       DD111
                    .          V
                    .          V
1928                .      D11D20
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1935          .      CPD20.......................
              .          V
              .          V
1937          .     D20D21
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              .          .
1944          .          .         D21
              .          .          .
              .          .          .
1957          .          .          .------->    RD21
1953          .          .     DD21RE
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              .          .          .
1961          .          .          .          .<-------  DD112S
1960          .          .          .      DD112
              .          .          .          V
              .          .          .          V
1962          .          .          .     D11D21
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              .          .          .          .
1970          .          .          .          .          .<-------  DD121S
1969          .          .          .          .      DD121
              .          .          .          .          V
              .          .          .          .          V
1971          .          .          .          .     D12D21
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1978          .      CPD21...................................
              .          .
              .          .
1982          .          .------->  DD211S
1980          .      DD211
              .          .
              .          .
1987          .          .------->  DD212S
1985          .      DD212
              .          V
              .          V
1990          .     D21D22
              .          .
              .          .
1998          .          .         D22
              .          .          .
              .          .          .
2011          .          .          .------->    RD22
2007          .          .     DD22RE
              .          .          .
              .          .          .
2015          .          .          .          .<-------  DD122S
2014          .          .          .      DD122
              .          .          .          V
              .          .          .          V
2016          .          .          .     D12D22
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2023          .      CPD22.......................
              .          V
              .          V
2025          .     D22D23
              .          .
              .          .
2032          .          .         D23
              .          .          .
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2050          .          .          .------->    RD23
2041          .          .     DD23RE
              .          .          .
              .          .          .
2054          .          .          .          .<-------  DD131S
2053          .          .          .      DD131
              .          .          .          V
              .          .          .          V
2055          .          .          .     D13D23
              .          .          .          .
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2062          .      CPD23.......................
              .          .
              .          .
2066          .          .------->  DD231S
2064          .      DD231
              .          .
              .          .
2071          .          .------->  DD232S
2069          .      DD232
              .          V
              .          V
2074          .     D23D24
              .          .
              .          .
2080          .          .         D24
              .          .          .
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2091          .          .          .------->    RD24
2089          .          .     DD24RE
              .          .          .
              .          .          .
2095          .          .          .          .<-------  DD132S
2094          .          .          .      DD132
              .          .          .          V
              .          .          .          V
2096          .          .          .     D13D24
              .          .          .          .
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2103          .      CPD24.......................
              .          .
              .          .
2107          .          .------->  DD24S
2105          .     DD24SE
              .          V
              .          V
2110          .     D24D25
              .          .
              .          .
2117          .          .         D25
              .          .          .
              .          .          .
2130          .          .          .------->    RD25
2126          .          .     DD25RE
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2133          .      CPD25............
              .          V
              .          V
2135          .      SRD25
              .          .
              .          .
2145          .          .-------> DD251S
2143          .      DD251
              .          .
              .          .
2150          .          .-------> DD252S
2148          .      DD252
              .          V
              .          V
2153          .     D2542A
              .          V
              .          V
2161          .     D2542B
              .          .
              .          .
2169          .          .        D37
              .          .          .
              .          .          .
2181          .          .          .-------> RD37
2178          .          .     DD37RE
              .          .          .
              .          .          .
2185          .          .          .          .<------- DD232S
2184          .          .          .      DD232
              .          .          .          V
              .          .          .          V
2186          .          .          .     D23D37
              .          .          .          .
              .          .          .          .
2194          .          .          .          .          .<------- DD251S
2193          .          .          .          .      DD251
              .          .          .          .          V
              .          .          .          .          V
2195          .          .          .          .     D25D37
              .          .          .          .          .
              .          .          .          .          .
2203          .          .          .          .          .          .<------- DD24S
2202          .          .          .          .          .     DD24SE
              .          .          .          .          .          V
              .          .          .          .          .          V
2204          .          .          .          .          .     D24D37
              .          .          .          .          .          .
              .          .          .          .          .          .
2211          .          .      CPD37...................................
              .          .          .
              .          .          .
2215          .          .          .-------> DD37S
2213          .          .     DD37SE
              .          .         V
              .          .         V
2218          .          .     D37D39
              .          .          .
              .          .          .
2225          .          .          .        D35
              .          .          .          .
              .          .          .          .
2237          .          .          .          .-------> RD35
2234          .          .          .     DD35RE
              .          .          .          .
              .          .          .          .
2241          .          .          .          .          .<------- DD231S
2240          .          .          .          .      DD231
              .          .          .          .          V
              .          .          .          .          V
2242          .          .          .          .     D23D35
              .          .          .          .          .
              .          .          .          .          .
2249          .          .          .      CPD35............
              .          .          .          .
              .          .          .          .
2253          .          .          .          .-------> DD35S
2251          .          .          .     DD35SE
              .          .          .          V
              .          .          .          V
2256          .          .          .     D35D38
              .          .          .          .
              .          .          .          .
2263          .          .          .          .        D38
              .          .          .          .          .
              .          .          .          .          .
2275          .          .          .          .          .-------> RD38
2272          .          .          .          .     DD38RE
              .          .          .          .          .
              .          .          .          .          .
2279          .          .          .          .          .          .<------- DD37S
2278          .          .          .          .          .     DD37SE
              .          .          .          .          .          V
              .          .          .          .          .          V
2280          .          .          .          .          .     D37D38
              .          .          .          .          .          .
              .          .          .          .          .          .
2287          .          .          .      CPD38........................
              .          .          .          .
              .          .          .          .
2291          .          .          .          .-------> DD381S
2289          .          .          .      DD381
              .          .          .          .
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2296          .          .          .          .-------> DD382S
2294          .          .          .      DD382
              .          .          .          V
              .          .          .          V
2299          .          .          .     D38D39
              .          .          .          .
              .          .          .          .
2306          .          .          .          .        D39
              .          .          .          .          .
              .          .          .          .          .
2318          .          .          .          .          .-------> RD39
2315          .          .          .          .     DD39RE
              .          .          .          .          .
              .          .          .          .          .
2322          .          .          .          .          .          .<------- DD252S
2321          .          .          .          .          .      DD252
              .          .          .          .          .          V
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                                                                  V
2323                                                        D25D39
                                                                 .
                                                                 .
2330                    CPD39.................................
                            V
                            V
2332                    D39D42
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                            .
2339                            D26
                                .
                                .
2351                            .------->    RD26
2349                        DD26RE
                                .
                                .
2355                            .                <-------  DD142S
2354                            .          DD142
                                .              V
                                .              V
2356                            .         D14D26
                                .              .
                                .              .
2363                        CPD26............
                                V
                                V
2365                        D26D27
                                .
                                .
2372                            .            D27
                                .              .
                                .              .
2384                            .              .------->    RD27
2382                            .         DD27RE
                                .              .
                                .              .
2387                        CPD27............
                                V
                                V
2389                        SRD27
                                V
                                V
2397                        D27D42
                                .
                                .
2404                            .            D42
                                .              .
                                .              .
2417                            .              .------->    RD42
2414                            .         DD42RE
                                .              .
                                .              .
2420                CPD42.................................
                        V
                        V
2422                SRD42
                        V
                        V
2430                D42D53
                        .
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2438                    .        D53
                        .          .
                        .          .
2449                    .          .------->    RD53
2447                    .      DD53RE
                        .          .
                        .          .
2452                CPD53...........
                        V
                        V
2454                SRD53
                        V
                        V
2463                D53D54
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                        .
2470                    .        D43
                        .          .
                        .          .
2481                    .          .------->    RD43
2479                    .      DD43RE
                        .          V
                        .          V
2484                    .      D43D54
                        .          .
                        .          .
2491                    .          .        D54
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2506                    .          .          .------->    RD54
2501                    .          .      DD54RE
                        .          .          .
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2509                CPD54......................
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                        .
2511                    .        D44
                        .          .
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2524                    .          .------->    RD44
2522                    .      DD44RE
                        .          .
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2527                    .          .        D55
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2538                    .          .          .------->    RD55
2536                    .          .      DD55RE
                        .          .          .
                        .          .          .
2541                    .          .          .        D56
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2555                    .          .          .          .------->    RD56
2550                    .          .          .     DD56RE
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2558                    .      DUMMY........................
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2560      DUMMY.......................
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2562            .        L14
                .          .
                .          .
2574            .          .-------->    RL14
2571            .     DL14RE
                .         V
                .         V
2577            .     L14L15
                .          .
                .          .
2584            .          .        L15
                .          .          .
                .          .          .
2596            .          .          .-------->    RL15
2593            .          .     DL15RE
                .          .          .
                .          .          .
2599            .      CPL15............
                .         V
                .         V
2601            .     L15L16
                .          .
                .          .
2608            .          .        L16
                .          .          .
                .          .          .
2620            .          .          .-------->    RL16
2617            .          .     DL16RE
                .          .          .
                .          .          .
2623            .      CPL16............
                .         V
                .         V
2625            .     L16L17
                .          .
                .          .
2632            .          .        L17
                .          .          .
                .          .          .
2643            .          .          .-------->    RL17
2641            .          .     DL17RE
                .          .          .
                .          .          .
2646            .      CPL17............
                .          .
                .          .
2650            .          .-------->   DL17S
2648            .     DL17SE
                .         V
                .         V
2653            .     L17L18
                .          .
                .          .
2660            .          .        L18
                .          .          .
                .          .          .
2672            .          .          .-------->    RL18
2669            .          .     DL18RE
                .          .          .
                .          .          .
2676            .          .          .          .<-------   DL11S
2675            .          .          .     DL11SE
                .          .          .         V
                .          .          .         V
2677            .          .          .     L11L18
                .          .          .          .
                .          .          .          .
2685            .          .          .          .          .<-------  DL121S
2684            .          .          .          .      DL121
                .          .          .          .          V
                .          .          .          .          V
2686            .          .          .          .     L12L18
                .          .          .          .          .
                .          .          .          .          .
2693            .      CPL18...................................
                .          .
                .          .
2697            .          .-------->  DL181S
2695            .      DL181
                .          .
                .          .
2702            .          .-------->  DL182S
2700            .      DL182
                .         V
                .         V
2705            .     L18L19
                .          .
                .          .
2712            .          .        L19
                .          .          .
                .          .          .
2724            .          .          .-------->    RL19
2721            .          .     DL19RE
                .          .          .
                .          .          .
2728            .          .          .          .<-------  DL122S
2727            .          .          .      DL122
                .          .          .         V
                .          .          .         V
2729            .          .          .     L12L19
                .          .          .          .
                .          .          .          .
2737            .          .          .          .          .<-------  DL131S
2736            .          .          .          .      DL131
                .          .          .          .          V
                .          .          .          .          V
2738            .          .          .          .     L13L19
                .          .          .          .          .
                .          .          .          .          .
2745            .      CPL19...................................
                .          .
                .          .
2750            .          .-------->  DL191S
2747            .      DL191
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2756                .
                    .-------> DL192S
2753            DL192
                    V
                    V
2759            L19D29
                    .
                    .
2766                .        D29
                    .          .
                    .          .
2779                .          .------->   RD29
2776                .     DD29RE
                    .          .
                    .          .
2783                .          .          .<-------  DL132S
2782                .          .      DL132
                    .          .          V
                    .          .          V
2784                .          .     L13D29
                    .          .          .
                    .          .          .
2792                .          .          .          .<-------  DD161S
2791                .          .          .      DD161
                    .          .          .          V
                    .          .          .          V
2793                .          .          .     D16D29
                    .          .          .          .
                    .          .          .          .
2800            CPD29.................................
                    V
                    V
2802            D29D30
                    .
                    .
2809                .        D30
                    .          .
                    .          .
2823                .          .------->   RD30
2820                .     DD30RE
                    .          .
                    .          .
2827                .          .          .<-------  DD162S
2826                .          .      DD162
                    .          .          V
                    .          .          V
2828                .          .     D16D30
                    .          .          .
                    .          .          .
2836                .          .          .          .<-------  DD191S
2835                .          .          .      DD191
                    .          .          .          V
                    .          .          .          V
2837                .          .          .     D19D30
                    .          .          .          .
                    .          .          .          .
2844            CPD30.................................
                    .
                    .
2848                .------->  DD30S
2846            DD30SE
                    V
                    V
2851            D30D32
                    .
                    .
2858                .        D32
                    .          .
                    .          .
2873                .          .------->   RD32
2867                .     DD32RE
                    .          .
                    .          .
2876            CPD32............
                    .
                    .
2880                .------->  DD32S
2878            DD32SE
                    V
                    V
2883            D32D33
                    .
                    .
2890                .        D31
                    .          .
                    .          .
2906                .          .------->   RD31
2899                .     DD31RE
                    .          .
                    .          .
2910                .          .          .<-------  DD192S
2909                .          .      DD192
                    .          .          V
                    .          .          V
2911                .          .     D19D31
                    .          .          .
                    .          .          .
2919                .          .          .          .<-------  DD211S
2918                .          .          .      DD211
                    .          .          .          V
                    .          .          .          V
2920                .          .          .     D21D31
                    .          .          .          .
                    .          .          .          .
2928                .      CPD31........................
                    .          V
                    .          V
2930                .     D31D33
                    .          .
                    .          .
2937                .          .        D33
                    .          .          .
                    .          .          .
2948                .          .          .------->   RD33
2946                .          .      DD33RE
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                    .          .          .
2951            CPD33........................
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2955          .          .-------> DD331S
2953          .      DD331
              .          .
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2960          .          .-------> DD332S
2958          .      DD332
              .          V
              .          V
2963          .     D33D34
              .          .
              .          .
2970          .          .        D34
              .          .          .
              .          .          .
2984          .          .          .------->   RD34
2979          .          .     DD34RE
              .          .          .
              .          .          .
2988          .          .          .          .<-------  DD212S
2987          .          .          .      DD212
              .          .          .          V
              .          .          .          V
2989          .          .          .     D21D34
              .          .          .          .
              .          .          .          .
2996          .      CPD34.......................
              .          V
              .          V
2998          .     D34D36
              .          .
              .          .
3005          .          .        D36
              .          .          .
              .          .          .
3019          .          .          .------->   RD36
3014          .          .     DD36RE
              .          .          .
              .          .          .
3023          .          .          .          .<-------  DD35S
3022          .          .          .     DD35SE
              .          .          .          V
              .          .          .          V
3024          .          .          .     D35D36
              .          .          .          .
              .          .          .          .
3031          .      CPD36.......................
              .          .
              .          .
3035          .          .-------> DD361S
3033          .      DD361
              .          .
              .          .
3040          .          .-------> DD362S
3038          .      DD362
              .          V
              .          V
3043          .     D36D40
              .          .
              .          .
3050          .          .        D40
              .          .          .
              .          .          .
3062          .          .          .------->   RD40
3059          .          .     DD40RE
              .          .          .
              .          .          .
3066          .          .          .          .<-------  DD381S
3065          .          .          .      DD381
              .          .          .          V
              .          .          .          V
3067          .          .          .     D38D40
              .          .          .          .
              .          .          .          .
3074          .      CPD40.......................
              .          .
              .          .
3078          .          .------->  DD40S
3076          .     DD40SE
              .          V
              .          V
3081          .     D40D41
              .          .
              .          .
3088          .          .        D41
              .          .          .
              .          .          .
3100          .          .          .------->   RD41
3097          .          .     DD41RE
              .          .          .
              .          .          .
3104          .          .          .          .<-------  DD382S
3103          .          .          .      DD382
              .          .          .          V
              .          .          .          V
3105          .          .          .     D38D41
              .          .          .          .
              .          .          .          .
3112          .      CPD41.......................
              .          V
              .          V
3114          .     D41D50
              .          .
              .          .
3121          .          .        L23
              .          .          .
              .          .          .
3133          .          .          .------->   RL23
3130          .          .     DL23RE
              .          .          V
              .          .          V
3136          .          .     L23L24
              .          .          .
              .          .          .
3143          .          .          .        L24
              .          .          .          .
              .          .          .          .
3155          .          .          .          .------->   RL24
3152          .          .          .     DL24RE
              .          .          .          .
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3158                CPL24............
                        V
                        V
3160            L24L26
                        .
                        .
3167                    .         L25
                        .           .
                        .           .
3180                    .           .-------->    RL25
3177                    .      DL25RE
                        .           V
                        .           V
3183                    .      L25L26
                        .           .
                        .           .
3191                    .           .          .<-------  DL181S
3190                    .           .      DL181
                        .           .          V
                        .           .          V
3192                    .           .     L18L26
                        .           .          .
                        .           .          .
3200                    .           .          .          .<-------   DL17S
3199                    .           .          .     DL17SE
                        .           .          .          V
                        .           .          .          V
3201                    .           .          .     L17L26
                        .           .          .          .
                        .           .          .          .
3208                    .           .          .          .         L26
                        .           .          .          .           .
                        .           .          .          .           .
3220                    .           .          .          .           .-------->    RL26
3217                    .           .          .          .      DL26RE
                        .           .          .          .           .
                        .           .          .          .           .
3223                CPL26.............................................
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                        .
3227                    .-------->   DL26S
3225            DL26SE
                        V
                        V
3230            L26L27
                        .
                        .
3237                    .         L27
                        .           .
                        .           .
3250                    .           .-------->    RL27
3247                    .      DL27RE
                        .           .
                        .           .
3254                    .           .          .<-------  DL182S
3253                    .           .      DL182
                        .           .          V
                        .           .          V
3255                    .           .     L18L27
                        .           .          .
                        .           .          .
3263                    .           .          .          .<-------  DL191S
3262                    .           .          .      DL191
                        .           .          .          V
                        .           .          .          V
3264                    .           .          .     L19L27
                        .           .          .          .
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3271                CPL27...................................
                        .
                        .
3275                    .-------->  DL271S
3273                DL271
                        .
                        .
3280                    .-------->  DL272S
3278                DL272
                        V
                        V
3283            L27D45
                        .
                        .
3290                    .         D45
                        .           .
                        .           .
3305                    .           .-------->    RD45
3300                    .      DD45RE
                        .           .
                        .           .
3309                    .           .          .<-------  DL192S
3308                    .           .      DL192
                        .           .          V
                        .           .          V
3310                    .           .     L19D45
                        .           .          .
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3317                CPD45........................
                        .
                        .
3321                    .-------->  DD451S
3319                DD451
                        .
                        .
3326                    .-------->  DD452S
3324                DD452
                        V
                        V
3329            D45D46
                        .
                        .
3336                    .         D46
                        .           .
                        .           .
3351                    .           .-------->    RD46
3346                    .      DD46RE
                        .           .
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3355                    .           .          .<-------   DD30S
3354                    .           .      DD30SE
                        .           .          V
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                                                  V
3356                                        D30D46
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3363                                 CPD46.........................
                                                  .
                                                  .
3367                                              .-------> DD461S
3365                                 DD461
                                                  .
                                                  .
3372                                              .-------> DD462S
3370                                 DD462
                                                 V
                                                 V
3375                                D46D47
                                                  .
                                                  .
3382                                          D47
                                                  .
                                                  .
3397                                              .------->    RD47
3391                                      DD47RE
                                                  .
                                                  .
3401                                                      .<-------   DD32S
3400                                                DD32SE
                                                          V
                                                          V
3402                                                D3247A
                                                          V
                                                          V
3409                                                D3247B
                                                          .
                                                          .
3417                                                      .           .<-------  DD331S
3416                                                      .       DD331
                                                          .           V
                                                          .           V
3418                                                      .      D3347A
                                                          .           V
                                                          .           V
3425                                                      .      D3347B
                                                          .           .
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3432                                 CPD47.................................
                                                  .
                                                  .
3436                                              .------->   DD47S
3434                                DD47SE
                                                 V
                                                 V
3439                                D47D48
                                                  .
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3446                                          D48
                                                  .
                                                  .
3460                                              .------->    RD48
3455                                      DD48RE
                                                  .
                                                  .
3464                                                      .<-------  DD332S
3463                                                 DD332
                                                          V
                                                          V
3465                                                D33D48
                                                          .
                                                          .
3473                                                      .           .<-------  DD361S
3472                                                      .       DD361
                                                          .           V
                                                          .           V
3474                                                      .      D3648A
                                                          .           V
                                                          .           V
3481                                                      .      D3648B
                                                          .           .
                                                          .           .
3488                                 CPD48.................................
                                                  .
                                                  .
3492                                              .-------> DD481S
3490                                 DD481
                                                  .
                                                  .
3497                                              .-------> DD482S
3495                                 DD482
                                                 V
                                                 V
3500                                D48D49
                                                  .
                                                  .
3507                                          D49
                                                  .
                                                  .
3522                                              .------->    RD49
3516                                      DD49RE
                                                  .
                                                  .
3526                                                      .<-------  DD362S
3525                                                 DD362
                                                          V
                                                          V
3527                                                D36D49
                                                          .
                                                          .
3535                                                      .           .<-------   DD40S
3534                                                      .      DD40SE
                                                          .           V
                                                          .           V
3536                                                      .      D40D49
                                                          .           .
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3543                                 CPD49.................................
                                                  .
                                                  .
3547                                              .-------> DD491S
3545                                 DD491
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3552                .-------> DD492S
3550            DD492
                    V
                    V
3555            D49D50
                    .
                    .
3562                .        D50
                    .          .
                    .          .
3574                .          .------->   RD50
3571                .     DD50RE
                    .          .
                    .          .
3577        CPD50.......................
                V
                V
3579        D50D64
                .
                .
3586            .        D60
                .          .
                .          .
3599            .------->   RD60
3596            .     DD60RE
                .          .
                .          .
3603            .          .<-------  DD481S
3602            .      DD481
                .          V
                .          V
3604            .     D48D60
                .          .
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3612            .      CPD60............
                .          .
                .          .
3616            .-------> DD601S
3614            .      DD601
                .          .
                .          .
3621            .-------> DD602S
3619            .      DD602
                .          V
                .          V
3624            .     D60D63
                .          .
                .          .
3631            .        D63
                .          .
                .          .
3645            .          .------->   RD63
3642            .     DD63RE
                .          .
                .          .
3649            .          .          .<-------  DD482S
3648            .          .      DD482
                .          .          V
                .          .          V
3650            .          .     D48D63
                .          .          .
                .          .          .
3658            .          .          .          .<-------  DD491S
3657            .          .          .      DD491
                .          .          .          V
                .          .          .          V
3659            .          .          .     D49D63
                .          .          .          .
                .          .          .          .
3666            .      CPD63.................................
                .          V
                .          V
3668            .      SRD63
                .          V
                .          V
3676            .     D63D64
                .          .
                .          .
3683            .        D62
                .          .
                .          .
3696            .          .------->   RD62
3693            .     DD62RE
                .          .
                .          .
3700            .          .          .<-------  DD601S
3699            .          .      DD601
                .          .          V
                .          .          V
3701            .          .     D60D62
                .          .          .
                .          .          .
3708            .      CPD62............
                .          .
                .          .
3712            .          .-------> DD621S
3710            .      DD621
                .          .
                .          .
3717            .          .-------> DD622S
3715            .      DD622
                .          V
                .          V
3720            .     D62D64
                .          .
                .          .
3728            .          .          .<-------  DD602S
3727            .          .      DD602
                .          .          V
                .          .          V
3729            .          .     D60D64
                .          .          .
                .          .          .
3737            .          .          .          .<-------  DD492S
3736            .          .          .      DD492
                .          .          .          V
                .          .          .          V
3738            .          .          .     D49D64
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3745          .          .          .          .          .          .
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3758          .          .          .          .          .          .          .-------->    RD64
3755          .          .          .          .          .          .      DD64RE
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              .          .          .          .          .          .          .
3761          .          .      CPD64A.............................................
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              .          .          .
3763          .      CPD64B............
              .          V
              .          V
3765          .      D64D74
              .          .
              .          .
3772          .          .        D74
              .          .          .
              .          .          .
3784          .          .          .-------->    RD74
3781          .          .      DD74RE
              .          .          .
              .          .          .
3788          .          .          .          .<-------  DD622S
3787          .          .          .      DD622
              .          .          .          V
              .          .          .          V
3789          .          .          .     D62D74
              .          .          .          .
              .          .          .          .
3796          .      CPD74........................
              .          .
              .          .
3800          .          .-------->  DD741S
3798          .      DD741
              .          .
              .          .
3805          .          .-------->  DD742S
3803          .      DD742
              .          V
              .          V
3808          .      D74D75
              .          .
              .          .
3815          .          .       D79A
              .          .          .
              .          .          .
3827          .          .          .-------->   RD79A
3824          .          .      DD79AR
              .          .          .
              .          .          .
3831          .          .          .          .<-------  DD742S
3830          .          .          .      DD742
              .          .          .          V
              .          .          .          V
3832          .          .          .     D7479A
              .          .          .          .
              .          .          .          .
3839          .          .      CPD79A............
              .          .          .
              .          .          .
3841          .          .          .        D51
              .          .          .          .
              .          .          .          .
3852          .          .          .          .-------->    RD51
3850          .          .          .     DD51RE
              .          .          .          V
              .          .          .          V
3855          .          .          .     D51D65
              .          .          .          .
              .          .          .          .
3862          .          .          .          .         D65
              .          .          .          .           .
              .          .          .          .           .
3874          .          .          .          .           .-------->    RD65
3871          .          .          .          .      DD65RE
              .          .          .          .           .
              .          .          .          .           .
3877          .          .          .      CPD65............
              .          .          .          V
              .          .          .          V
3879          .          .          .     D65D75
              .          .          .          .
              .          .          .          .
3886          .          .          .          .         D75
              .          .          .          .           .
              .          .          .          .           .
3899          .          .          .          .           .-------->    RD75
3896          .          .          .          .      DD75RE
              .          .          .          .           .
              .          .          .          .           .
3902          .      CPD75.................................
              .          V
              .          V
3904          .      D7579B
              .          .
              .          .
3911          .          .        L33
              .          .          .
              .          .          .
3923          .          .          .-------->    RL33
3920          .          .      DL33RE
              .          .          .
              .          .          .
3928          .          .          .-------->   DL33S
3926          .          .      DL33SE
              .          .          V
              .          .          V
3931          .          .      L33L34
              .          .          .
              .          .          .
3938          .          .          .        L34
              .          .          .          .
              .          .          .          .
3951          .          .          .          .-------->    RL34
3948          .          .          .     DL34RE
              .          .          .          .
              .          .          .          .
3955          .          .          .          .           .<-------   DL26S
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3954                                  DL26SE
                                          V
                                          V
3956                                  L26L34
                                          .
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3964                                          .<-------  DL271S
3963                                      DL271
                                              V
                                              V
3965                                      L27L34
                                              .
                                              .
3972                          CPL34.................................
                                  .
                                  .
3976                              .------->  DL341S
3974                          DL341
                                  .
                                  .
3981                              .------->  DL342S
3979                          DL342
                                  V
                                  V
3984                          L34D57
                                  .
                                  .
3991                                  D57
                                          .
                                          .
4004                                      .------->    RD57
4001                                  DD57RE
                                          .
                                          .
4008                                          .<-------  DL272S
4007                                      DL272
                                              V
                                              V
4009                                      L27D57
                                              .
                                              .
4017                                          .<-------  DD451S
4016                                      DD451
                                              V
                                              V
4018                                      D45D57
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4025                          CPD57.................................
                                  V
                                  V
4027                          D57D58
                                  .
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4034                                  D58
                                          .
                                          .
4047                                      .------->    RD58
4044                                  DD58RE
                                          .
                                          .
4051                                          .<-------  DD452S
4050                                      DD452
                                              V
                                              V
4052                                      D45D58
                                              .
                                              .
4060                                          .<-------  DD461S
4059                                      DD461
                                              V
                                              V
4061                                      D46D58
                                              .
                                              .
4070                                          .------->  SSPILL
4068                                      RMSBSN
                                              .
                                              .
4074                                          .           .<-------  SSPILL
4073                                          .       RMSBSN
                                              .           V
                                              .           V
4075                                          .        SRRMS
                                              .           .
                                              .           .
4083                                          .      CPRMS............
                                              .           V
                                              .           V
4085                                          .       RRMS
                                              .           .
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4091                          CPD58.................................
                                  .
                                  .
4095                              .------->  DD581S
4093                          DD581
                                  .
                                  .
4100                              .------->  DD582S
4098                          DD582
                                  V
                                  V
4103                          D58D59
                                  .
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4110                                  D59
                                          .
                                          .
4123                                      .------->    RD59
4120                                  DD59RE
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4127                                          .<-------  DD462S
4126                                      DD462
                                              V
                                              V
4128                                      D46D59
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4136                                                                  .<-------   DD47S
4135                                                            DD47SE
                                                                     V
                                                                     V
4137                                                            D47D59
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4144                                  CPD59.................................
                                                .
                                                .
4148                                            .------->   DD59S
4146                                  DD59SE
                                              V
                                              V
4151                                  D59D61
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4158                                            .        D61
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4171                                            .          .------->    RD61
4168                                            .     DD61RE
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4174                                  CPD61............
                                              V
                                              V
4176                                  D61D72
                                                .
                                                .
4183                                            .        L30
                                                .          .
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4194                                            .          .------->    RL30
4192                                            .     DL30RE
                                                .          V
                                                .          V
4197                                            .     L30L31
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4204                                            .          .        L31
                                                .          .          .
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4215                                            .          .          .------->    RL31
4213                                            .          .     DL31RE
                                                .          .          .
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4218                                            .      CPL31............
                                                .          V
                                                .          V
4220                                            .     L31L32
                                                .          .
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4227                                            .          .        L32
                                                .          .          .
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4239                                            .          .          .------->    RL32
4236                                            .          .     DL32RE
                                                .          .          .
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4242                                            .      CPL32............
                                                .          V
                                                .          V
4244                                            .     L32L38
                                                .          .
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4251                                            .          .        L28
                                                .          .          .
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4263                                            .          .          .------->    RL28
4260                                            .          .     DL28RE
                                                .          .          V
                                                .          .          V
4266                                            .          .     L28L29
                                                .          .          .
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4273                                            .          .          .        L29
                                                .          .          .          .
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4287                                            .          .          .          .------->    RL29
4284                                            .          .          .     DL29RE
                                                .          .          .          .
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4290                                            .          .      CPL29............
                                                .          .          .
                                                .          .          .
4294                                            .          .          .------->   DL29S
4292                                            .          .     DL29SE
                                                .          .          V
                                                .          .          V
4297                                            .          .     L29L36
                                                .          .          .
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4304                                            .          .          .        L35
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4316                                            .          .          .          .------->    RL35
4313                                            .          .          .     DL35RE
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4320                                            .          .          .          .          .<-------   DL29S
4319                                            .          .          .          .     DL29SE
                                                .          .          .          .          V
                                                .          .          .          .          V
4321                                            .          .          .          .     L29L35
                                                .          .          .          .          .
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4328                                            .          .          .      CPL35............
                                                .          .          .          V
                                                .          .          .          V
4330                                            .          .          .     L35L37
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4337                                            .          .          .          .        L37
                                                .          .          .          .          .
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4350                                            .          .          .          .          .------->    RL37
4347                                            .          .          .          .     DL37RE
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4353                                                                  L36
                                                                       .
4365                                                                   .-------> RL36
4363                                                            DL36RE
                                                                       .
4368                                  CPL36.................................
                                          V
                                          V
4370                                  L36L38
                                          .
                                          .
4377                                      .        L38
                                          .          .
4389                                      .          .-------> RL38
4386                                      .     DL38RE
                                          .          .
                                          .          .
4393                                      .          .        .<-------  DL33S
4392                                      .          .   DL33SE
                                          .          .        V
                                          .          .        V
4394                                      .          .   L33L38
                                          .          .        .
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4401                              CPL38.................................
                                      .
                                      .
4405                                  .-------> DL381S
4403                              DL381
                                      .
                                      .
4410                                  .-------> DL382S
4408                              DL382
                                      V
                                      V
4413                              L38L39
                                      .
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4420                                  .        L39
                                      .          .
4433                                  .          .-------> RL39
4430                                  .     DL39RE
                                      .          .
                                      .          .
4437                                  .          .        .<-------  DL341S
4436                                  .          .   DL341
                                      .          .        V
                                      .          .        V
4438                                  .          .   L34L39
                                      .          .        .
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4445                              CPL39......................
                                      .
                                      .
4449                                  .-------> DL391S
4447                              DL391
                                      .
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4454                                  .-------> DL392S
4452                              DL392
                                      V
                                      V
4457                              L39D68
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4464                                  .        D68
                                      .          .
4477                                  .          .-------> RD68
4474                                  .     DD68RE
                                      .          .
                                      .          .
4481                                  .          .        .<-------  DL342S
4480                                  .          .   DL342
                                      .          .        V
                                      .          .        V
4482                                  .          .   L34D68
                                      .          .        .
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4489                              CPD68......................
                                      .
                                      .
4493                                  .-------> DD681S
4491                              DD681
                                      .
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4498                                  .-------> DD682S
4496                              DD682
                                      V
                                      V
4501                              D68D69
                                      .
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4508                                  .        D69
                                      .          .
4520                                  .          .-------> RD69
4517                                  .     DD69RE
                                      .          .
                                      .          .
4524                                  .          .        .<-------  DD581S
4523                                  .          .   DD581
                                      .          .        V
                                      .          .        V
4525                                  .          .   D58D69
                                      .          .        .
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4532                              CPD69......................
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4536                                  .-------> DD691S
4534                              DD691
                                      .
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4541                                  .-------> DD692S
4539                              DD692
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                 .         .         .         V
                 .         .         .         V
4544             .         .         .     D69D70
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                 .         .         .         .
4551             .         .         .         .       D70A
                 .         .         .         .         .
                 .         .         .         .         .
4563             .         .         .         .         .-------->   RD70A
4560             .         .         .         .     DD70AR
                 .         .         .         .         .
                 .         .         .         .         .
4567             .         .         .         .         .          .<-------  DD582S
4566             .         .         .         .         .      DD582
                 .         .         .         .         .          V
                 .         .         .         .         .          V
4568             .         .         .         .         .     D5870A
                 .         .         .         .         .          .
                 .         .         .         .         .          .
4575             .         .         .         .     CPD70A............
                 .         .         .         .         V
                 .         .         .         .         V
4577             .         .         .         .     D70A70
                 .         .         .         .         .
                 .         .         .         .         .
4584             .         .         .         .         .        D70
                 .         .         .         .         .          .
                 .         .         .         .         .          .
4596             .         .         .         .         .          .-------->    RD70
4593             .         .         .         .         .     DD70RE
                 .         .         .         .         .          .
                 .         .         .         .         .          .
4599             .         .         .      CPD70........................
                 .         .         .         V
                 .         .         .         V
4601             .         .         .      SRD70
                 .         .         .         V
                 .         .         .         V
4609             .         .         .     D70D71
                 .         .         .         .
                 .         .         .         .
4617             .         .         .         .        D71
                 .         .         .         .         .
                 .         .         .         .         .
4629             .         .         .         .         .-------->    RD71
4626             .         .         .         .     DD71RE
                 .         .         .         .         .
                 .         .         .         .         .
4633             .         .         .         .         .          .<-------   DD59S
4632             .         .         .         .         .     DD59SE
                 .         .         .         .         .          V
                 .         .         .         .         .          V
4634             .         .         .         .         .     D59D71
                 .         .         .         .         .          .
                 .         .         .         .         .          .
4641             .         .         .      CPD71........................
                 .         .         .         V
                 .         .         .         V
4643             .         .         .     D71D72
                 .         .         .         .
                 .         .         .         .
4651             .         .         .         .        D72
                 .         .         .         .         .
                 .         .         .         .         .
4665             .         .         .         .         .-------->    RD72
4662             .         .         .         .     DD72RE
                 .         .         .         .         .
                 .         .         .         .         .
4668             .         .      CPD72........................
                 .         .         V
                 .         .         V
4670             .         .     D72D73
                 .         .         .
                 .         .         .
4678             .         .         .        D73
                 .         .         .         .
                 .         .         .         .
4690             .         .         .         .-------->    RD73
4687             .         .         .     DD73RE
                 .         .         .         .
                 .         .         .         .
4694             .         .         .         .          .<-------  DD621S
4693             .         .         .         .       DD621
                 .         .         .         .         V
                 .         .         .         .         V
4695             .         .         .         .     D62D73
                 .         .         .         .         .
                 .         .         .         .         .
4702             .         .      CPD73........................
                 .         .         V
                 .         .         V
4704             .         .     D73D78
                 .         .         .
                 .         .         .
4712             .         .         .        D78
                 .         .         .         .
                 .         .         .         .
4725             .         .         .         .-------->    RD78
4722             .         .         .     DD78RE
                 .         .         .         .
                 .         .         .         .
4729             .         .         .         .          .<-------  DD741S
4728             .         .         .         .       DD741
                 .         .         .         .         V
                 .         .         .         .         V
4730             .         .         .         .     D74D78
                 .         .         .         .         .
                 .         .         .         .         .
4737             .         .      CPD78........................
                 .         .         V
                 .         .         V
4739             .         .     D7879B
                 .         .         .
                 .         .         .
4747             .         .         .       D79B
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                 .         .         .         .
4760             .         .         .         .-------->   RD79B
4757             .         .         .     DD79BR
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4763          .      CPD79B.......................
              .           V
              .           V
4765          .      D79B80
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              .           .
4773          .           .         D80
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              .           .           .
4785          .           .           .-------->    RD80
4782          .           .      DD80RE
              .           .           .
              .           .           .
4788          .       CPD80............
              .           .
              .           .
4790          .           .         D52
              .           .           .
              .           .           .
4802          .           .           .-------->    RD52
4800          .           .      DD52RE
              .           .           V
              .           .           V
4805          .           .      D52D66
              .           .           .
              .           .           .
4813          .           .           .         D66
              .           .           .           .
              .           .           .           .
4825          .           .           .           .-------->    RD66
4822          .           .           .      DD66RE
              .           .           .           .
              .           .           .           .
4828          .           .       CPD66............
              .           .           V
              .           .           V
4830          .           .      D66D67
              .           .           .
              .           .           .
4837          .           .           .         D67
              .           .           .           .
              .           .           .           .
4850          .           .           .           .-------->    RD67
4847          .           .           .      DD67RE
              .           .           .           .
              .           .           .           .
4853          .           .       CPD67............
              .           .           .
              .           .           .
4855          .           .           .         D76
              .           .           .           .
              .           .           .           .
4868          .           .           .           .-------->    RD76
4865          .           .           .      DD76RE
              .           .           .           V
              .           .           .           V
4871          .           .           .      D76D77
              .           .           .           .
              .           .           .           .
4879          .           .           .           .         D77
              .           .           .           .           .
              .           .           .           .           .
4888          .           .           .       CPD77............
              .           .           .           .
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4890          .           .           .           .         B01
              .           .           .           .           .
              .           .           .           .           .
4900       DUMMY.............................................
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              .
4902          .         B03
              .           .
              .           .
4915          .           .-------->    RB03
4912          .      DB03RE
              .           V
              .           V
4918          .      B03B05
              .           .
              .           .
4924          .           .         B05
              .           .           .
              .           .           .
4937          .           .           .-------->    RB05
4934          .           .      DB05RE
              .           .           .
              .           .           .
4940          .       CPB05............
              .           V
              .           V
4942          .      B05B06
              .           .
              .           .
4949          .           .         B06
              .           .           .
              .           .           .
4961          .           .           .-------->    RB06
4958          .           .      DB06RE
              .           .           .
              .           .           .
4964          .       CPB06............
              .           V
              .           V
4966          .      B06B15
              .           .
              .           .
4973          .           .         B07
              .           .           .
              .           .           .
4988          .           .           .-------->    RB07
4983          .           .      DB07RE
              .           .           V
              .           .           V
4991          .           .      B07B09
              .           .           .
              .           .           .
4998          .           .           .         B08
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5011                                  .-------->    RB08
5008                          DB08RE
                                  V
                                  V
5014                          B08B09
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5021                                  .         B09
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5036                                  .           .-------->    RB09
5030                                  .      DB09RE
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5039                      CPB09........................
                              V
                              V
5041                      SRB11
                              V
                              V
5050                     B09B11
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5057                              .         B10
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5069                              .           .-------->    RB10
5066                          DB10RE
                                  V
                                  V
5072                          B1011A
                                  V
                                  V
5079                          B1011B
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5086                              .         B11
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5102                              .           .-------->    RB11
5096                              .      DB11RE
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5105                      CPB11........................
                              V
                              V
5107                     B11B12
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5114                              .         B12
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5126                              .           .-------->    RB12
5124                          DB12RE
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5129                      CPB12............
                              V
                              V
5131                     B12B14
                                  .
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5138                              .         B13
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5151                              .           .-------->    RB13
5148                          DB13RE
                                  V
                                  V
5154                          B13B14
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5161                              .         B14
                                  .           .
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5174                              .           .-------->    RB14
5170                              .      DB14RE
                                  .           .
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5177                      CPB14........................
                              V
                              V
5179                     B14B15
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5186                              .         B15
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5195                  CPB15........................
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5197                          B16
                                  .
                                  .
5208                              .-------->    RB16
5206                     DB16RE
                              V
                              V
5211                     B16B17
                                  .
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5218                              .         B17
                                  .           .
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5230                              .           .-------->    RB17
5228                          DB17RE
                                  .           .
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5233                      CPB17............
                              V
                              V
5235                     B17B18
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5242                              .         B18
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5256                              .           .-------->    RB18
5252                          DB18RE
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5259            .          .      CPB18...........
                .          .          V
                .          .          V
5261            .          .     B18B19
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5268            .          .          .        B19
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5277            .          .      CPB19...........
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5279            .          .          .        B20
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5288        DUMMY...................................
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5290            .        B21
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                .          .
5303            .          .-------->    RB21
5299            .     DB21RE
                .          V
                .          V
5306            .     B21B22
                .          .
                .          .
5313            .          .        B22
                .          .          .
                .          .          .
5325            .          .          .-------->    RB22
5322            .          .     DB22RE
                .          .          .
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5328            .      CPB22...........
                .          .
                .          .
5330            .          .        B23
                .          .          .
                .          .          .
5342            .          .          .-------->    RB23
5339            .          .     DB23RE
                .          .          V
                .          .          V
5345            .          .     B23B24
                .          .          .
                .          .          .
5352            .          .          .        B24
                .          .          .          .
                .          .          .          .
5366            .          .          .          .-------->    RB24
5361            .          .          .     DB24RE
                .          .          .          .
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5369            .          .      CPB24...........
                .          .          V
                .          .          V
5371            .          .     B24B25
                .          .          .
                .          .          .
5378            .          .          .        B25
                .          .          .          .
                .          .          .          .
5390            .          .          .          .-------->    RB25
5387            .          .          .     DB25RE
                .          .          .          .
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5393            .          .      CPB25...........
                .          .          .
                .          .          .
5395            .          .          .        B26
                .          .          .          .
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5408            .          .          .          .-------->    RB26
5404            .          .          .     DB26RE
                .          .          .          V
                .          .          .          V
5411            .          .          .     B26B27
                .          .          .          .
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5418            .          .          .          .        B27
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5427            .          .          .      CPB27...........
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5429        DUMMY...................................
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5431            .        B76
                .          .
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5442            .          .-------->    RB76
5440            .     DB76RE
                .          V
                .          V
5445            .     B7676A
                .          .
                .          .
5452            .          .        B75
                .          .          .
                .          .          .
5465            .          .          .-------->    RB75
5461            .          .     DB75RE
                .          .          V
                .          .          V
5468            .          .     B75A75
                .          .          .
                .          .          .
5475            .          .          .        B75A
                .          .          .          .
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5484            .          .     CPB75A...........
                .          .          V
                .          .          V
5486            .          .     B7576A
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5493                                  B76A
5502          CPB76A.......................
                 V
                 V
5504          B76B78
                 .
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5512                     B77
                 .         .
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5524             .         .-------->    RB77
5521             .     DB77RE
                 .         V
                 .         V
5527             .     B77B78
                 .         .
                 .         .
5534             .         .         B78
                 .         .           .
                 .         .           .
5547             .         .           .-------->    RB78
5543             .         .      DB78RE
                 .         .           .
                 .         .           .
5550             .     CPB78A............
                 .         .
                 .         .
5555             .         .-------->  RB78BN
5552             .     DB78BN
                 .         .
                 .         .
5558          CPB78B............
                 V
                 V
5560          B78B79
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5567                     B79
                 .         .
                 .         .
5581             .         .-------->    RB79
5577             .     DB79RE
                 .         .
                 .         .
5584           CPB79............
                 V
                 V
5586          B79B80
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5593                     B80
                 .         .
                 .         .
5604             .         .-------->    RB80
5602             .     DB80RE
                 .         .
                 .         .
5607           CPB80............
                 V
                 V
5609           SRB80
                 V
                 V
5617          B80B81
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5624                     B81
                 .         .
                 .         .
5635             .         .-------->    RB81
5633             .     DB81RE
                 .         .
                 .         .
5638           CPB81............
                 V
                 V
5640           SRB81
                 V
                 V
5648          B81B84
                 .
                 .
5656                     B82
                 .         .
                 .         .
5667             .         .-------->    RB82
5665             .     DB82RE
                 .         V
                 .         V
5670             .     B82B83
                 .         .
                 .         .
5677             .         .         B83
                 .         .           .
                 .         .           .
5688             .         .           .-------->    RB83
5686             .         .      DB83RE
                 .         .           .
                 .         .           .
5691             .       CPB83............
                 .         V
                 .         V
5693             .       SRB83
                 .         V
                 .         V
5701             .     B83B84
                 .         .
                 .         .
5708             .         .         B71
                 .         .           .
                 .         .           .
5722             .         .           .-------->    RB71
5718             .         .      DB71RE
                 .         .           V
                 .         .           V
5725             .         .      B71B72
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5732                B72
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5743                 .-------> RB72
5741            DB72RE
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5746          CPB72............
                  V
                  V
5748          B72B74
                     .
                     .
5755                B73
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5766                 .-------> RB73
5764            DB73RE
                     V
                     V
5769           SRB73
                     V
                     V
5777            B73B74
                     .
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5784                 .       B74
                     .         .
                     .         .
5795                 .         .-------> RB74
5793                 .     DB74RE
                     .         .
                     .         .
5798          CPB74......................
                  V
                  V
5800          SRB74
                  V
                  V
5808          B74B84
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5815                B84
                     .
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5826                 .-------> RB84
5824            DB84RE
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5829      CPB84...................................
              V
              V
5831      SRB84
              .
              .
5840          .       B28
              .         .
              .         .
5851          .         .-------> RB28
5849          .     DB28RE
              .         .
              .         .
5854          .         .       B29
              .         .         .
              .         .         .
5870          .         .         .-------> RB29
5864          .         .     DB29RE
              .         .         .
              .         .         .
5873          .         .         .       B30
              .         .         .         .
              .         .         .         .
5886          .         .         .         .-------> RB30
5882          .         .         .     DB30RE
              .         .         .         V
              .         .         .         V
5889          .         .         .      SRB30
              .         .         .         .
              .         .         .         .
5897          .         .         .         .       B31
              .         .         .         .         .
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5911          .         .         .         .         .-------> RB31
5906          .         .         .         .     DB31RE
              .         .         .         .         V
              .         .         .         .         V
5914          .         .         .         .      SRB31
              .         .         .         .         .
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5922          .         .         .      DUMMY............
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5924     DUMMY...............................................
              .
5926          .       B32
              .         .
              .         .
5944          .         .-------> RB32
5937          .     DB32RE
              .         V
              .         V
5947          .      SRB32
              .         V
              .         V
5955          .     B32B33
              .         .
              .         .
5962          .         .       B33
              .         .         .
              .         .         .
5974          .         .         .-------> RB33
5971          .         .     DB33RE
              .         .         .
              .         .         .
5977          .      CPB33............
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              .         .
5979          .         .       B34
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5991            .          .          .-------->    RB34
5988            .          .     DB34RE
                .          .          .
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5994            .          .          .        B38
                .          .          .          .
                .          .          .          .
6005            .          .          .          .-------->    RB38
6003            .          .          .     DB38RE
                .          .          .         V
                .          .          .         V
6008            .          .          .     B38B39
                .          .          .          .
                .          .          .          .
6015            .          .          .          .         B37
                .          .          .          .           .
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6027            .          .          .          .           .-------->    RB37
6024            .          .          .          .     DB37RE
                .          .          .          .         V
                .          .          .          .         V
6030            .          .          .          .     B37B39
                .          .          .          .           .
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6037            .          .          .          .           .         B39
                .          .          .          .           .           .
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6050            .          .          .          .           .           .-------->    RB39
6047            .          .          .          .           .     DB39RE
                .          .          .          .           .           .
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6053            .          .          .      CPB39.......................
                .          .          .         V
                .          .          .         V
6055            .          .          .      SRB39
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6063            .          .          .          .         B35
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6076            .          .          .          .           .-------->    RB35
6073            .          .          .          .     DB35RE
                .          .          .          .           .
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6079            .          .          .          .           .         B36
                .          .          .          .           .           .
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6092            .          .          .          .           .           .-------->    RB36
6089            .          .          .          .           .     DB36RE
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6095            .          .     DUMMY.................................
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6097       DUMMY........................
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6099            .         L41
                .          .
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6110            .          .-------->   DL41S
6108            .     DL41SE
                .          V
                .          V
6113            .     L41L42
                .          .
                .          .
6120            .          .         L42
                .          .          .
                .          .          .
6129            .      CPL42............
                .          .
                .          .
6133            .          .-------->  DL421S
6131            .      DL421
                .          .
                .          .
6138            .          .-------->  DL422S
6136            .      DL422
                .          V
                .          V
6141            .     L42L43
                .          .
                .          .
6149            .          .         L43
                .          .          .
                .          .          .
6161            .          .          .-------->    RL43
6158            .          .     DL43RE
                .          .          .
                .          .          .
6165            .          .          .          .<-------  DL381S
6164            .          .          .      DL381
                .          .          .         V
                .          .          .         V
6166            .          .          .     L38L43
                .          .          .          .
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6173            .      CPL43........................
                .          .
                .          .
6177            .          .-------->  DL431S
6175            .      DL431
                .          .
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6182            .          .-------->  DL432S
6180            .      DL432
                .          V
                .          V
6185            .     L43L44
                .          .
                .          .
6192            .          .         L44
                .          .          .
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6205            .          .          .-------->    RL44
6202            .          .     DL44RE
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6209                                  .<-------  DL382S
6208                            DL382
                                    V
                                    V
6210                            L38L44
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6218                                  .           .<-------  DL391S
6217                                  .       DL391
                                      .           V
                                      .           V
6219                                  .       L39L44
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                                      .           .
6226                CPL44.................................
                        .
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6230                    .------->  DL441S
6228                DL441
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6235                    .------->  DL442S
6233                DL442
                        V
                        V
6238                L44B40
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6245                    .         B40
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6259                    .           .------->    RB40
6256                    .      DB40RE
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6263                    .           .<-------  DL392S
6262                    .       DL392
                        .           V
                        .           V
6264                    .       L39B40
                        .           .
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6272                    .           .           .<-------  DD681S
6271                    .           .       DD681
                        .           .           V
                        .           .           V
6273                    .           .       D68B40
                        .           .           .
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6280                CPB40.................................
                        .
                        .
6284                    .------->  DB401S
6282                DB401
                        .
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6289                    .------->  DB402S
6287                DB402
                        V
                        V
6292                B40B41
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6299                    .         B41
                        .           .
                        .           .
6312                    .           .------->    RB41
6309                    .      DB41RE
                        .           .
                        .           .
6316                    .           .<-------  DD682S
6315                    .       DD682
                        .           V
                        .           V
6317                    .       D68B41
                        .           .
                        .           .
6325                    .           .           .<-------  DD691S
6324                    .           .       DD691
                        .           .           V
                        .           .           V
6326                    .           .       D69B41
                        .           .           .
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6333                CPB41.................................
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6337                    .------->   DB41S
6335                DB41SE
                        V
                        V
6340                B41B43
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6347                    .         B43
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                        .           .
6359                    .           .------->    RB43
6356                    .      DB43RE
                        .           .
                        .           .
6363                    .           .<-------  DD692S
6362                    .       DD692
                        .           V
                        .           V
6364                    .       D69B43
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6371                CPB43......................
                        V
                        V
6373                B43B45
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6380                    .         L40
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6393                    .           .------->    RL40
6390                    .      DL40RE
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                 .          .          V
                 .          .          V
6396             .          .     L40L45
                 .          .          .
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6403             .          .          .         L45
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                 .          .          .          .
6416             .          .          .          .-------->    RL45
6413             .          .          .     DL45RE
                 .          .          .          .
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6419             .          .      CPL45............
                 .          .          V
                 .          .          V
6421             .          .     L45L46
                 .          .          .
                 .          .          .
6428             .          .          .         L46
                 .          .          .          .
                 .          .          .          .
6438             .          .          .          .           .<-------   DL41S
6437             .          .          .          .      DL41SE
                 .          .          .          .           V
                 .          .          .          .           V
6439             .          .          .          .      L41L46
                 .          .          .          .           .
                 .          .          .          .           .
6446             .          .      CPL46........................
                 .          .          .
                 .          .          .
6450             .          .          .-------->  DL461S
6448             .          .      DL461
                 .          .          .
                 .          .          .
6455             .          .          .-------->  DL462S
6453             .          .      DL462
                 .          .          V
                 .          .          V
6458             .          .     L46L47
                 .          .          .
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6465             .          .          .         L47
                 .          .          .          .
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6477             .          .          .          .-------->    RL47
6474             .          .          .     DL47RE
                 .          .          .          .
                 .          .          .          .
6481             .          .          .          .           .<-------  DL421S
6480             .          .          .          .       DL421
                 .          .          .          .           V
                 .          .          .          .           V
6482             .          .          .          .      L42L47
                 .          .          .          .           .
                 .          .          .          .           .
6489             .          .      CPL47........................
                 .          .          .
                 .          .          .
6493             .          .          .-------->  DL471S
6491             .          .      DL471
                 .          .          .
                 .          .          .
6498             .          .          .-------->  DL472S
6496             .          .      DL472
                 .          .          V
                 .          .          V
6501             .          .     L47L48
                 .          .          .
                 .          .          .
6508             .          .          .         L48
                 .          .          .          .
                 .          .          .          .
6520             .          .          .          .-------->    RL48
6517             .          .          .     DL48RE
                 .          .          .          .
                 .          .          .          .
6524             .          .          .          .           .<-------  DL422S
6523             .          .          .          .       DL422
                 .          .          .          .           V
                 .          .          .          .           V
6525             .          .          .          .      L42L48
                 .          .          .          .           .
                 .          .          .          .           .
6533             .          .          .          .           .           .<-------  DL431S
6532             .          .          .          .           .       DL431
                 .          .          .          .           .           V
                 .          .          .          .           .           V
6534             .          .          .          .           .      L43L48
                 .          .          .          .           .           .
                 .          .          .          .           .           .
6541             .          .      CPL48.................................
                 .          .          .
                 .          .          .
6545             .          .          .-------->  DL481S
6543             .          .      DL481
                 .          .          .
                 .          .          .
6550             .          .          .-------->  DL482S
6548             .          .      DL482
                 .          .          V
                 .          .          V
6553             .          .     L48L49
                 .          .          .
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6560             .          .          .         L49
                 .          .          .          .
                 .          .          .          .
6573             .          .          .          .-------->    RL49
6570             .          .          .     DL49RE
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6577             .          .          .          .           .<-------  DL432S
6576             .          .          .          .       DL432
                 .          .          .          .           V
                 .          .          .          .           V
6578             .          .          .          .      L43L49
                 .          .          .          .           .
                 .          .          .          .           .
6586             .          .          .          .           .           .<-------  DL441S
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6585                                                  DL441
                                                        V
                                                        V
6587                                                  L44L49
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6594          CPL49.................................
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6598            .-------> DL491S
6596          DL491
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                .
6603            .-------> DL492S
6601          DL492
                V
                V
6606         L49B44
                .
                .
6613                B44
                      .
                      .
6626                  .------->   RB44
6623            DB44RE
                      .
                      .
6630                  .<-------  DL442S
6629                DL442
                        V
                        V
6631                L44B44
                      .
                      .
6639                  .<-------  DB401S
6638                DB401
                        V
                        V
6640                B40B44
                      .
                      .
6648          CPB44.................................
                .
                .
6652            .-------> DB441S
6650          DB441
                .
                .
6657            .-------> DB442S
6655          DB442
                V
                V
6660         B44B45
                .
                .
6667                B45
                      .
                      .
6679                  .------->   RB45
6676            DB45RE
                      .
                      .
6683                  .<-------  DB402S
6682                DB402
                        V
                        V
6684                B40B45
                      .
                      .
6692                  .<-------  DB41S
6691                DB41SE
                        V
                        V
6693                B41B45
                      .
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6700      CPB45.............................................
            V
            V
6702      B45B47
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6709          W21
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6722            .-------> RW21
6719          DW21RE
                V
                V
6725          W21L50
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6732            .       L50
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6745                  .------->   RL50
6742            DL50RE
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                      .
6748          CPL50............
                V
                V
6750          L50L51
                .
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6757            .       L51
                      .
                      .
6768                  .------->   RL51
6766            DL51RE
                      .
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6772                  .<-------  DL461S
6771                DL461
                        V
                        V
6773                L46L51
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6780          CPL51........................
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                 .          .          V
                 .          .          V
6782             .          .     L51L52
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6789             .          .          .        L52
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                 .          .          .          .
6800             .          .          .          .-------->    RL52
6798             .          .          .     DL52RE
                 .          .          .          .
                 .          .          .          .
6804             .          .          .          .          .<-------  DL462S
6803             .          .          .          .      DL462
                 .          .          .          .          V
                 .          .          .          .          V
6805             .          .          .          .     L46L52
                 .          .          .          .          .
                 .          .          .          .          .
6813             .          .          .          .          .          .<-------  DL471S
6812             .          .          .          .          .      DL471
                 .          .          .          .          .          V
                 .          .          .          .          .          V
6814             .          .          .          .          .     L47L52
                 .          .          .          .          .          .
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6821             .          .      CPL52.....................................
                 .          .          .
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6825             .          .          .-------->  DL521S
6823             .          .      DL521
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6830             .          .          .-------->  DL522S
6828             .          .      DL522
                 .          .          V
                 .          .          V
6833             .          .     L52L53
                 .          .          .
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6840             .          .          .        L53
                 .          .          .          .
                 .          .          .          .
6852             .          .          .          .-------->    RL53
6849             .          .          .     DL53RE
                 .          .          .          .
                 .          .          .          .
6856             .          .          .          .          .<-------  DL472S
6855             .          .          .          .      DL472
                 .          .          .          .          V
                 .          .          .          .          V
6857             .          .          .          .     L47L53
                 .          .          .          .          .
                 .          .          .          .          .
6865             .          .          .          .          .          .<-------  DL481S
6864             .          .          .          .          .      DL481
                 .          .          .          .          .          V
                 .          .          .          .          .          V
6866             .          .          .          .          .     L48L53
                 .          .          .          .          .          .
                 .          .          .          .          .          .
6873             .          .      CPL53.....................................
                 .          .          .
                 .          .          .
6877             .          .          .-------->  DL531S
6875             .          .      DL531
                 .          .          .
                 .          .          .
6882             .          .          .-------->  DL532S
6880             .          .      DL532
                 .          .          V
                 .          .          V
6885             .          .     L53L54
                 .          .          .
                 .          .          .
6892             .          .          .        L54
                 .          .          .          .
                 .          .          .          .
6905             .          .          .          .-------->    RL54
6902             .          .          .     DL54RE
                 .          .          .          .
                 .          .          .          .
6909             .          .          .          .          .<-------  DL482S
6908             .          .          .          .      DL482
                 .          .          .          .          V
                 .          .          .          .          V
6910             .          .          .          .     L48L54
                 .          .          .          .          .
                 .          .          .          .          .
6918             .          .          .          .          .          .<-------  DL491S
6917             .          .          .          .          .      DL491
                 .          .          .          .          .          V
                 .          .          .          .          .          V
6919             .          .          .          .          .     L49L54
                 .          .          .          .          .          .
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6926             .          .      CPL54.....................................
                 .          .          .
                 .          .          .
6930             .          .          .-------->  DL54S
6928             .          .     DL54SE
                 .          .          V
                 .          .          V
6933             .          .     L54B46
                 .          .          .
                 .          .          .
6940             .          .          .        B46
                 .          .          .          .
                 .          .          .          .
6953             .          .          .          .-------->    RB46
6950             .          .          .     DB46RE
                 .          .          .          .
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6957             .          .          .          .          .<-------  DL492S
6956             .          .          .          .      DL492
                 .          .          .          .          V
                 .          .          .          .          V
6958             .          .          .          .     L49B46
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6966                                                                  .<-------  DB441S
6965                                                            DB441
                                                                    V
                                                                    V
6967                                                            B44B46
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6974                                  CPB46.................................
                                          V
                                          V
6976                                  B46B47
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                                          .
6983                                          B47
                                              .
                                              .
6995                                          .------->    RB47
6992                                      DB47RE
                                              .
                                              .
6999                                          .                .<-------  DB442S
6998                                          .            DB442
                                              .                V
                                              .                V
7000                                          .            B44B47
                                              .                .
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7007                              CPB47.................................
                                      V
                                      V
7009                              B47B48
                                      .
                                      .
7017                                  B48
                                          .
                                          .
7029                                      .------->    RB48
7026                                  DB48RE
                                          .
                                          .
7032                              CPB48............
                                      V
                                      V
7034                              B48B54
                                      .
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7041                                  B42
                                          .
                                          .
7053                                      .------->    RB42
7050                                  DB42RE
                                          V
                                          V
7056                                  B42B53
                                          .
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7063                                          B53
                                              .
                                              .
7075                                          .------->    RB53
7072                                      DB53RE
                                              .
                                              .
7078                                  CPB53............
                                          V
                                          V
7080                                  B53B54
                                          .
                                          .
7087                                          B49
                                              V
                                              V
7096                                      B49B50
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                                              .
7103                                          .            B02
                                              .            .
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7114                                          .            .------->    RB02
7112                                          .        DB02RE
                                              .            .
                                              .            .
7117                                          .            .        B04
                                              .            .          .
                                              .            .          .
7131                                          .            .          .------->    RB04
7127                                          .            .      DB04RE
                                              .            .          V
                                              .            .          V
7134                                          .            .      B04B02
                                              .            .          .
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7140                                          .        CPB02............
                                              .            V
                                              .            V
7142                                          .        B02B50
                                              .            .
                                              .            .
7150                                          .            .        B50
                                              .            .          .
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7159                                      CPB50........................
                                              V
                                              V
7161                                      B50B52
                                              .
                                              .
7168                                          .            B51
                                              .              V
                                              .              V
7177                                          .        B51B52
                                              .            .
                                              .            .
7185                                          .            .        B52
                                              .            .          .
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7197                                          .            .          .------->    RB52
7194                                          .            .      DB52RE
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7200                                CPB52.......................
                                      V
                                      V
7202                              B52B54
                                      .
7209                                  .         B54
                                      .           .
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7221                                  .           .-------->    RB54
7219                                  .      DB54RE
                                      .           .
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7224                CPB54.................................
                      V
                      V
7227              B54B57
                      .
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7234                      L55
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                          .
7246                      .-------->    RL55
7243                  DL55RE
                          .
                          .
7251                      .-------->  DL551S
7249                   DL551
                          .
                          .
7256                      .-------->  DL552S
7254                   DL552
                          V
                          V
7259                  L55L56
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7267                      .        L56
                          .          .
                          .          .
7278                      .          .-------->    RL56
7276                      .      DL56RE
                          .          .
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7282                      .          .          .<-------  DL521S
7281                      .          .       DL521
                          .          .          V
                          .          .          V
7283                      .          .      L52L56
                          .          .          .
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7290                   CPL56........................
                          .
                          .
7294                      .-------->  DL561S
7292                   DL561
                          .
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7299                      .-------->  DL562S
7297                   DL562
                          V
                          V
7302                  L56L57
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7309                      .        L57
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7321                      .          .-------->    RL57
7318                      .      DL57RE
                          .          .
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7325                      .          .          .<-------  DL522S
7324                      .          .       DL522
                          .          .          V
                          .          .          V
7326                      .          .      L52L57
                          .          .          .
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7334                      .          .          .          .<-------  DL531S
7333                      .          .          .       DL531
                          .          .          .          V
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7335                      .          .          .      L53L57
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7342                   CPL57...................................
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                          .
7346                      .-------->  DL571S
7344                   DL571
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7351                      .-------->  DL572S
7349                   DL572
                          V
                          V
7354                  L57L58
                          .
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7361                      .        L58
                          .          .
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7373                      .          .-------->    RL58
7370                      .      DL58RE
                          .          .
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7377                      .          .          .<-------  DL532S
7376                      .          .       DL532
                          .          .          V
                          .          .          V
7378                      .          .      L53L58
                          .          .          .
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7386                      .          .          .          .<-------   DL54S
7385                      .          .          .      DL54SE
                          .          .          .          V
                          .          .          .          V
7387                      .          .          .      L54L58
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7394                CPL58.................................
                        .
7398                    .-------> DL581S
7396                DL581
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7403                    .-------> DL582S
7401                DL582
                        V
                        V
7406               L58B55
                        .
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7413                    .        B55
                        .          .
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7425                    .          .------->    RB55
7422                    .     DB55RE
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7428                CPB55............
                        V
                        V
7430               B55B56
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7437                    .        B56
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7448                    .          .------->    RB56
7446                    .     DB56RE
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7451                CPB56............
                        V
                        V
7453               B56B57
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7460                    .        B57
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7471                    .          .------->    RB57
7469                    .     DB57RE
                        .          .
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7474            CPB57........................
                    V
                    V
7476           B57B58
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7483                    .    B58
                        .      .
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7495                    .      .------->    RB58
7492                    .  DB58RE
                        .      .
                        .      .
7498            CPB58............
                    V
                    V
7500           B58B59
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7507                    .    B59
                        .      .
                        .      .
7522                    .      .-------->    RB59
7516                    .  DB59RE
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                        .      .
7525            CPB59............
                    V
                    V
7527           B59B65
                    .
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7534                    .    B61
                        .      .
                        .      .
7546                    .      .-------->    RB61
7544                    .  DB61RE
                        .      V
                        .      V
7549                    .  B61B62
                        .      .
                        .      .
7557                    .      .        B62
                        .      .          .
                        .      .          .
7569                    .      .          .-------->    RB62
7567                    .      .     DB62RE
                        .      .          .
                        .      .          .
7572                    .  CPB62............
                        .      V
                        .      V
7574                    .  B62B63
                        .      .
                        .      .
7581                    .      .        B63
                        .      .          .
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7593                    .      .          .-------->    RB63
7590                    .      .     DB63RE
                        .      .          .
                        .      .          .
7596                    .  CPB63............
                        .      V
                        .      V
7598                    .  SRB63
                        .      V
                        .      V
7606                    .  B63B65
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7613                    .      .        B64
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7627            .          .          .          .-------->    RB64
7622            .          .          .     DB64RE
                .          .          .          V
                .          .          .          V
7630            .          .          .     B64B65
                .          .          .          .
                .          .          .          .
7637            .          .          .          .        B65
                .          .          .          .          .
                .          .          .          .          .
7649            .          .          .          .          .-------->    RB65
7646            .          .          .          .     DB65RE
                .          .          .          .          .
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7652            .      CPB65.................................
                .          V
                .          V
7654            .     B65B66
                .          .
                .          .
7661            .          .        S01
                .          .          .
                .          .          .
7683            .          .          .-------->    RS01
7673            .          .     DS01RE
                .          .          .
                .          .          .
7688            .          .          .-------->  DS011S
7686            .          .      DS011
                .          .          .
                .          .          .
7693            .          .          .-------->  DS012S
7691            .          .      DS012
                .          .          V
                .          .          V
7696            .          .     S01B66
                .          .          .
                .          .          .
7703            .          .          .        B66
                .          .          .          .
                .          .          .          .
7720            .          .          .          .-------->    RB66
7714            .          .          .     DB66RE
                .          .          .          .
                .          .          .          .
7723            .      CPB66.......................
                .          V
                .          V
7725            .     B66B68
                .          .
                .          .
7734            .          .          .<--------  DS011S
7733            .          .      DS011
                .          .          V
                .          .          V
7735            .          .     S01S02
                .          .          .
                .          .          .
7743            .          .          .        S02
                .          .          .          .
                .          .          .          .
7759            .          .          .          .-------->    RS02
7754            .          .          .     DS02RE
                .          .          .          .
                .          .          .          .
7762            .          .      CPS02............
                .          .          .
                .          .          .
7766            .          .          .-------->  DS021S
7764            .          .      DS021
                .          .          .
                .          .          .
7771            .          .          .-------->  DS022S
7769            .          .      DS022
                .          .          V
                .          .          V
7774            .          .     S02B67
                .          .          .
                .          .          .
7782            .          .          .        B67
                .          .          .          .
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7796            .          .          .          .-------->    RB67
7792            .          .          .     DB67RE
                .          .          .          .
                .          .          .          .
7800            .          .          .          .          .<--------  DS012S
7799            .          .          .          .      DS012
                .          .          .          .          V
                .          .          .          .          V
7801            .          .          .          .     S01B67
                .          .          .          .          .
                .          .          .          .          .
7808            .          .      CPB67........................
                .          .          V
                .          .          V
7810            .          .     B67B68
                .          .          .
                .          .          .
7817            .          .          .        B68
                .          .          .          .
                .          .          .          .
7831            .          .          .          .-------->    RB68
7827            .          .          .     DB68RE
                .          .          .          .
                .          .          .          .
7834            .      CPB68........................
                .          V
                .          V
7836            .     B68B69
                .          .
                .          .
7843            .          .        B69
                .          .          .
                .          .          .
7855            .          .          .-------->    RB69
7852            .          .     DB69RE
                .          .          .
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7859          .          .          .          .<-------  DS022S
7858          .          .          .      DS022
              .          .          .          V
              .          .          .          V
7860          .          .          .     S02B69
              .          .          .          .
              .          .          .          .
7867          .     CPB69.......................
              .         V
              .         V
7869          .    B69B70
              .          .
              .          .
7876          .          .       B85
              .          .          .
              .          .          .
7890          .          .          .------->    RB85
7885          .          .     DB85RE
              .          .          V
              .          .          V
7893          .          .    B85B86
              .          .          .
              .          .          .
7900          .          .          .        B86
              .          .          .          .
              .          .          .          .
7911          .          .          .          .------->    RB86
7909          .          .          .     DB86RE
              .          .          .          .
              .          .          .          .
7914          .          .      CPB86............
              .          .          V
              .          .          V
7916          .          .    B86B89
              .          .          .
              .          .          .
7923          .          .          .        B87
              .          .          .          .
              .          .          .          .
7934          .          .          .          .------->    RB87
7932          .          .          .     DB87RE
              .          .          .          V
              .          .          .          V
7937          .          .          .     B87B88
              .          .          .          .
              .          .          .          .
7944          .          .          .          .        B88
              .          .          .          .          .
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7955          .          .          .          .          .------->    RB88
7953          .          .          .          .     DB88RE
              .          .          .          .          .
              .          .          .          .          .
7958          .          .          .      CPB88............
              .          .          .          V
              .          .          .          V
7960          .          .          .     B88B89
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              .          .          .          .
7967          .          .          .          .        B89
              .          .          .          .          .
              .          .          .          .          .
7981          .          .          .          .          .------->    RB89
7977          .          .          .          .     DB89RE
              .          .          .          .          .
              .          .          .          .          .
7984          .          .      CPB89........................
              .          .          V
              .          .          V
7986          .          .      SRB89
              .          .          .
              .          .          .
7996          .          .          .------->  DB89SD
7994          .          .     DB89SW
              .          .          V
              .          .          V
7999          .          .    B89B92
              .          .          .
              .          .          .
8006          .          .          .        B90
              .          .          .          .
              .          .          .          .
8019          .          .          .          .------->    RB90
8015          .          .          .     DB90RE
              .          .          .          V
              .          .          .          V
8022          .          .          .     B90B91
              .          .          .          .
              .          .          .          .
8031          .          .          .          .        B91
              .          .          .          .          .
              .          .          .          .          .
8046          .          .          .          .          .------->    RB91
8041          .          .          .          .     DB91RE
              .          .          .          .          .
              .          .          .          .          .
8049          .          .          .      CPB91............
              .          .          .          V
              .          .          .          V
8051          .          .          .     B91B92
              .          .          .          .
              .          .          .          .
8058          .          .          .          .        B92
              .          .          .          .          .
              .          .          .          .          .
8071          .          .          .          .          .------->    RB92
8068          .          .          .          .     DB92RE
              .          .          .          .          .
              .          .          .          .          .
8074          .          .          .      CPB92........................
              .          .          .          V
              .          .          .          V
8076          .          .          .     B92B70
              .          .          .          .
              .          .          .          .
8083          .          .          .          .        B70
              .          .          .          .          .
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8095          .          .          .          .          .------->    RB70
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8092          .           .           .      DB70RE
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              .           .           .           .
8098          .       CPB70.......................
              .           V
              .           V
8100          .      B70B93
              .           .
              .           .
8108          .           .         B93
              .           .           .
              .           .           .
8121          .           .           .------->    RB93
8117          .           .     DB93RE
              .           .           .
              .           .           .
8124          .       CPB93............
              .           V
              .           V
8126          .      B93B94
              .           .
              .           .
8134          .           .         B94
              .           .           .
              .           .           .
8147          .           .           .------->    RB94
8144          .           .     DB94RE
              .           .           .
              .           .           .
8150          .       CPB94............
              .           .
              .           .
8152          .           .         L63
              .           .           .
              .           .           .
8164          .           .           .------->    RL63
8161          .           .     DL63RE
              .           .           .
              .           .           .
8168          .           .           .           .<-------  DL572S
8167          .           .           .      DL572
              .           .           .          V
              .           .           .          V
8169          .           .           .     L57L63
              .           .           .           .
              .           .           .           .
8177          .           .           .           .           .<-------  DL581S
8176          .           .           .           .      DL581
              .           .           .           .          V
              .           .           .           .          V
8178          .           .           .           .     L58L63
              .           .           .           .           .
              .           .           .           .           .
8185          .           .      CPL63........................
              .           .           .
              .           .           .
8189          .           .           .------->   DL63S
8187          .           .     DL63SE
              .           .          V
              .           .          V
8192          .           .     L63B95
              .           .           .
              .           .           .
8199          .           .           .         B95
              .           .           .           .
              .           .           .           .
8211          .           .           .           .------->    RB95
8208          .           .           .     DB95RE
              .           .           .           .
              .           .           .           .
8215          .           .           .           .           .<-------  DL582S
8214          .           .           .           .      DL582
              .           .           .           .          V
              .           .           .           .          V
8216          .           .           .           .     L58B95
              .           .           .           .           .
              .           .           .           .           .
8223          .           .      CPB95........................
              .           .          V
              .           .          V
8225          .           .     B95B96
              .           .           .
              .           .           .
8232          .           .           .         B96
              .           .           .           .
              .           .           .           .
8244          .           .           .           .------->    RB96
8242          .           .           .     DB96RE
              .           .           .           .
              .           .           .           .
8247          .           .      CPB96............
              .           .          V
              .           .          V
8249          .           .     B96B97
              .           .           .
              .           .           .
8256          .           .           .         B97
              .           .           .           .
              .           .           .           .
8266          .           .      CPB97............
              .           .           .
              .           .           .
8270          .           .           .------->    RB97
8268          .           .     DB97RE
              .           .          V
              .           .          V
8273          .           .      SRB97
              .           .           .
              .           .           .
8283          .           .           .------->   DD97S
8281          .           .     DB97SE
              .           .          V
              .           .          V
8286          .           .     B97B99
              .           .           .
              .           .           .
8293          .           .           .         L60
              .           .           .           .
              .           .           .           .
8305          .           .           .           .------->    RL60
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8302                DL60RE
                       .
                       .
8309                   .<-------  DL552S
8308                DL552
                       V
                       V
8310                L55L60
                       .
                       .
8318                   .                .<-------  DL561S
8317                   .            DL561
                       .                V
                       .                V
8319                   .            L56L60
                       .                .
                       .                .
8326             CPL60.......................
                       .
                       .
8330                   .-------> DL601S
8328             DL601
                       .
                       .
8335                   .-------> DL602S
8333             DL602
                       V
                       V
8338             L60L61
                       .
                       .
8345                 L61
                       .
                       .
8357                   .------->    RL61
8354                DL61RE
                       .
                       .
8361                   .                .<-------  DL562S
8360                   .            DL562
                       .                V
                       .                V
8362                   .            L56L61
                       .                .
                       .                .
8369             CPL61.......................
                       .
                       .
8373                   .------->   DL61S
8371             DL61SE
                       V
                       V
8376             L61L62
                       .
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8383                 L62
                       .
                       .
8395                   .------->    RL62
8392                DL62RE
                       .
                       .
8399                   .                .<-------  DL571S
8398                   .            DL571
                       .                V
                       .                V
8400                   .            L57L62
                       .                .
                       .                .
8408             CPL62.......................
                       V
                       V
8410             L62L68
                       .
                       .
8418                 L64
                       .
                       .
8430                   .------->    RL64
8427                DL64RE
                       .
                       .
8434                   .                .<-------   DL63S
8433                   .            DL63SE
                       .                V
                       .                V
8435                   .            L63L64
                       .                .
                       .                .
8442                CPL64............
                       V
                       V
8444                L64L67
                       .
                       .
8451                   .              L67
                       .                .
                       .                .
8463                   .                .------->    RL67
8460                   .            DL67RE
                       .                .
                       .                .
8466                CPL67............
                       V
                       V
8468                L67L68
                       .
                       .
8476                   .                .<-------  DL602S
8475                   .            DL602
                       .                V
                       .                V
8477                   .            L60L68
                       .                .
                       .                .
8485                   .                .          .<-------   DL61S
8484                   .                .      DL61SE
                       .                .          V
                       .                .          V
8486                   .                .      L61L68
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8493                                                                              L68
                                                                                  .
8506                                                                              .-------->    RL68
8503                                                                          DL68RE
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8509                                                  CPL68.............................................
                                                          V
                                                          V
8511                                                  L68L72
                                                          .
                                                          .
8518                                                          L72
                                                              .
                                                              .
8530                                                          .-------->    RL72
8528                                                      DL72RE
                                                              .
                                                              .
8533                                                  CPL72............
                                                          .
                                                          .
8537                                                      .-------->   DL72S
8535                                                  DL72SE
                                                          V
                                                          V
8540                                                  L72B99
                                                          .
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8547                                                          B99
                                                              .
                                                              .
8559                                                          .-------->    RB99
8556                                                      DB99RE
                                                              .
                                                              .
8562                                          CPB99........................
                                                  V
                                                  V
8564                                          B99S11
                                                  .
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8572                                                  S11
                                                      .
                                                      .
8584                                                  .-------->    RS11
8581                                                  DS11RE
                                                      .
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8587                                          CPS11............
                                                  V
                                                  V
8589                                          SRS11
                                                  V
                                                  V
8597                                          S11S14
                                                  .
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8604                                                  S12
                                                      .
                                                      .
8616                                                  .-------->    RS12
8613                                                  DS12RE
                                                      .
                                                      .
8620                                                  .<--------   DL72S
8619                                                  DL72SE
                                                          V
                                                          V
8621                                                  L72S12
                                                      .
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8628                                                  CPS12............
                                                          V
                                                          V
8630                                                  SRS12
                                                          V
                                                          V
8638                                                  S12S13
                                                      .
                                                      .
8645                                                  .         S13
                                                      .           .
                                                      .           .
8657                                                  .           .-------->    RS13
8655                                                  .      DS13RE
                                                      .           .
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8660                                                  CPS13............
                                                      .
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8664                                                  .-------->   DS13S
8662                                                  DS13SE
                                                          V
                                                          V
8667                                                  S13S14
                                                      .
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8674                                                  .         S14
                                                      .           .
                                                      .           .
8690                                                  .           .-------->    RS14
8686                                                  .      DS14RE
                                                      .           .
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8693                                          CPS14........................
                                                  V
                                                  V
8695                                          S14S16
                                                  .
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8702                                                  B98
                                                      .
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8714                                                  .-------->    RB98
8712                                                  DB98RE
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                                  V
8717                          B98100
                                  .
                                  .
8724                                  B100
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                                      .
8736                                  .-------> RB100
8733                              DB100R
                                      .
                                      .
8740                                  .<------- DD97S
8739                                  .     DB97SE
                                      .        .
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8741                          CPB100.......................
                                  V
                                  V
8743                           B100S
                                  .
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8750                                   S15
                                      .
                                      .
8766                                  .-------> RS15
8762                              DS15RE
                                      .
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8769                           CPS15............
                                  V
                                  V
8771                          S15S16
                                  .
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8778                                   S16
                                      .
                                      .
8792                                  .-------> RS16
8788                              DS16RE
                                      .
                                      .
8795                     CPS16.......................
                             V
                             V
8797                     S16S18
                                  .
                                  .
8804                                   S17
                                      .
                                      .
8817                                  .-------> RS17
8814                           DS17RE
                                  V
                                  V
8820                           S17S18
                                  .
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8827                                   S18
                                      .
                                      .
8850                                  .-------> RS18
8841                              DS18RE
                                      .
                                      .
8853                     CPS18.......................
                             V
                             V
8855                     S18S21
                                  .
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8862                                   S19
                                      .
                                      .
8880                                  .-------> RS19
8873                           DS19RE
                                  .
                                  .
8884                                  .<------- DS13S
8883                              DS13SE
                                      V
                                      V
8885                              S13S19
                                      .
                                      .
8892                           CPS19............
                                  V
                                  V
8894                           S19S20
                                  .
                                  .
8901                                   S20
                                      .
                                      .
8916                                  .-------> RS20
8911                              DS20RE
                                      .
                                      .
8919                           CPS20............
                                  V
                                  V
8921                           S20S21
                                  .
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8928                                   S21
                                      .
                                      .
8940                                  .-------> RS21
8937                              DS21RE
                                      .
                                      .
8943                     CPS21.......................
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8947                              .-------> DS21S
8945                     DS21SE
                             V
                             V
8950                     S21S23
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8957                B101
                      .
8970                  .-------> RB101
8967            DB101R
                      V
                      V
8973            SRB101
                      V
                      V
8981             B101S
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                      .
8988                  .        S06
                      .          .
9009                  .          .-------> RS06
9000                  .     DS06RE
                      .          .
                      .          .
9012             CPS06............
                      V
                      V
9014            S06S07
                      .
                      .
9022                  .        S07
                      .          .
9036                  .          .-------> RS07
9032                  .     DS07RE
                      .          .
                      .          .
9039             CPS07............
                      V
                      V
9041            S07S08
                      .
                      .
9049                  .        S08
                      .          .
9064                  .          .-------> RS08
9061                  .     DS08RE
                      .          .
                      .          .
9067             CPS08............
                      V
                      V
9069            S08S09
                      .
                      .
9076                  .        S09
                      .          .
9094                  .          .-------> RS09
9086                  .     DS09RE
                      .          .
                      .          .
9097             CPS09............
                      V
                      V
9099             SRS09
                      .
                      .
9109                  .-------> DS091W
9107             DS091
                      .
                      .
9114                  .-------> DS092W
9112             DS092
                      V
                      V
9117            S09S23
                      .
                      .
9124                  .        S22
                      .          .
9138                  .          .-------> RS22
9134                  .     DS22RE
                      .          V
                      .          V
9141                  .     S22S23
                      .          .
                      .          .
9148                  .          .        S23
                      .          .          .
9163                  .          .          .-------> RS23
9159                  .          .     DS23RE
                      .          .          .
                      .          .          .
9166            CPS23.................................
                      V
                      V
9168            SRS23
                      V
                      V
9176           S23S24
                      .
                      .
9183                  .       S03
                      .         .
9204                  .         .-------> RS03
9196            DS03RE
                      .
                      .
9208                  .          .<------- DS021S
9207                  .      DS021
                      .          V
                      .          V
9209                  .     S02S03
                      .          .
                      .          .
9216             CPS03............
                      V
                      V
9218            S03S04
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9226            .         .         .         .        S04
                .         .         .         .         .
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9243            .         .         .         .         .-------->    RS04
9237            .         .         .         .     DS04RE
                .         .         .         .         .
                .         .         .         .         .
9246            .         .         .      CPS04............
                .         .         .         V
                .         .         .         V
9248            .         .         .      SRS04
                .         .         .         V
                .         .         .         V
9256            .         .         .     S04S10
                .         .         .         .
                .         .         .         .
9264            .         .         .         .<-------  DS091W
9263            .         .         .      DS091
                .         .         .         V
                .         .         .         V
9265            .         .         .     S09S10
                .         .         .         .
                .         .         .         .
9272            .         .         .         .        S05
                .         .         .         .         .
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9285            .         .         .         .         .-------->    RS05
9282            .         .         .         .     DS05RE
                .         .         .         .         V
                .         .         .         .         V
9288            .         .         .         .     S05S10
                .         .         .         .         .
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9295            .         .         .         .         .        S10
                .         .         .         .         .         .
                .         .         .         .         .         .
9308            .         .         .         .         .         .-------->    RS10
9305            .         .         .         .         .     DS10RE
                .         .         .         .         .         .
                .         .         .         .         .         .
9311            .         .         .      CPS10.................................
                .         .         .         V
                .         .         .         V
9313            .         .         .     S10S24
                .         .         .         .
                .         .         .         .
9321            .         .         .         .<-------  DS092W
9320            .         .         .      DS092
                .         .         .         V
                .         .         .         V
9322            .         .         .     S09S24
                .         .         .         .
                .         .         .         .
9329            .         .         .         .        S24
                .         .         .         .         .
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9342            .         .         .         .         .-------->    RS24
9339            .         .         .         .     DS24RE
                .         .         .         .         .
                .         .         .         .         .
9345            .         .      CPS24.................................
                .         .         V
                .         .         V
9347            .         .     S24S25
                .         .         .
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9354            .         .         .        S25
                .         .         .         .
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9366            .         .         .         .-------->    RS25
9363            .         .         .      DS25RE
                .         .         .         .
                .         .         .         .
9369            .         .      CPS25............
                .         .         .
                .         .         .
9371            .         .         .        S81
                .         .         .         .
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9383            .         .         .         .-------->    RS81
9380            .         .         .      DS81RE
                .         .         .         .
                .         .         .         .
9386            .         .         .         .        S82
                .         .         .         .         .
                .         .         .         .         .
9399            .         .         .         .         .-------->    RS82
9396            .         .         .         .     DS82RE
                .         .         .         .         V
                .         .         .         .         V
9402            .         .         .         .     S82S83
                .         .         .         .         .
                .         .         .         .         .
9409            .         .         .         .         .        S83
                .         .         .         .         .         .
                .         .         .         .         .         .
9422            .         .         .         .         .         .-------->    RS83
9419            .         .         .         .         .     DS83RE
                .         .         .         .         .         .
                .         .         .         .         .         .
9425            .         .         .         .      CPS83............
                .         .         .         .         .
                .         .         .         .         .
9427            .         .         .         .         .        S84
                .         .         .         .         .         .
                .         .         .         .         .         .
9439            .         .         .         .         .         .-------->    RS84
9436            .         .         .         .         .     DS84RE
                .         .         .         .         .         .
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9442            .         .      DUMMY.................................
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9444         DUMMY........................
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9446            .      W28
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9461       .          .------->    RW28
9455       .     DW28RE
           .          V
           .          V
9464       .     W28W29
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9472       .          .         W29
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9487       .          .           .------->    RW29
9481       .          .     DW29RE
           .          .           .
           .          .           .
9490       .      CPW29............
           .          V
           .          V
9492       .     W29W30
           .          .
           .          .
9499       .          .         W30
           .          .           .
           .          .           .
9511       .          .           .------->    RW30
9508       .          .     DW30RE
           .          .           .
           .          .           .
9514       .      CPW30............
           .          V
           .          V
9516       .     W30L59
           .          .
           .          .
9523       .          .         L59
           .          .           .
           .          .           .
9534       .          .           .------->    RL59
9532       .          .     DL59RE
           .          .           .
           .          .           .
9538       .          .           .           .<-------  DL551S
9537       .          .           .      DL551
           .          .           .          V
           .          .           .          V
9539       .          .           .     L55L59
           .          .           .          .
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9547       .      CPL59........................
           .          V
           .          V
9549       .     L59L65
           .          .
           .          .
9556       .          .         W31
           .          .           .
           .          .           .
9568       .          .           .------->    RW31
9565       .          .     DW31RE
           .          .           V
           .          .           V
9571       .          .     W31W32
           .          .           .
           .          .           .
9579       .          .           .         W32
           .          .           .           .
           .          .           .           .
9591       .          .           .           .------->    RW32
9588       .          .           .     DW32RE
           .          .           .           .
           .          .           .           .
9594       .          .      CPW32............
           .          .           .
           .          .           .
9598       .          .           .------->   DW32S
9596       .          .     DW32SE
           .          .           V
           .          .           V
9601       .          .     W32L65
           .          .           .
           .          .           .
9607       .          .           .         L65
           .          .           .           .
           .          .           .           .
9619       .          .           .           .------->    RL65
9616       .          .           .     DL65RE
           .          .           .           .
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9622       .      CPL65........................
           .          V
           .          V
9624       .     L65S34
           .          .
           .          .
9633       .          .           .<-------   DW32S
9632       .          .     DW32SE
           .          .           V
           .          .           V
9634       .          .     W32S34
           .          .           .
           .          .           .
9641       .          .           .         S34
           .          .           .           .
           .          .           .           .
9653       .          .           .           .------->    RS34
9650       .          .           .     DS34RE
           .          .           .           .
           .          .           .           .
9656       .      CPS34........................
           .          .
           .          .
9660       .          .------->   DS34S
9658       .     DS34SE
           .          V
           .          V
9663       .     S34S44
           .          .
           .          .
9670       .          .         L66
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9682                .-------->    RL66
9679          DL66RE
                    .
                    .
9686                .<-------  DL601S
9685                .      DL601
                    .          V
                    .          V
9687                .     L60L66
                    .          .
                    .          .
9694           CPL66............
                   V
                   V
9696          L66L71
                    .
                    .
9703                .        L71
                    .          .
                    .          .
9716                .          .-------->    RL71
9712                .     DL71RE
                    .          .
                    .          .
9719           CPL71............
                   V
                   V
9721          L71S35
                    .
                    .
9728                .        L69
                    .          V
                    .          V
9737                .      SRL69
                    .          V
                    .          V
9745                .     L69S35
                    .          .
                    .          .
9752                .          .        L70
                    .          .          V
                    .          .          V
9761                .          .      SRL70
                    .          .          V
                    .          .          V
9769                .          .     L70S35
                    .          .          .
                    .          .          .
9775                .          .          .        S35
                    .          .          .          .
                    .          .          .          .
9788                .          .          .          .-------->    RS35
9785                .          .          .     DS35RE
                    .          .          .          .
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9791           CPS35.................................
                   V
                   V
9793          S35S44
                    .
                    .
9799                .        S44
                    .          .
                    .          .
9811                .          .-------->    RS44
9808                .     DS44RE
                    .          .
                    .          .
9814       CPS44......................
               V
               V
9816       SRS44
               V
               V
9824      S44S45
               .
               .
9833                .<-------   DS34S
9832           DS34SE
                   V
                   V
9834          S34S45
                    .
                    .
9842                .        S45
                    .          .
                    .          .
9855                .          .-------->    RS45
9851                .     DS45RE
                    .          .
                    .          .
9858       CPS45......................
               V
               V
9860      S45S46
               .
               .
9868                .       S46
                    .          .
                    .          .
9882                .          .-------->    RS46
9877           DS46RE
                    .          .
                    .          .
9885       CPS46............
               V
               V
9887       SRS46
               V
               V
9895      S46S47
               .
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9902                .       S47
                    .          .
                    .          .
9914                .          .-------->    RS47
9911           DS47RE
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9917        .      CPS47............
            .          V
            .          V
9919        .     S47S48
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9927        .          .         S48
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            .          .           .
9939        .          .           .-------->    RS48
9936        .          .     DS48RE
            .          .           .
            .          .           .
9942        .      CPS48............
            .          .
            .          .
9946        .          .-------->   DS48S
9944        .      DS48S
            .          V
            .          V
9949        .     S48S50
            .          .
            .          .
9956        .          .         S49
            .          .           .
            .          .           .
9968        .          .           .-------->    RS49
9965        .          .     DS49RE
            .          .           V
            .          .           V
9971        .          .     S49S50
            .          .           .
            .          .           .
9978        .          .           .         S50
            .          .           .           .
            .          .           .           .
9990        .          .           .           .-------->    RS50
9987        .          .           .     DS50RE
            .          .           .           .
            .          .           .           .
9993        .      CPS50........................
            .          V
            .          V
9995        .      SRS50
            .          V
            .          V
10003       .     S50S51
            .          .
            .          .
10011       .          .         S36
            .          .           .
            .          .           .
10025       .          .           .-------->    RS36
10021       .          .     DS36RE
            .          .           V
            .          .           V
10028       .          .      SRS36
            .          .           V
            .          .           V
10036       .          .     S36S37
            .          .           .
            .          .           .
10043       .          .           .         S37
            .          .           .           .
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10055       .          .           .           .-------->    RS37
10052       .          .           .     DS37RE
            .          .           .           .
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10058       .          .      CPS37............
            .          .           V
            .          .           V
10060       .          .     S37S38
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10067       .          .           .         S38
            .          .           .           .
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10079       .          .           .           .-------->    RS38
10076       .          .           .     DS38RE
            .          .           .           .
            .          .           .           .
10082       .          .      CPS38............
            .          .           V
            .          .           V
10084       .          .     S38S39
            .          .           .
            .          .           .
10091       .          .           .         S39
            .          .           .           .
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10103       .          .           .           .-------->    RS39
10100       .          .           .     DS39RE
            .          .           .           .
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10106       .          .      CPS39............
            .          .           V
            .          .           V
10108       .          .     S39S43
            .          .           .
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10115       .          .           .         S40
            .          .           .           .
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10127       .          .           .           .-------->    RS40
10124       .          .           .     DS40RE
            .          .           .           V
            .          .           .           V
10130       .          .           .     S40S41
            .          .           .           .
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10137       .          .           .           .         S41
            .          .           .           .           .
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10150       .          .           .           .           .-------->    RS41
10147       .          .           .           .     DS41RE
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10153       .          .           .      CPS41............
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                 .         .         .         V
                 .         .         .         V
10155            .         .         .     S41S42
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10162            .         .         .         .        S42
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                 .         .         .         .         .
10174            .         .         .         .         .-------->   RS42
10171            .         .         .         .     DS42RE
                 .         .         .         .         .
                 .         .         .         .         .
10177            .         .         .      CPS42............
                 .         .         .         V
                 .         .         .         V
10179            .         .         .     S42S43
                 .         .         .         .
                 .         .         .         .
10186            .         .         .         .        S43
                 .         .         .         .         .
                 .         .         .         .         .
10198            .         .         .         .         .-------->   RS43
10195            .         .         .         .     DS43RE
                 .         .         .         .         .
                 .         .         .         .         .
10201            .         .      CPS43........................
                 .         .         V
                 .         .         V
10203            .         .      SRS43
                 .         .         V
                 .         .         V
10211            .         .     S43S51
                 .         .         .
                 .         .         .
10218            .         .         .        S28
                 .         .         .         .
                 .         .         .         .
10233            .         .         .         .-------->   RS28
10229            .         .         .     DS28RE
                 .         .         .         V
                 .         .         .         V
10236            .         .         .     S28S29
                 .         .         .         .
                 .         .         .         .
10243            .         .         .         .        S29
                 .         .         .         .         .
                 .         .         .         .         .
10255            .         .         .         .         .-------->   RS29
10252            .         .         .         .     DS29RE
                 .         .         .         .         .
                 .         .         .         .         .
10258            .         .         .      CPS29............
                 .         .         .         V
                 .         .         .         V
10260            .         .         .     S29S30
                 .         .         .         .
                 .         .         .         .
10268            .         .         .         .        S30
                 .         .         .         .         .
                 .         .         .         .         .
10280            .         .         .         .         .-------->   RS30
10277            .         .         .         .     DS30RE
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                 .         .         .         .         .
10283            .         .         .      CPS30............
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                 .         .         .         V
10285            .         .         .     S30S32
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10292            .         .         .         .        S31
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10304            .         .         .         .         .-------->   RS31
10301            .         .         .         .     DS31RE
                 .         .         .         .         V
                 .         .         .         .         V
10307            .         .         .         .     S31S32
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10314            .         .         .         .         .        S32
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10327            .         .         .         .         .         .-------->   RS32
10324            .         .         .         .         .     DS32RE
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10330            .         .         .      CPS32........................
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10332            .         .         .         .        S26
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10343            .         .         .         .         .-------->   RS26
10341            .         .         .         .     DS26RE
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10347            .         .         .         .         .         .<-------   DS21S
10346            .         .         .         .         .     DS21SE
                 .         .         .         .         .         V
                 .         .         .         .         .         V
10348            .         .         .         .         .     S21S26
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10356            .         .         .         .      CPS26............
                 .         .         .         .         .
                 .         .         .         .         .
10360            .         .         .         .         .-------->   DS26S
10358            .         .         .         .     DS26SE
                 .         .         .         .         V
                 .         .         .         .         V
10363            .         .         .         .     S26S27
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10371            .         .         .         .         .        S27
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                 .         .         .         .         .         .
10384            .         .         .         .         .         .-------->   RS27
10381            .         .         .         .         .     DS27RE
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10387          .           .           .           .       CPS27............
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10389          .           .           .     CP3227............
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               .           .           .           V
10391          .           .           .     SR3227
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               .           .           .           V
10399          .           .           .     S32S33
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10406          .           .           .           .        S33
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10419          .           .           .           .           .-------->    RS33
10416          .           .           .           .      DS33RE
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10423          .           .           .           .           .           .<-------   DS26S
10422          .           .           .           .           .      DS26SE
               .           .           .           .           .           V
               .           .           .           .           .           V
10424          .           .           .           .           .      S26S33
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10432          .           .           .      CPS33.......................
               .           .           .           V
               .           .           .           V
10434          .           .           .     S33S51
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               .           .           .           .
10441          .           .           .           .        S51
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10453          .           .           .           .           .-------->    RS51
10450          .           .           .           .      DS51RE
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10456          .       CPS51...................................
               .           V
               .           V
10458          .       SRS51
               .           V
               .           V
10466          .      S51S54
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               .           .
10473          .           .        S52
               .           .           .
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10486          .           .           .-------->    RS52
10483          .           .     DS52RE
               .           .           V
               .           .           V
10489          .           .     S52S54
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10497          .           .           .        S54
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10509          .           .           .           .-------->    RS54
10506          .           .           .     DS54RE
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10512          .       CPS54........................
               .           V
               .           V
10514          .      S54S55
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10521          .           .        S53
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10533          .           .           .-------->    RS53
10530          .           .     DS53RE
               .           .           V
               .           .           V
10536          .           .     S53S55
               .           .           .
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10543          .           .           .        S55
               .           .           .           .
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10555          .           .           .           .-------->    RS55
10552          .           .           .     DS55RE
               .           .           .           .
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10558          .       CPS55........................
               .           V
               .           V
10560          .      S55S74
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10567          .           .        W59
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               .           .           .
10580          .           .           .-------->    RW59
10577          .           .     DW59RE
               .           .           V
               .           .           V
10583          .           .     W59W60
               .           .           .
               .           .           .
10591          .           .           .        W61
               .           .           .           .
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10602          .           .           .           .-------->    RW61
10599          .           .           .     DW61RE
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10607          .           .           .           .-------->    DW61S
10605          .           .           .     DW61SE
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10610          .           .           .           .        W60
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10623          .           .           .           .           .-------->    RW60
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10620                                                  DW60RE
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10626                  CPW60......................
                           V
                           V
10628                  SRW60
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                           V
10636                W60S61
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10644                      .        S61
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10656                      .          .-------->    RS61
10653                      .     DS61RE
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10659                  CPS61............
                           V
                           V
10661                S61S62
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10669                      .        S62
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10681                      .          .-------->    RS62
10678                      .     DS62RE
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10684                  CPS62............
                           V
                           V
10686                S62S64
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10694                      .        S63
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10706                      .          .-------->    RS63
10703                      .     DS63RE
                           .          V
                           .          V
10709                      .     S63S64
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10717                      .          .        S64
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10729                      .          .          .-------->    RS64
10726                      .          .     DS64RE
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10732                  CPS64......................
                           V
                           V
10734                S64S67
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10742                      .        S67
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10754                      .          .-------->    RS67
10751                      .     DS67RE
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10757                  CPS67............
                           V
                           V
10759                  SRS67
                           V
                           V
10767                S67S68
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10774                      .        S68
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10786                      .          .-------->    RS68
10783                      .     DS68RE
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10789                  CPS68............
                           V
                           V
10791                S68S69
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10798                      .        S69
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10810                      .          .-------->    RS69
10807                      .     DS69RE
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10813                  CPS69............
                           V
                           V
10815                S69S70
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10822                      .        S70
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10835                      .          .-------->    RS70
10832                      .     DS70RE
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10838                  CPS70............
                           V
                           V
10840                S70S71
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10848                      .        S71
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10861                      .          .-------->    RS71
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10858                                   DS71RE
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10864                                CPS71............
                                        V
                                        V
10866                                SRS71
                                          .
                                          .-------->   DS71W
10876
10874                               DS71SW
                                        V
                                        V
10879                               S71S74
                                          .
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10886                                     S56
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                                          .-------->    RS56
10898
10895                                DS56RE
                                          V
                                          V
10901                                S56S57
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10908                                          S57
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                                                .-------->    RS57
10920
10917                                       DS57RE
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10923                                 CPS57............
                                          V
                                          V
10925                                S57S58
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                                                .<--------   DS48S
10933
10932                                     DS48S
                                                V
                                                V
10934                                     S48S58
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10941                                           .         S58
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                                                .           .-------->    RS58
10953
10950                                           .      DS58RE
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10956                                 CPS58........................
                                          V
                                          V
10958                                 SRS58
                                          V
                                          V
10966                                S58S59
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10973                                          S59
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                                                .-------->    RS59
10986
10983                                       DS59RE
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10989                                 CPS59............
                                          V
                                          V
10991                                 SRS59
                                          V
                                          V
10999                                S59S74
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11006                                          S72
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                                                .-------->    RS72
11018
11015                                       DS72RE
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                                                V
11021                                       S72S73
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11028                                           .         S73
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                                                .           .-------->    RS73
11040
11037                                           .      DS73RE
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11043                                     CPS73............
                                                V
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11045                                       S73S74
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11052                                           .         S74
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                                                .           .-------->    RS74
11064
11061                                           .      DS74RE
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11067                          CPS74.............................................
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11071                              .-------->  DS741W
11069                          DS741
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11076                              .-------->  DS742W
11074                          DS742
                                   V
                                   V
11079                         S74S79
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11087               .          .<-------   DW61S
11086               .      DW61SE
                    .          V
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11088               .      W61S65
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11096               .          .        S65
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11108               .          .          .------->    RS65
11105               .          .     DS65RE
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11111               .       CPS65............
                    .          V
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11113               .      S65S66
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11121               .          .        S66
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11134               .          .          .------->    RS66
11130               .          .     DS66RE
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11137               .       CPS66............
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11139               .       SRS66
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11147               .      S66S75
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11154               .          .        S75
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11166               .          .          .------->    RS75
11163               .          .     DS75RE
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11169               .       CPS75............
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11171               .      S75S76
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11178               .          .        S76
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11190               .          .          .------->    RS76
11187               .          .     DS76RE
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11193               .       CPS76............
                    .          V
                    .          V
11195               .      S76S77
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11203               .          .        S77
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11215               .          .          .------->    RS77
11212               .          .     DS77RE
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11218               .       CPS77............
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                    .          V
11220               .       SRS77
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11228               .      S77S78
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11235               .          .        S78
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11248               .          .          .------->    RS78
11245               .          .     DS78RE
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11252               .          .          .          .<-------   DS71W
11251               .          .          .     DS71SW
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11253               .          .          .     S71S78
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11260               .       CPS78........................
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11262               .       SRS78
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11270               .      S78S79
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11277               .          .        S79
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11289               .          .          .------->    RS79
11286               .          .     DS79RE
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11292               .     CPS79........................
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11294               .    S79S80
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11303               .        .       S92
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11315               .        .         .------->    RS92
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11312          .          .      DS92RE
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11319          .          .          .          .<-------  DS741W
11318          .          .          .      DS741
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11320          .          .          .     S74S92
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11327          .          .      CPS92............
               .          .          V
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11329          .          .      S92S80
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11337          .          .          .          .<-------  DS742W
11336          .          .          .      DS742
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11338          .          .          .     S74S80
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11345          .          .          .          .         S80
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11358          .          .          .          .           .------->    RS80
11355          .          .          .          .     DS80RE
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11361          .      CPS80...................................
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11363          .          .        S89
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11376          .          .          .------->    RS89
11373          .          .      DS89RE
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11379          .          .          .        S90
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11391          .          .          .          .------->    RS90
11388          .          .          .     DS90RE
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11394          .          .          .     S90S91
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11401          .          .          .          .         S91
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11414          .          .          .          .           .------->    RS91
11411          .          .          .          .     DS91RE
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11417          .          .          .      CPS91............
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11419          .          .          .          .         S88
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11431          .          .          .          .           .------->    RS88
11428          .          .          .          .     DS88RE
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11434          .          .          .          .           .         S87
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11446          .          .          .          .           .           .------->    RS87
11443          .          .          .          .           .     DS87RE
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11449          .          .          .          .           .           .         S86
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11461          .          .          .          .           .           .           .------->    RS86
11458          .          .          .          .           .           .     DS86RE
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11464          .          .          .          .           .           .           .         S85
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11476          .          .          .          .           .           .           .           .------->    RS85
11473          .          .          .          .           .           .           .     DS85RE
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11479          .          .          .      DUMMY...............................................
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11481      DUMMY...................................
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	N07	866.	12.25	113.	37.	12.	.57		
+	DIVERSION TO	RN07	866.	12.25	102.	28.	9.	.57		
+	HYDROGRAPH AT	DN07RE	97.	12.92	27.	9.	3.	.57		
+	DIVERSION TO	DN07AS	43.	12.92	9.	2.	1.	.57		
+	HYDROGRAPH AT	DN07A	55.	12.92	18.	7.	2.	.57		
+	DIVERSION TO	DN07BS	21.	12.92	3.	1.	0.	.57		
	HYDROGRAPH AT									

+	DN07B	34.	12.92	15.	6.	2.	.57
+ DIVERSION TO	DN07CS	0.	.00	0.	0.	0.	.57
+ HYDROGRAPH AT	DN07C	34.	12.92	15.	6.	2.	.57
+ DIVERSION TO	DN07DS	34.	12.92	15.	6.	2.	.57
+ HYDROGRAPH AT	DN07D	0.	.00	0.	0.	0.	.57
+ ROUTED TO	N07N06	0.	.00	0.	0.	0.	.57
+ HYDROGRAPH AT	N01	619.	12.17	61.	20.	7.	.34
+ DIVERSION TO	RN01	619.	12.17	51.	14.	5.	.34
+ HYDROGRAPH AT	DN01RE	156.	12.42	18.	6.	2.	.34
+ HYDROGRAPH AT	N02A	99.	12.33	12.	4.	1.	.08
+ DIVERSION TO	RN02A	99.	12.33	12.	4.	1.	.08
+ HYDROGRAPH AT	DN02AR	0.	.00	0.	0.	0.	.08
+ ROUTED TO	N2AN01	0.	.00	0.	0.	0.	.08
+ 2 COMBINED AT	CPN01	156.	12.42	18.	6.	2.	.43
+ ROUTED TO	N01N02	74.	12.58	18.	6.	2.	.43
+ HYDROGRAPH AT	N02	743.	12.25	67.	20.	7.	.51
+ DIVERSION TO	RN02	743.	12.25	67.	19.	6.	.51
+ HYDROGRAPH AT	DN02RE	3.	23.25	1.	0.	0.	.51
+ HYDROGRAPH AT	N03A	88.	12.25	8.	2.	1.	.06
+ DIVERSION TO	RN03A	88.	12.25	8.	2.	1.	.06
+ HYDROGRAPH AT	DN03AR	6.	12.75	1.	0.	0.	.06
+ ROUTED TO	N3AN02	3.	13.75	1.	0.	0.	.06
+ 3 COMBINED AT	CPN02	72.	12.58	19.	6.	2.	1.00
+ ROUTED TO	N02N3B	51.	13.25	18.	6.	2.	1.00
+ HYDROGRAPH AT	N03B	451.	12.17	41.	13.	4.	.28
+ DIVERSION TO	RN03B	227.	12.00	14.	4.	1.	.28
+ HYDROGRAPH AT	DN3BRE	451.	12.17	32.	9.	3.	.28
+ 2 COMBINED AT	CPN03B	449.	12.17	48.	15.	5.	1.29
+ ROUTED TO	N3BN04	211.	12.83	44.	15.	5.	1.29
+ HYDROGRAPH AT	N04	1067.	12.42	141.	42.	14.	.99
+ HYDROGRAPH AT	N03	518.	12.25	49.	15.	5.	.36
+ DIVERSION TO	RN03	274.	12.08	17.	5.	2.	.36
+ HYDROGRAPH AT	DN03RE	518.	12.25	36.	10.	3.	.36
+ ROUTED TO	N03N04	238.	12.83	35.	10.	3.	.36
+ HYDROGRAPH AT	N04A	323.	12.17	29.	9.	3.	.20
+ DIVERSION TO	RN04A	323.	12.17	29.	8.	3.	.20
+ HYDROGRAPH AT	DN04AR	4.	15.17	2.	1.	0.	.20
+ ROUTED TO	N4AN04	3.	17.67	2.	1.	0.	.20
+ HYDROGRAPH AT	N04B	258.	12.08	19.	6.	2.	.13
+ DIVERSION TO	RN04B	258.	12.08	18.	5.	2.	.13
HYDROGRAPH AT							

+	DN04BR	5.	13.58	2.	1.	0.	.13
+ ROUTED TO	N4BN04	4.	15.42	2.	1.	0.	.13
+ 5 COMBINED AT	CPN04	1067.	12.42	214.	67.	23.	2.97
+ DIVERSION TO	RN04	1065.	12.42	184.	48.	16.	2.97
+ HYDROGRAPH AT	DN04RE	121.	13.83	54.	20.	7.	2.97
+ ROUTED TO	N04N05	106.	14.67	52.	20.	7.	2.97
+ HYDROGRAPH AT	N05	1065.	12.50	157.	46.	16.	1.00
+ DIVERSION TO	RN05	226.	12.00	25.	8.	3.	1.00
+ HYDROGRAPH AT	DN05RE	1065.	12.50	145.	39.	13.	1.00
+ HYDROGRAPH AT	DN07A	43.	12.92	9.	2.	1.	.57
+ ROUTED TO	N7AN05	24.	14.00	8.	2.	1.	.57
+ HYDROGRAPH AT	DN07B	21.	12.92	3.	1.	0.	.57
+ ROUTED TO	N7BN05	11.	14.67	3.	1.	0.	.57
+ HYDROGRAPH AT	DN07C	0.	.00	0.	0.	0.	.57
+ ROUTED TO	N7CN05	0.	.00	0.	0.	0.	.57
+ 5 COMBINED AT	CPN05	1065.	12.50	195.	62.	21.	4.53
+ ROUTED TO	N05N06	981.	12.67	190.	61.	20.	4.53
+ HYDROGRAPH AT	N06	267.	12.33	29.	9.	3.	.22
+ DIVERSION TO	RN06	267.	12.33	27.	7.	2.	.22
+ HYDROGRAPH AT	DN06RE	18.	13.00	5.	2.	1.	.22
+ 3 COMBINED AT	CPN06	981.	12.67	194.	62.	21.	4.75
+ HYDROGRAPH AT	N08	1557.	12.67	259.	77.	26.	1.72
+ HYDROGRAPH AT	N10	692.	12.33	83.	25.	8.	.64
+ ROUTED TO	N10N11	556.	12.75	82.	25.	8.	.64
+ HYDROGRAPH AT	N11	844.	12.33	96.	29.	10.	.70
+ 2 COMBINED AT	CPN11	962.	12.42	177.	53.	18.	1.34
+ ROUTED TO	N11N09	898.	12.67	177.	53.	18.	1.34
+ HYDROGRAPH AT	N09	880.	12.50	128.	39.	13.	.88
+ HYDROGRAPH AT	N14	708.	12.25	66.	19.	6.	.51
+ DIVERSION TO	RN14	708.	12.25	66.	19.	6.	.51
+ HYDROGRAPH AT	DN14RE	0.	.00	0.	0.	0.	.51
+ 3 COMBINED AT	CPN09	1689.	12.58	303.	91.	31.	2.72
+ ROUTED TO	N09N18	1674.	12.58	303.	91.	31.	2.72
+ HYDROGRAPH AT	N18	682.	12.25	71.	22.	7.	.44
+ 2 COMBINED AT	CPN18	1797.	12.58	373.	113.	38.	3.16
+ ROUTED TO	N18N15	1732.	12.67	373.	113.	38.	3.16
+ HYDROGRAPH AT	N12	835.	12.58	138.	40.	13.	.78
+ ROUTED TO	N12N13	833.	12.58	138.	40.	13.	.78
+ HYDROGRAPH AT	N13	701.	12.58	123.	38.	13.	.72
+ 2 COMBINED AT	CPN13	1531.	12.58	260.	78.	26.	1.51
ROUTED TO							

+	N13N15	1459.	12.75	260.	78.	26.	1.51
+ HYDROGRAPH AT	N16	481.	12.17	50.	16.	5.	.28
+ DIVERSION TO	RN16	392.	12.08	25.	7.	2.	.28
+ HYDROGRAPH AT	DN16RE	459.	12.25	32.	9.	3.	.28
+ ROUTED TO	N16N15	391.	12.33	32.	9.	3.	.28
+ HYDROGRAPH AT	N15	1027.	12.33	137.	43.	14.	.85
+ 4 COMBINED AT	CPN15	3744.	12.58	791.	240.	81.	5.81
+ ROUTED TO	N15N17	3735.	12.58	791.	240.	81.	5.81
+ HYDROGRAPH AT	N17	1298.	12.50	190.	57.	19.	1.29
+ 2 COMBINED AT	CPN17	4903.	12.58	968.	294.	99.	7.10
+ HYDROGRAPH AT	N20	172.	12.08	16.	5.	2.	.09
+ DIVERSION TO	RN20	10.	11.58	3.	1.	0.	.09
+ HYDROGRAPH AT	DN20RE	172.	12.08	15.	4.	1.	.09
+ ROUTED TO	N20N21	107.	12.42	14.	4.	1.	.09
+ HYDROGRAPH AT	N21	324.	12.25	33.	10.	3.	.19
+ DIVERSION TO	RN21	2.	1.08	0.	0.	0.	.19
+ HYDROGRAPH AT	DN21RE	324.	12.25	33.	10.	3.	.19
+ 2 COMBINED AT	CPN21	366.	12.25	47.	14.	5.	.28
+ DIVERSION TO	DN21S	136.	12.25	17.	5.	2.	.28
+ HYDROGRAPH AT	DN21SE	230.	12.25	29.	9.	3.	.28
+ ROUTED TO	N21N25	177.	12.67	29.	9.	3.	.28
+ HYDROGRAPH AT	N22	203.	12.17	17.	5.	2.	.11
+ HYDROGRAPH AT	DN21SE	136.	12.25	17.	5.	2.	.28
+ ROUTED TO	N21N22	131.	12.33	17.	5.	2.	.28
+ 2 COMBINED AT	CPN22	307.	12.17	34.	10.	3.	.39
+ ROUTED TO	N22N25	232.	12.50	34.	10.	3.	.39
+ HYDROGRAPH AT	N25	766.	12.25	93.	31.	10.	.49
+ DIVERSION TO	RN25	376.	12.00	38.	12.	4.	.49
+ HYDROGRAPH AT	DN25RE	766.	12.25	70.	20.	7.	.49
+ 3 COMBINED AT	CPN25	911.	12.33	133.	39.	13.	.88
+ ROUTED TO	N25N26	862.	12.42	132.	39.	13.	.88
+ HYDROGRAPH AT	N26	320.	12.33	43.	14.	5.	.26
+ DIVERSION TO	RN26	320.	12.33	43.	13.	4.	.26
+ HYDROGRAPH AT	DN26RE	6.	17.58	4.	1.	0.	.26
+ 2 COMBINED AT	CPN26	862.	12.42	133.	40.	13.	1.14
+ HYDROGRAPH AT	N19	372.	12.08	35.	11.	4.	.18
+ HYDROGRAPH AT	N23	833.	12.25	90.	29.	10.	.52
+ DIVERSION TO	RN23	31.	11.00	14.	5.	2.	.52
+ HYDROGRAPH AT	DN23RE	833.	12.25	88.	24.	8.	.52
+ ROUTED TO	N23N24	627.	12.33	86.	24.	8.	.52
HYDROGRAPH AT							

+		N24	397.	12.17	38.	12.	4.	.25
	DIVERSION TO							
+		RN24	388.	12.17	22.	6.	2.	.25
	HYDROGRAPH AT							
+		DN24RE	362.	12.25	20.	6.	2.	.25
	2 COMBINED AT							
+		CPN24	911.	12.25	105.	30.	10.	.77
	HYDROGRAPH AT							
+		N27	177.	12.17	17.	6.	2.	.13
	DIVERSION TO							
+		RN27	177.	12.17	17.	6.	2.	.13
	HYDROGRAPH AT							
+		DN27RE	0.	.00	0.	0.	0.	.13
	4 COMBINED AT							
+		DUMMY	1666.	12.42	269.	80.	27.	2.21
	4 COMBINED AT							
+		DUMMY	8169.	12.58	1567.	479.	161.	15.78
	HYDROGRAPH AT							
+		D03	960.	12.25	110.	34.	11.	.72
	DIVERSION TO							
+		RD03	960.	12.25	96.	26.	9.	.72
	HYDROGRAPH AT							
+		DD03RE	177.	12.67	25.	8.	3.	.72
	ROUTED TO							
+		D03D04	110.	12.92	24.	8.	3.	.72
	HYDROGRAPH AT							
+		D04	1149.	12.33	142.	44.	15.	.89
	DIVERSION TO							
+		RD04	1118.	12.33	85.	24.	8.	.89
	HYDROGRAPH AT							
+		DD04RE	1065.	12.42	72.	20.	7.	.89
	2 COMBINED AT							
+		CPD04	1062.	12.42	95.	28.	9.	1.61
	DIVERSION TO							
+		DD04S	647.	12.42	30.	7.	2.	1.61
	HYDROGRAPH AT							
+		DD04SE	414.	12.42	65.	21.	7.	1.61
	ROUTED TO							
+		D04D05	308.	12.67	64.	21.	7.	1.61
	HYDROGRAPH AT							
+		D05	325.	12.17	35.	12.	4.	.16
	DIVERSION TO							
+		RD05	137.	11.92	13.	4.	1.	.16
	HYDROGRAPH AT							
+		DD05RE	325.	12.17	27.	8.	3.	.16
	2 COMBINED AT							
+		CPD05	337.	12.67	89.	28.	9.	1.78
	ROUTED TO							
+		D05D14	272.	12.83	88.	28.	9.	1.78
	DIVERSION TO							
+		DD141S	150.	12.83	17.	4.	1.	1.78
	HYDROGRAPH AT							
+		DD141	122.	12.17	71.	24.	8.	1.78
	ROUTED TO							
+		D05D15	122.	12.50	70.	24.	8.	1.78
	HYDROGRAPH AT							
+		D11	807.	12.33	108.	34.	11.	.66
	DIVERSION TO							
+		RD11	807.	12.33	64.	18.	6.	.66
	HYDROGRAPH AT							
+		DD11RE	686.	12.50	55.	16.	5.	.66
	DIVERSION TO							
+		DD111S	564.	12.50	44.	12.	4.	.66
	HYDROGRAPH AT							
+		DD111	122.	12.50	11.	3.	1.	.66
	DIVERSION TO							
+		DD112S	45.	12.50	6.	2.	1.	.66
	HYDROGRAPH AT							
+		DD112	77.	12.50	5.	1.	0.	.66
	ROUTED TO							
+		D11D12	49.	12.67	5.	1.	0.	.66
	HYDROGRAPH AT							
+		D12	438.	12.33	62.	20.	7.	.35
	DIVERSION TO							
+		RD12	438.	12.33	47.	13.	4.	.35
	HYDROGRAPH AT							
+		DD12RE	210.	12.67	23.	7.	2.	.35
	2 COMBINED AT							
+		CPD12	258.	12.67	28.	8.	3.	1.01
	DIVERSION TO							

+	DD121S	111.	12.67	10.	3.	1.	1.01
+ HYDROGRAPH AT	DD121	146.	12.67	18.	6.	2.	1.01
+ DIVERSION TO	DD122S	60.	12.67	9.	3.	1.	1.01
+ HYDROGRAPH AT	DD122	86.	12.67	10.	3.	1.	1.01
+ ROUTED TO	D12D13	37.	13.58	9.	3.	1.	1.01
+ HYDROGRAPH AT	D13	1329.	12.33	157.	49.	16.	1.03
+ DIVERSION TO	RD13	1329.	12.33	157.	49.	16.	1.03
+ HYDROGRAPH AT	DD13RE	0.	.00	0.	0.	0.	1.03
+ HYDROGRAPH AT	DD04SE	647.	12.42	30.	7.	2.	1.61
+ ROUTED TO	D04D13	189.	13.50	30.	7.	2.	1.61
+ 3 COMBINED AT	CPD13	220.	13.50	38.	10.	3.	3.65
+ DIVERSION TO	DD131S	8.	13.50	1.	0.	0.	3.65
+ HYDROGRAPH AT	DD131	212.	13.50	37.	10.	3.	3.65
+ DIVERSION TO	DD132S	48.	13.50	8.	2.	1.	3.65
+ HYDROGRAPH AT	DD132	164.	13.50	29.	8.	3.	3.65
+ ROUTED TO	D13D14	136.	14.00	28.	8.	3.	3.65
+ HYDROGRAPH AT	D14	1126.	12.42	157.	50.	17.	.94
+ DIVERSION TO	RD14	1126.	12.42	150.	41.	14.	.94
+ HYDROGRAPH AT	DD14RE	64.	13.50	26.	9.	3.	.94
+ HYDROGRAPH AT	DD141	150.	12.83	17.	4.	1.	1.78
+ ROUTED TO	D0514A	122.	13.08	17.	4.	1.	1.78
+ 3 COMBINED AT	CPD14	188.	14.00	67.	21.	7.	4.76
+ ROUTED TO	SRD14	108.	14.58	66.	21.	7.	4.76
+ DIVERSION TO	DD142S	98.	14.58	60.	19.	6.	4.76
+ HYDROGRAPH AT	DD142	10.	14.58	6.	2.	1.	4.76
+ ROUTED TO	D14D15	10.	14.83	6.	2.	1.	4.76
+ HYDROGRAPH AT	D15	421.	12.17	44.	14.	5.	.22
+ DIVERSION TO	RD15	3.	1.00	1.	0.	0.	.22
+ HYDROGRAPH AT	DD15RE	421.	12.17	44.	14.	5.	.22
+ 3 COMBINED AT	CPD15	420.	12.17	113.	40.	13.	4.98
+ ROUTED TO	D15D26	407.	12.25	113.	40.	13.	4.98
+ ROUTED TO	D15D28	370.	12.33	113.	40.	13.	4.98
+ HYDROGRAPH AT	D28	428.	12.17	39.	12.	4.	.25
+ DIVERSION TO	RD28	3.	4.08	2.	0.	0.	.25
+ HYDROGRAPH AT	DD28RE	428.	12.17	39.	12.	4.	.25
+ 2 COMBINED AT	CPD28	717.	12.25	148.	51.	17.	5.23
+ ROUTED TO	D28AFR	685.	12.25	148.	51.	17.	5.23
+ 2 COMBINED AT	DUMMY	8406.	12.50	1668.	516.	174.	21.02
+ HYDROGRAPH AT	L01	269.	12.17	25.	8.	3.	.16
+ DIVERSION TO	RL01	269.	12.17	18.	5.	2.	.16
HYDROGRAPH AT							

+	DL01RE	159.	12.33	9.	3.	1.	.16
+ ROUTED TO	L01L03	58.	12.75	8.	3.	1.	.16
+ HYDROGRAPH AT	L03	958.	12.33	116.	35.	12.	.79
+ DIVERSION TO	RL03	958.	12.33	116.	34.	11.	.79
+ HYDROGRAPH AT	DL03RE	1.	19.83	1.	0.	0.	.79
+ HYDROGRAPH AT	L20	390.	12.42	47.	14.	5.	.35
+ DIVERSION TO	RL20	390.	12.42	41.	11.	4.	.35
+ HYDROGRAPH AT	DL20RE	88.	12.83	9.	3.	1.	.35
+ ROUTED TO	L20L03	46.	13.25	9.	3.	1.	.35
+ 3 COMBINED AT	CPL03	60.	13.25	17.	5.	2.	1.29
+ DIVERSION TO	DL03S	37.	12.67	15.	5.	2.	1.29
+ HYDROGRAPH AT	DL03SE	23.	13.25	2.	0.	0.	1.29
+ ROUTED TO	L03L04	18.	13.58	2.	0.	0.	1.29
+ HYDROGRAPH AT	L04	663.	12.42	82.	24.	8.	.63
+ DIVERSION TO	RL04	663.	12.42	81.	22.	7.	.63
+ HYDROGRAPH AT	DL04RE	8.	15.67	6.	2.	1.	.63
+ 2 COMBINED AT	CPL04	17.	13.58	6.	2.	1.	1.93
+ DIVERSION TO	DL04S	0.	.00	0.	0.	0.	1.93
+ HYDROGRAPH AT	DL04SE	17.	13.58	6.	2.	1.	1.93
+ ROUTED TO	L04L05	6.	17.25	5.	2.	1.	1.93
+ HYDROGRAPH AT	L05	659.	12.33	84.	27.	9.	.49
+ DIVERSION TO	RL05	659.	12.33	61.	17.	6.	.49
+ HYDROGRAPH AT	DL05RE	399.	12.50	33.	10.	3.	.49
+ 2 COMBINED AT	CPL05	386.	12.50	37.	12.	4.	2.41
+ DIVERSION TO	DL051S	10.	12.50	0.	0.	0.	2.41
+ HYDROGRAPH AT	DL051	375.	12.50	36.	12.	4.	2.41
+ DIVERSION TO	DL052S	9.	12.50	1.	0.	0.	2.41
+ HYDROGRAPH AT	DL052	366.	12.50	35.	12.	4.	2.41
+ ROUTED TO	L05D06	251.	12.67	35.	12.	4.	2.41
+ HYDROGRAPH AT	L02	1727.	12.58	279.	85.	28.	1.88
+ DIVERSION TO	RL02	1727.	12.58	219.	59.	20.	1.88
+ HYDROGRAPH AT	DL02RE	906.	12.92	88.	26.	9.	1.88
+ ROUTED TO	L02D06	454.	13.42	83.	26.	9.	1.88
+ HYDROGRAPH AT	D06	616.	12.33	77.	23.	8.	.46
+ DIVERSION TO	RD06	616.	12.33	60.	16.	5.	.46
+ HYDROGRAPH AT	DD06RE	252.	12.67	24.	7.	2.	.46
+ 3 COMBINED AT	CPD06	513.	13.42	137.	44.	15.	4.76
+ DIVERSION TO	DD06S	143.	13.42	8.	2.	1.	4.76
+ HYDROGRAPH AT	DD06SE	370.	12.58	129.	42.	14.	4.76
+ ROUTED TO	D06D07	427.	12.75	128.	42.	14.	4.76
HYDROGRAPH AT							

+	D07	919.	12.50	134.	40.	13.	.89
+ DIVERSION TO	RD07	919.	12.50	116.	31.	10.	.89
+ HYDROGRAPH AT	DD07RE	250.	13.00	29.	9.	3.	.89
+ 2 COMBINED AT	CPD07	450.	13.50	152.	50.	17.	5.64
+ ROUTED TO	D07D02	423.	13.67	151.	50.	17.	5.64
+ HYDROGRAPH AT	D01	1347.	12.58	212.	63.	21.	1.56
+ DIVERSION TO	RD01	1347.	12.58	184.	49.	16.	1.56
+ HYDROGRAPH AT	DD01RE	334.	13.17	46.	14.	5.	1.56
+ ROUTED TO	D01D02	147.	14.33	42.	14.	5.	1.56
+ HYDROGRAPH AT	D02	1750.	12.50	266.	80.	27.	1.84
+ DIVERSION TO	RD02	1750.	12.50	237.	63.	21.	1.84
+ HYDROGRAPH AT	DD02RE	378.	13.08	53.	17.	6.	1.84
+ 3 COMBINED AT	CPD02	535.	13.25	213.	73.	24.	9.05
+ ROUTED TO	D02D10	497.	13.92	211.	73.	24.	9.05
+ HYDROGRAPH AT	D09	360.	12.33	42.	13.	4.	.26
+ DIVERSION TO	RD09	360.	12.33	29.	8.	3.	.26
+ HYDROGRAPH AT	DD09RE	225.	12.50	18.	5.	2.	.26
+ ROUTED TO	D09D10	170.	12.58	17.	5.	2.	.26
+ HYDROGRAPH AT	DD06SE	143.	13.42	8.	2.	1.	4.76
+ ROUTED TO	D06D10	77.	13.92	8.	2.	1.	4.76
+ HYDROGRAPH AT	D10	787.	12.33	104.	32.	11.	.63
+ DIVERSION TO	RD10	787.	12.33	83.	23.	8.	.63
+ HYDROGRAPH AT	DD10RE	354.	12.67	32.	10.	3.	.63
+ 4 COMBINED AT	CPD10	537.	13.92	242.	85.	28.	9.95
+ ROUTED TO	D10D19	524.	14.08	240.	85.	28.	9.95
+ HYDROGRAPH AT	L09	656.	12.33	85.	27.	9.	.49
+ DIVERSION TO	RL09	656.	12.33	85.	26.	9.	.49
+ HYDROGRAPH AT	DL09RE	6.	21.00	4.	1.	0.	.49
+ HYDROGRAPH AT	DL051	10.	12.50	0.	0.	0.	2.41
+ ROUTED TO	L05L09	2.	13.75	0.	0.	0.	2.41
+ 2 COMBINED AT	CPL09	6.	21.00	4.	1.	0.	2.90
+ DIVERSION TO	DL091S	1.	21.00	0.	0.	0.	2.90
+ HYDROGRAPH AT	DL091	5.	21.00	3.	1.	0.	2.90
+ DIVERSION TO	DL092S	0.	.00	0.	0.	0.	2.90
+ HYDROGRAPH AT	DL092	5.	21.00	3.	1.	0.	2.90
+ ROUTED TO	L09D08	5.	23.92	3.	1.	0.	2.90
+ HYDROGRAPH AT	D08	661.	12.33	91.	29.	10.	.51
+ DIVERSION TO	RD08	661.	12.33	73.	20.	7.	.51
+ HYDROGRAPH AT	DD08RE	283.	12.67	29.	9.	3.	.51
+ HYDROGRAPH AT	DL052	9.	12.50	1.	0.	0.	2.41
ROUTED TO							

+	L05D08	3.	14.08	1.	0.	0.	2.41
+ 3 COMBINED AT	CPD08	283.	12.67	30.	10.	3.	3.41
+ ROUTED TO	D08D16	121.	13.25	28.	10.	3.	3.41
+ HYDROGRAPH AT	L06	914.	12.33	107.	33.	11.	.70
+ DIVERSION TO	RL06	914.	12.33	107.	33.	11.	.70
+ HYDROGRAPH AT	DL06RE	0.	.00	0.	0.	0.	.70
+ DIVERSION TO	DL06S	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+ ROUTED TO	L06L07	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	L07	816.	12.33	101.	31.	10.	.63
+ DIVERSION TO	RL07	816.	12.33	101.	31.	10.	.63
+ HYDROGRAPH AT	DL07RE	0.	.00	0.	0.	0.	.63
+ HYDROGRAPH AT	DL03SE	37.	12.67	15.	5.	2.	1.29
+ ROUTED TO	L0307A	40.	13.00	15.	5.	2.	1.29
+ ROUTED TO	L0307B	37.	13.83	14.	5.	2.	1.29
+ 3 COMBINED AT	CPL07	37.	13.83	14.	5.	2.	2.62
+ DIVERSION TO	DL07S	7.	13.83	3.	1.	0.	2.62
+ HYDROGRAPH AT	DL07SE	29.	13.83	11.	4.	1.	2.62
+ ROUTED TO	L07L08	29.	14.00	11.	4.	1.	2.62
+ HYDROGRAPH AT	L08	647.	12.33	87.	27.	9.	.49
+ DIVERSION TO	RL08	647.	12.33	86.	23.	8.	.49
+ HYDROGRAPH AT	DL08RE	15.	14.50	8.	3.	1.	.49
+ HYDROGRAPH AT	DL04SE	0.	.00	0.	0.	0.	1.93
+ ROUTED TO	L04L08	0.	.00	0.	0.	0.	1.93
+ 3 COMBINED AT	CPL08	36.	14.50	19.	7.	2.	3.74
+ ROUTED TO	L08L12	29.	15.42	18.	7.	2.	3.74
+ HYDROGRAPH AT	L10	845.	12.42	103.	30.	10.	.84
+ DIVERSION TO	RL10	845.	12.42	65.	17.	6.	.84
+ HYDROGRAPH AT	DL10RE	647.	12.58	46.	13.	4.	.84
+ ROUTED TO	L10L11	441.	12.83	45.	13.	4.	.84
+ HYDROGRAPH AT	DL06SE	0.	.00	0.	0.	0.	.70
+ ROUTED TO	L06L11	0.	.00	0.	0.	0.	.70
+ HYDROGRAPH AT	L11	744.	12.33	94.	29.	10.	.62
+ DIVERSION TO	RL11	744.	12.33	89.	24.	8.	.62
+ HYDROGRAPH AT	DL11RE	46.	13.25	15.	5.	2.	.62
+ HYDROGRAPH AT	DL07SE	7.	13.83	3.	1.	0.	2.62
+ ROUTED TO	L07L11	6.	15.25	3.	1.	0.	2.62
+ 4 COMBINED AT	CPL11	439.	12.83	61.	19.	6.	4.09
+ DIVERSION TO	DL11S	3.	12.83	0.	0.	0.	4.09
+ HYDROGRAPH AT	DL11SE	434.	12.83	60.	18.	6.	4.09
ROUTED TO							

+	L11L12	354.	13.00	60.	18.	6.	4.09
+ HYDROGRAPH AT	L12	586.	12.25	68.	22.	7.	.36
+ DIVERSION TO	RL12	586.	12.25	60.	16.	5.	.36
+ HYDROGRAPH AT	DL12RE	90.	12.67	16.	5.	2.	.36
+ 3 COMBINED AT	CPL12	385.	13.00	89.	30.	10.	5.56
+ DIVERSION TO	DL121S	68.	13.00	16.	5.	2.	5.56
+ HYDROGRAPH AT	DL121	318.	13.00	73.	25.	8.	5.56
+ DIVERSION TO	DL122S	4.	13.00	1.	0.	0.	5.56
+ HYDROGRAPH AT	DL122	314.	13.00	72.	24.	8.	5.56
+ ROUTED TO	L12L13	262.	13.17	71.	24.	8.	5.56
+ HYDROGRAPH AT	L13	860.	12.17	109.	38.	13.	.48
+ DIVERSION TO	RL13	860.	12.17	91.	26.	9.	.48
+ HYDROGRAPH AT	DL13RE	190.	12.50	36.	12.	4.	.48
+ HYDROGRAPH AT	DL091	1.	21.00	0.	0.	0.	2.90
+ ROUTED TO	L09L13	1.	22.92	0.	0.	0.	2.90
+ 3 COMBINED AT	CPL13	312.	13.17	99.	34.	11.	7.02
+ DIVERSION TO	DL131S	300.	13.17	98.	34.	11.	7.02
+ HYDROGRAPH AT	DL131	12.	13.17	2.	0.	0.	7.02
+ DIVERSION TO	DL132S	8.	13.17	1.	0.	0.	7.02
+ HYDROGRAPH AT	DL132	4.	13.17	0.	0.	0.	7.02
+ ROUTED TO	L13D16	3.	14.08	0.	0.	0.	7.02
+ HYDROGRAPH AT	D16	922.	12.17	116.	40.	13.	.52
+ DIVERSION TO	RD16	922.	12.17	94.	27.	9.	.52
+ HYDROGRAPH AT	DD16RE	263.	12.50	42.	13.	4.	.52
+ HYDROGRAPH AT	DL092	0.	.00	0.	0.	0.	2.90
+ ROUTED TO	L09D16	0.	.00	0.	0.	0.	2.90
+ 4 COMBINED AT	CPD16	263.	12.50	68.	23.	8.	8.05
+ DIVERSION TO	DD161S	177.	12.50	48.	16.	5.	8.05
+ HYDROGRAPH AT	DD161	42.	12.50	15.	5.	2.	8.05
+ DIVERSION TO	DD162S	17.	12.50	7.	3.	1.	8.05
+ HYDROGRAPH AT	DD162	25.	12.50	7.	3.	1.	8.05
+ ROUTED TO	D16D18	17.	12.92	7.	3.	1.	8.05
+ HYDROGRAPH AT	D18	321.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD18	321.	12.17	28.	9.	3.	.20
+ HYDROGRAPH AT	DD18RE	0.	21.42	0.	0.	0.	.20
+ 2 COMBINED AT	CPD18	17.	12.92	7.	3.	1.	8.25
+ ROUTED TO	D18D19	16.	13.92	7.	3.	1.	8.25
+ HYDROGRAPH AT	D17	324.	12.17	28.	9.	3.	.20
+ DIVERSION TO	RD17	324.	12.17	28.	8.	3.	.20
+ HYDROGRAPH AT	DD17RE	2.	20.17	1.	0.	0.	.20
ROUTED TO							

+	D17D19	2.	21.75	1.	0.	0.	.20
+ HYDROGRAPH AT	D19	577.	12.33	71.	21.	7.	.51
+ DIVERSION TO	RD19	577.	12.33	71.	20.	7.	.51
+ HYDROGRAPH AT	DD19RE	5.	18.58	4.	1.	0.	.51
+ 4 COMBINED AT	CPD19	521.	14.08	242.	86.	29.	16.49
+ DIVERSION TO	DD191S	269.	14.17	124.	44.	15.	16.49
+ HYDROGRAPH AT	DD191	178.	14.17	91.	34.	11.	16.49
+ DIVERSION TO	DD192S	72.	14.17	42.	17.	6.	16.49
+ HYDROGRAPH AT	DD192	107.	14.17	48.	17.	6.	16.49
+ ROUTED TO	D19D20	104.	14.33	48.	17.	6.	16.49
+ HYDROGRAPH AT	D20	595.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD20	595.	12.33	72.	21.	7.	.50
+ HYDROGRAPH AT	DD20RE	6.	18.33	5.	1.	0.	.50
+ HYDROGRAPH AT	DD111	564.	12.50	44.	12.	4.	.66
+ ROUTED TO	D11D20	292.	12.92	42.	12.	4.	.66
+ 3 COMBINED AT	CPD20	232.	13.00	81.	28.	9.	17.65
+ ROUTED TO	D20D21	185.	13.50	78.	28.	9.	17.65
+ HYDROGRAPH AT	D21	565.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD21	565.	12.33	72.	20.	7.	.50
+ HYDROGRAPH AT	DD21RE	9.	15.92	6.	2.	1.	.50
+ HYDROGRAPH AT	DD112	45.	12.50	6.	2.	1.	.66
+ ROUTED TO	D11D21	20.	13.33	5.	2.	1.	.66
+ HYDROGRAPH AT	DD121	111.	12.67	10.	3.	1.	1.01
+ ROUTED TO	D12D21	76.	12.83	9.	3.	1.	1.01
+ 4 COMBINED AT	CPD21	210.	13.50	86.	32.	11.	18.49
+ DIVERSION TO	DD211S	153.	13.50	65.	24.	8.	18.49
+ HYDROGRAPH AT	DD211	57.	13.50	21.	8.	3.	18.49
+ DIVERSION TO	DD212S	39.	13.50	17.	6.	2.	18.49
+ HYDROGRAPH AT	DD212	17.	13.50	5.	2.	1.	18.49
+ ROUTED TO	D21D22	10.	14.00	4.	2.	1.	18.49
+ HYDROGRAPH AT	D22	562.	12.33	67.	21.	7.	.45
+ DIVERSION TO	RD22	562.	12.33	67.	19.	6.	.45
+ HYDROGRAPH AT	DD22RE	8.	16.75	5.	2.	1.	.45
+ HYDROGRAPH AT	DD122	60.	12.67	9.	3.	1.	1.01
+ ROUTED TO	D12D22	37.	13.25	8.	3.	1.	1.01
+ 3 COMBINED AT	CPD22	28.	13.33	11.	4.	1.	18.94
+ ROUTED TO	D22D23	24.	14.00	11.	4.	1.	18.94
+ HYDROGRAPH AT	D23	649.	12.33	82.	25.	8.	.54
+ DIVERSION TO	RD23	649.	12.33	82.	25.	8.	.54
+ HYDROGRAPH AT	DD23RE	5.	23.08	2.	0.	0.	.54
HYDROGRAPH AT							

+	DD131	8.	13.50	1.	0.	0.	3.65
+ ROUTED TO	D13D23	6.	14.08	1.	0.	0.	3.65
+ 3 COMBINED AT	CPD23	24.	14.17	11.	4.	1.	22.13
+ DIVERSION TO	DD231S	2.	14.17	1.	0.	0.	22.13
+ HYDROGRAPH AT	DD231	22.	14.17	10.	4.	1.	22.13
+ DIVERSION TO	DD232S	3.	14.17	1.	0.	0.	22.13
+ HYDROGRAPH AT	DD232	19.	14.17	9.	3.	1.	22.13
+ ROUTED TO	D23D24	19.	14.33	9.	3.	1.	22.13
+ HYDROGRAPH AT	D24	538.	12.42	71.	21.	7.	.49
+ DIVERSION TO	RD24	538.	12.42	71.	21.	7.	.49
+ HYDROGRAPH AT	DD24RE	4.	21.08	2.	1.	0.	.49
+ HYDROGRAPH AT	DD132	48.	13.50	8.	2.	1.	3.65
+ ROUTED TO	D13D24	40.	13.92	8.	2.	1.	3.65
+ 3 COMBINED AT	CPD24	42.	14.17	14.	5.	2.	22.62
+ DIVERSION TO	DD24S	0.	.00	0.	0.	0.	22.62
+ HYDROGRAPH AT	DD24SE	42.	14.17	14.	5.	2.	22.62
+ ROUTED TO	D24D25	39.	14.50	14.	5.	2.	22.62
+ HYDROGRAPH AT	D25	574.	12.33	72.	22.	7.	.50
+ DIVERSION TO	RD25	574.	12.33	69.	19.	6.	.50
+ HYDROGRAPH AT	DD25RE	21.	13.58	9.	3.	1.	.50
+ 2 COMBINED AT	CPD25	39.	14.50	17.	6.	2.	23.12
+ ROUTED TO	SRD25	0.	.00	0.	0.	0.	23.12
+ DIVERSION TO	DD251S	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	DD251	0.	.00	0.	0.	0.	23.12
+ DIVERSION TO	DD252S	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	DD252	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D2542A	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D2542B	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	D37	376.	12.08	33.	10.	3.	.20
+ DIVERSION TO	RD37	376.	12.08	33.	10.	3.	.20
+ HYDROGRAPH AT	DD37RE	0.	.00	0.	0.	0.	.20
+ HYDROGRAPH AT	DD232	3.	14.17	1.	0.	0.	22.13
+ ROUTED TO	D23D37	2.	15.42	1.	0.	0.	22.13
+ HYDROGRAPH AT	DD251	0.	.00	0.	0.	0.	23.12
+ ROUTED TO	D25D37	0.	.00	0.	0.	0.	23.12
+ HYDROGRAPH AT	DD24SE	0.	.00	0.	0.	0.	22.62
+ ROUTED TO	D24D37	0.	.00	0.	0.	0.	22.62
+ 4 COMBINED AT	CPD37	2.	15.42	1.	0.	0.	23.32
+ DIVERSION TO	DD37S	0.	.00	0.	0.	0.	23.32
+ HYDROGRAPH AT	DD37SE	2.	15.42	1.	0.	0.	23.32
ROUTED TO							

+		D37D39	2.	16.25	1.	0.	0.	23.32
+	HYDROGRAPH AT	D35	444.	12.17	38.	12.	4.	.25
+	DIVERSION TO	RD35	444.	12.17	38.	12.	4.	.25
+	HYDROGRAPH AT	DD35RE	0.	.00	0.	0.	0.	.25
+	HYDROGRAPH AT	DD231	2.	14.17	1.	0.	0.	22.13
+	ROUTED TO	D23D35	2.	14.92	1.	0.	0.	22.13
+	2 COMBINED AT	CPD35	2.	14.92	1.	0.	0.	22.38
+	DIVERSION TO	DD35S	0.	14.92	0.	0.	0.	22.38
+	HYDROGRAPH AT	DD35SE	2.	14.92	1.	0.	0.	22.38
+	ROUTED TO	D35D38	2.	15.58	1.	0.	0.	22.38
+	HYDROGRAPH AT	D38	222.	12.08	19.	6.	2.	.12
+	DIVERSION TO	RD38	222.	12.08	19.	6.	2.	.12
+	HYDROGRAPH AT	DD38RE	0.	.00	0.	0.	0.	.12
+	HYDROGRAPH AT	DD37SE	0.	.00	0.	0.	0.	23.32
+	ROUTED TO	D37D38	0.	.00	0.	0.	0.	23.32
+	3 COMBINED AT	CPD38	2.	15.58	1.	0.	0.	23.69
+	DIVERSION TO	DD381S	2.	15.58	1.	0.	0.	23.69
+	HYDROGRAPH AT	DD381	0.	15.58	0.	0.	0.	23.69
+	DIVERSION TO	DD382S	0.	15.58	0.	0.	0.	23.69
+	HYDROGRAPH AT	DD382	0.	15.50	0.	0.	0.	23.69
+	ROUTED TO	D38D39	0.	17.17	0.	0.	0.	23.69
+	HYDROGRAPH AT	D39	354.	12.08	30.	9.	3.	.18
+	DIVERSION TO	RD39	354.	12.08	30.	9.	3.	.18
+	HYDROGRAPH AT	DD39RE	0.	.00	0.	0.	0.	.18
+	HYDROGRAPH AT	DD252	0.	.00	0.	0.	0.	23.12
+	ROUTED TO	D25D39	0.	.00	0.	0.	0.	23.12
+	4 COMBINED AT	CPD39	2.	16.25	1.	0.	0.	23.88
+	ROUTED TO	D39D42	2.	17.00	1.	0.	0.	23.88
+	HYDROGRAPH AT	D26	1103.	12.17	107.	33.	11.	.64
+	DIVERSION TO	RD26	1103.	12.17	107.	31.	10.	.64
+	HYDROGRAPH AT	DD26RE	13.	16.58	9.	3.	1.	.64
+	HYDROGRAPH AT	DD142	98.	14.58	60.	19.	6.	4.76
+	ROUTED TO	D14D26	97.	14.83	60.	19.	6.	4.76
+	2 COMBINED AT	CPD26	95.	14.83	62.	21.	7.	5.40
+	ROUTED TO	D26D27	95.	15.00	62.	21.	7.	5.40
+	HYDROGRAPH AT	D27	498.	12.17	52.	17.	6.	.32
+	DIVERSION TO	RD27	100.	11.92	13.	4.	1.	.32
+	HYDROGRAPH AT	DD27RE	498.	12.17	45.	12.	4.	.32
+	2 COMBINED AT	CPD27	491.	12.17	98.	33.	11.	5.72
+	ROUTED TO	SRD27	491.	12.17	98.	33.	11.	5.72
	ROUTED TO							

+	D27D42	370.	12.42	94.	33.	11.	5.72
+ HYDROGRAPH AT	D42	1338.	12.25	155.	48.	16.	.99
+ DIVERSION TO	RD42	1338.	12.25	142.	38.	13.	.99
+ HYDROGRAPH AT	DD42RE	123.	12.83	28.	9.	3.	.99
+ 4 COMBINED AT	CPD42	380.	12.42	121.	43.	14.	26.93
+ ROUTED TO	SRD42	175.	12.75	71.	27.	9.	26.93
+ ROUTED TO	D42D53	170.	12.92	70.	27.	9.	26.93
+ HYDROGRAPH AT	D53	195.	12.17	16.	5.	2.	.12
+ DIVERSION TO	RD53	195.	12.17	16.	5.	2.	.12
+ HYDROGRAPH AT	DD53RE	0.	.00	0.	0.	0.	.12
+ 2 COMBINED AT	CPD53	170.	12.92	70.	27.	9.	27.05
+ ROUTED TO	SRD53	37.	20.00	29.	10.	3.	27.05
+ ROUTED TO	D53D54	36.	20.50	29.	10.	3.	27.05
+ HYDROGRAPH AT	D43	651.	12.33	77.	24.	8.	.50
+ DIVERSION TO	RD43	651.	12.33	72.	19.	6.	.50
+ HYDROGRAPH AT	DD43RE	43.	13.08	13.	5.	2.	.50
+ ROUTED TO	D43D54	27.	14.25	13.	5.	2.	.50
+ HYDROGRAPH AT	D54	369.	12.25	34.	10.	3.	.27
+ DIVERSION TO	RD54	290.	12.17	16.	5.	2.	.27
+ HYDROGRAPH AT	DD54RE	369.	12.25	21.	6.	2.	.27
+ 3 COMBINED AT	CPD54	285.	12.33	35.	17.	6.	27.82
+ HYDROGRAPH AT	D44	625.	12.33	78.	24.	8.	.54
+ DIVERSION TO	RD44	625.	12.33	60.	16.	5.	.54
+ HYDROGRAPH AT	DD44RE	323.	12.58	26.	8.	3.	.54
+ HYDROGRAPH AT	D55	249.	12.25	24.	7.	2.	.19
+ DIVERSION TO	RD55	249.	12.25	20.	5.	2.	.19
+ HYDROGRAPH AT	DD55RE	92.	12.50	7.	2.	1.	.19
+ HYDROGRAPH AT	D56	276.	12.25	30.	9.	3.	.22
+ DIVERSION TO	RD56	103.	12.00	8.	2.	1.	.22
+ HYDROGRAPH AT	DD56RE	276.	12.25	25.	7.	2.	.22
+ 3 COMBINED AT	DUMMY	463.	12.58	57.	17.	6.	.95
+ 3 COMBINED AT	DUMMY	8406.	12.50	1670.	528.	178.	49.78
+ HYDROGRAPH AT	L14	269.	12.25	24.	7.	2.	.23
+ DIVERSION TO	RL14	269.	12.25	24.	7.	2.	.23
+ HYDROGRAPH AT	DL14RE	0.	.00	0.	0.	0.	.23
+ ROUTED TO	L14L15	0.	.00	0.	0.	0.	.23
+ HYDROGRAPH AT	L15	438.	12.25	40.	11.	4.	.37
+ DIVERSION TO	RL15	438.	12.25	40.	11.	4.	.37
+ HYDROGRAPH AT	DL15RE	0.	.00	0.	0.	0.	.37
+ 2 COMBINED AT	CPL15	0.	.00	0.	0.	0.	.60
ROUTED TO							

+		L15L16	0.	.00	0.	0.	0.	.60
+	HYDROGRAPH AT	L16	582.	12.33	58.	17.	6.	.50
+	DIVERSION TO	RL16	582.	12.33	58.	17.	6.	.50
+	HYDROGRAPH AT	DL16RE	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT	CPL16	0.	.00	0.	0.	0.	1.10
+	ROUTED TO	L16L17	0.	.00	0.	0.	0.	1.10
+	HYDROGRAPH AT	L17	586.	12.33	72.	23.	8.	.50
+	DIVERSION TO	RL17	586.	12.33	72.	23.	8.	.50
+	HYDROGRAPH AT	DL17RE	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT	CPL17	0.	.00	0.	0.	0.	1.61
+	DIVERSION TO	DL17S	0.	.00	0.	0.	0.	1.61
+	HYDROGRAPH AT	DL17SE	0.	.00	0.	0.	0.	1.61
+	ROUTED TO	L17L18	0.	.00	0.	0.	0.	1.61
+	HYDROGRAPH AT	L18	604.	12.25	58.	17.	6.	.50
+	DIVERSION TO	RL18	0.	.00	0.	0.	0.	.50
+	HYDROGRAPH AT	DL18RE	604.	12.25	58.	17.	6.	.50
+	HYDROGRAPH AT	DL11SE	3.	12.83	0.	0.	0.	4.09
+	ROUTED TO	L11L18	1.	14.25	0.	0.	0.	4.09
+	HYDROGRAPH AT	DL121	68.	13.00	16.	5.	2.	5.56
+	ROUTED TO	L12L18	48.	13.58	15.	5.	2.	5.56
+	4 COMBINED AT	CPL18	604.	12.25	71.	22.	7.	7.67
+	DIVERSION TO	DL181S	8.	12.25	0.	0.	0.	7.67
+	HYDROGRAPH AT	DL181	576.	12.33	67.	21.	7.	7.67
+	DIVERSION TO	DL182S	23.	12.33	3.	1.	0.	7.67
+	HYDROGRAPH AT	DL182	553.	12.33	64.	20.	7.	7.67
+	ROUTED TO	L18L19	455.	12.42	63.	20.	7.	7.67
+	HYDROGRAPH AT	L19	872.	12.17	109.	38.	13.	.49
+	DIVERSION TO	RL19	872.	12.17	91.	26.	9.	.49
+	HYDROGRAPH AT	DL19RE	187.	12.50	36.	12.	4.	.49
+	HYDROGRAPH AT	DL122	4.	13.00	1.	0.	0.	5.56
+	ROUTED TO	L12L19	2.	14.67	1.	0.	0.	5.56
+	HYDROGRAPH AT	DL131	300.	13.17	98.	34.	11.	7.02
+	ROUTED TO	L13L19	259.	13.58	95.	34.	11.	7.02
+	4 COMBINED AT	CPL19	467.	12.58	174.	62.	21.	9.61
+	DIVERSION TO	DL191S	465.	12.58	173.	62.	21.	9.61
+	HYDROGRAPH AT	DL191	2.	12.58	0.	0.	0.	9.61
+	DIVERSION TO	DL192S	2.	12.58	0.	0.	0.	9.61
+	HYDROGRAPH AT	DL192	0.	12.50	0.	0.	0.	9.61
+	ROUTED TO	L19D29	0.	14.17	0.	0.	0.	9.61
+	HYDROGRAPH AT	D29	908.	12.17	113.	39.	13.	.51
	DIVERSION TO							

+		RD29	908.	12.17	93.	26.	9.	.51
+	HYDROGRAPH AT	DD29RE	251.	12.50	39.	13.	4.	.51
+	HYDROGRAPH AT	DL132	8.	13.17	1.	0.	0.	7.02
+	ROUTED TO	L13D29	5.	14.83	1.	0.	0.	7.02
+	HYDROGRAPH AT	DD161	177.	12.50	48.	16.	5.	8.05
+	ROUTED TO	D16D29	117.	13.83	46.	16.	5.	8.05
+	4 COMBINED AT	CPD29	423.	12.58	95.	32.	11.	11.15
+	ROUTED TO	D29D30	146.	14.08	76.	27.	9.	11.15
+	HYDROGRAPH AT	D30	1541.	12.25	203.	70.	23.	.91
+	DIVERSION TO	RD30	1541.	12.25	174.	49.	16.	.91
+	HYDROGRAPH AT	DD30RE	282.	12.67	62.	21.	7.	.91
+	HYDROGRAPH AT	DD162	17.	12.50	7.	3.	1.	8.05
+	ROUTED TO	D16D30	11.	15.08	7.	3.	1.	8.05
+	HYDROGRAPH AT	DD191	269.	14.17	124.	44.	15.	16.49
+	ROUTED TO	D19D30	250.	14.33	122.	44.	15.	16.49
+	4 COMBINED AT	CPD30	407.	14.33	232.	85.	28.	20.50
+	DIVERSION TO	DD30S	397.	14.33	226.	83.	28.	20.50
+	HYDROGRAPH AT	DD30SE	11.	14.33	6.	2.	1.	20.50
+	ROUTED TO	D30D32	10.	14.92	6.	2.	1.	20.50
+	HYDROGRAPH AT	D32	361.	12.25	38.	12.	4.	.25
+	DIVERSION TO	RD32	361.	12.25	38.	12.	4.	.25
+	HYDROGRAPH AT	DD32RE	0.	.00	0.	0.	0.	.25
+	2 COMBINED AT	CPD32	10.	14.92	6.	2.	1.	20.75
+	DIVERSION TO	DD32S	0.	14.92	0.	0.	0.	20.75
+	HYDROGRAPH AT	DD32SE	10.	14.92	6.	2.	1.	20.75
+	ROUTED TO	D32D33	10.	15.17	6.	2.	1.	20.75
+	HYDROGRAPH AT	D31	666.	12.25	73.	22.	7.	.50
+	DIVERSION TO	RD31	666.	12.25	73.	22.	7.	.50
+	HYDROGRAPH AT	DD31RE	0.	.00	0.	0.	0.	.50
+	HYDROGRAPH AT	DD192	72.	14.17	42.	17.	6.	16.49
+	ROUTED TO	D19D31	70.	14.50	42.	17.	6.	16.49
+	HYDROGRAPH AT	DD211	153.	13.50	65.	24.	8.	18.49
+	ROUTED TO	D21D31	147.	13.67	65.	24.	8.	18.49
+	3 COMBINED AT	CPD31	187.	13.67	105.	40.	13.	18.99
+	ROUTED TO	D31D33	178.	13.83	105.	40.	13.	18.99
+	HYDROGRAPH AT	D33	377.	12.25	38.	12.	4.	.25
+	DIVERSION TO	RD33	377.	12.25	35.	9.	3.	.25
+	HYDROGRAPH AT	DD33RE	31.	12.75	7.	2.	1.	.25
+	3 COMBINED AT	CPD33	177.	13.83	110.	43.	14.	23.50
+	DIVERSION TO	DD331S	90.	13.83	57.	22.	7.	23.50
	HYDROGRAPH AT							

+	DD331	76.	13.83	49.	19.	6.	23.50
+ DIVERSION TO	DD332S	35.	13.83	24.	9.	3.	23.50
+ HYDROGRAPH AT	DD332	41.	13.83	25.	10.	3.	23.50
+ ROUTED TO	D33D34	39.	14.33	24.	10.	3.	23.50
+ HYDROGRAPH AT	D34	697.	12.25	75.	24.	8.	.50
+ DIVERSION TO	RD34	697.	12.25	75.	24.	8.	.50
+ HYDROGRAPH AT	DD34RE	0.	.00	0.	0.	0.	.50
+ HYDROGRAPH AT	DD212	39.	13.50	17.	6.	2.	18.49
+ ROUTED TO	D21D34	34.	14.08	17.	6.	2.	18.49
+ 3 COMBINED AT	CPD34	67.	14.25	39.	15.	5.	24.00
+ ROUTED TO	D34D36	63.	14.67	38.	15.	5.	24.00
+ HYDROGRAPH AT	D36	402.	12.17	38.	12.	4.	.25
+ DIVERSION TO	RD36	402.	12.17	35.	9.	3.	.25
+ HYDROGRAPH AT	DD36RE	22.	12.75	7.	2.	1.	.25
+ HYDROGRAPH AT	DD35SE	0.	14.92	0.	0.	0.	22.38
+ ROUTED TO	D35D36	0.	16.08	0.	0.	0.	22.38
+ 3 COMBINED AT	CPD36	62.	14.75	41.	16.	5.	28.14
+ DIVERSION TO	DD361S	53.	15.00	36.	14.	5.	28.14
+ HYDROGRAPH AT	DD361	4.	15.00	3.	1.	0.	28.14
+ DIVERSION TO	DD362S	4.	15.00	3.	1.	0.	28.14
+ HYDROGRAPH AT	DD362	0.	14.58	0.	0.	0.	28.14
+ ROUTED TO	D36D40	0.	15.83	0.	0.	0.	28.14
+ HYDROGRAPH AT	D40	451.	12.17	40.	12.	4.	.24
+ DIVERSION TO	RD40	451.	12.17	40.	12.	4.	.24
+ HYDROGRAPH AT	DD40RE	0.	.00	0.	0.	0.	.24
+ HYDROGRAPH AT	DD381	2.	15.58	1.	0.	0.	23.69
+ ROUTED TO	D38D40	1.	16.58	1.	0.	0.	23.69
+ 3 COMBINED AT	CPD40	1.	16.67	1.	0.	0.	29.69
+ DIVERSION TO	DD40S	1.	16.67	0.	0.	0.	29.69
+ HYDROGRAPH AT	DD40SE	0.	16.67	0.	0.	0.	29.69
+ ROUTED TO	D40D41	0.	17.08	0.	0.	0.	29.69
+ HYDROGRAPH AT	D41	557.	12.08	47.	14.	5.	.25
+ DIVERSION TO	RD41	557.	12.08	47.	14.	5.	.25
+ HYDROGRAPH AT	DD41RE	4.	19.25	2.	1.	0.	.25
+ HYDROGRAPH AT	DD382	0.	15.58	0.	0.	0.	23.69
+ ROUTED TO	D38D41	0.	17.42	0.	0.	0.	23.69
+ 3 COMBINED AT	CPD41	8.	16.58	3.	1.	0.	29.94
+ ROUTED TO	D41D50	1.	19.50	0.	0.	0.	29.94
+ HYDROGRAPH AT	L23	922.	12.33	102.	30.	10.	.90
+ DIVERSION TO	RL23	922.	12.33	102.	30.	10.	.90
HYDROGRAPH AT							

+		DL23RE	0.	.00	0.	0.	0.	.90
+	ROUTED TO	L23L24	0.	.00	0.	0.	0.	.90
+	HYDROGRAPH AT	L24	624.	12.25	60.	18.	6.	.50
+	DIVERSION TO	RL24	624.	12.25	60.	18.	6.	.50
+	HYDROGRAPH AT	DL24RE	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT	CPL24	0.	.00	0.	0.	0.	1.40
+	ROUTED TO	L24L26	0.	.00	0.	0.	0.	1.40
+	HYDROGRAPH AT	L25	261.	12.33	29.	8.	3.	.24
+	DIVERSION TO	RL25	261.	12.33	29.	8.	3.	.24
+	HYDROGRAPH AT	DL25RE	0.	.00	0.	0.	0.	.24
+	ROUTED TO	L25L26	0.	.00	0.	0.	0.	.24
+	HYDROGRAPH AT	DL181	8.	12.25	0.	0.	0.	7.67
+	ROUTED TO	L18L26	3.	13.00	0.	0.	0.	7.67
+	HYDROGRAPH AT	DL17SE	0.	.00	0.	0.	0.	1.61
+	ROUTED TO	L17L26	0.	.00	0.	0.	0.	1.61
+	HYDROGRAPH AT	L26	980.	12.25	103.	32.	11.	.76
+	DIVERSION TO	RL26	980.	12.25	103.	29.	10.	.76
+	HYDROGRAPH AT	DL26RE	9.	17.50	7.	2.	1.	.76
+	5 COMBINED AT	CPL26	5.	20.83	3.	1.	0.	10.07
+	DIVERSION TO	DL26S	0.	.00	0.	0.	0.	10.07
+	HYDROGRAPH AT	DL26SE	5.	20.83	3.	1.	0.	10.07
+	ROUTED TO	L26L27	5.	23.00	3.	1.	0.	10.07
+	HYDROGRAPH AT	L27	906.	12.17	113.	39.	13.	.51
+	DIVERSION TO	RL27	906.	12.17	91.	26.	9.	.51
+	HYDROGRAPH AT	DL27RE	250.	12.42	41.	13.	4.	.51
+	HYDROGRAPH AT	DL182	23.	12.33	3.	1.	0.	7.67
+	ROUTED TO	L18L27	11.	13.67	3.	1.	0.	7.67
+	HYDROGRAPH AT	DL191	465.	12.58	173.	62.	21.	9.61
+	ROUTED TO	L19L27	364.	12.83	170.	62.	21.	9.61
+	4 COMBINED AT	CPL27	433.	12.83	200.	72.	24.	12.53
+	DIVERSION TO	DL271S	299.	12.83	124.	43.	14.	12.53
+	HYDROGRAPH AT	DL271	135.	12.83	76.	29.	10.	12.53
+	DIVERSION TO	DL272S	68.	12.83	32.	12.	4.	12.53
+	HYDROGRAPH AT	DL272	67.	12.83	44.	18.	6.	12.53
+	ROUTED TO	L27D45	64.	13.08	43.	18.	6.	12.53
+	HYDROGRAPH AT	D45	780.	12.25	92.	31.	10.	.49
+	DIVERSION TO	RD45	780.	12.25	79.	22.	7.	.49
+	HYDROGRAPH AT	DD45RE	167.	12.58	27.	9.	3.	.49
+	HYDROGRAPH AT	DL192	2.	12.58	0.	0.	0.	9.61
+	ROUTED TO	L19D45	1.	13.25	0.	0.	0.	9.61
	3 COMBINED AT							

+	CPD45	607.	12.67	98.	37.	12.	13.02
+ DIVERSION TO	DD451S	17.	13.00	9.	4.	1.	13.02
+ HYDROGRAPH AT	DD451	103.	13.00	55.	21.	7.	13.02
+ DIVERSION TO	DD452S	51.	13.00	28.	11.	4.	13.02
+ HYDROGRAPH AT	DD452	51.	13.00	28.	11.	4.	13.02
+ ROUTED TO	D45D46	44.	13.67	27.	11.	4.	13.02
+ HYDROGRAPH AT	D46	982.	12.42	139.	43.	14.	.92
+ DIVERSION TO	RD46	982.	12.42	139.	42.	14.	.92
+ HYDROGRAPH AT	DD46RE	8.	22.17	4.	1.	0.	.92
+ HYDROGRAPH AT	DD30SE	397.	14.33	226.	83.	28.	20.50
+ ROUTED TO	D30D46	388.	14.58	223.	83.	28.	20.50
+ 3 COMBINED AT	CPD46	359.	14.75	227.	87.	29.	24.82
+ DIVERSION TO	DD461S	357.	14.75	226.	86.	29.	24.82
+ HYDROGRAPH AT	DD461	3.	14.75	2.	1.	0.	24.82
+ DIVERSION TO	DD462S	3.	14.75	2.	1.	0.	24.82
+ HYDROGRAPH AT	DD462	0.	.00	0.	0.	0.	24.82
+ ROUTED TO	D46D47	0.	.00	0.	0.	0.	24.82
+ HYDROGRAPH AT	D47	1066.	12.42	152.	47.	16.	1.00
+ DIVERSION TO	RD47	1066.	12.42	152.	47.	16.	1.00
+ HYDROGRAPH AT	DD47RE	0.	.00	0.	0.	0.	1.00
+ HYDROGRAPH AT	DD32SE	0.	14.92	0.	0.	0.	20.75
+ ROUTED TO	D3247A	0.	16.67	0.	0.	0.	20.75
+ ROUTED TO	D3247B	0.	18.17	0.	0.	0.	20.75
+ HYDROGRAPH AT	DD331	90.	13.83	57.	22.	7.	23.50
+ ROUTED TO	D3347A	86.	14.25	56.	22.	7.	23.50
+ ROUTED TO	D3347B	84.	14.67	55.	22.	7.	23.50
+ 4 COMBINED AT	CPD47	72.	14.67	50.	21.	7.	28.82
+ DIVERSION TO	DD47S	63.	14.67	44.	18.	6.	28.82
+ HYDROGRAPH AT	DD47SE	9.	14.67	6.	2.	1.	28.82
+ ROUTED TO	D47D48	8.	16.50	6.	2.	1.	28.82
+ HYDROGRAPH AT	D48	975.	12.50	134.	39.	13.	1.00
+ DIVERSION TO	RD48	975.	12.50	134.	39.	13.	1.00
+ HYDROGRAPH AT	DD48RE	1.	22.17	0.	0.	0.	1.00
+ HYDROGRAPH AT	DD332	35.	13.83	24.	9.	3.	23.50
+ ROUTED TO	D33D48	33.	15.33	23.	9.	3.	23.50
+ HYDROGRAPH AT	DD361	53.	15.00	36.	14.	5.	28.14
+ ROUTED TO	D3648A	51.	15.50	35.	14.	5.	28.14
+ ROUTED TO	D3648B	50.	15.67	35.	14.	5.	28.14
+ 4 COMBINED AT	CPD48	77.	16.25	57.	24.	8.	34.45
+ DIVERSION TO	DD481S	66.	16.25	48.	20.	7.	34.45
HYDROGRAPH AT							

+	DD481	11.	16.25	8.	4.	1.	34.45
+ DIVERSION TO	DD482S	3.	16.25	2.	1.	0.	34.45
+ HYDROGRAPH AT	DD482	9.	16.25	6.	3.	1.	34.45
+ ROUTED TO	D48D49	9.	16.58	6.	3.	1.	34.45
+ HYDROGRAPH AT	D49	724.	12.25	75.	24.	8.	.49
+ DIVERSION TO	RD49	27.	11.17	11.	4.	1.	.49
+ HYDROGRAPH AT	DD49RE	724.	12.25	73.	20.	7.	.49
+ HYDROGRAPH AT	DD362	4.	15.00	3.	1.	0.	28.14
+ ROUTED TO	D36D49	4.	18.58	3.	1.	0.	28.14
+ HYDROGRAPH AT	DD40SE	1.	16.67	0.	0.	0.	29.69
+ ROUTED TO	D40D49	1.	18.17	0.	0.	0.	29.69
+ 4 COMBINED AT	CPD49	724.	12.25	80.	26.	9.	36.49
+ DIVERSION TO	DD491S	347.	12.25	33.	10.	3.	36.49
+ HYDROGRAPH AT	DD491	294.	12.25	32.	11.	4.	36.49
+ DIVERSION TO	DD492S	7.	12.25	1.	0.	0.	36.49
+ HYDROGRAPH AT	DD492	287.	12.25	32.	10.	3.	36.49
+ ROUTED TO	D49D50	264.	12.33	31.	10.	3.	36.49
+ HYDROGRAPH AT	D50	774.	12.25	92.	29.	10.	.50
+ DIVERSION TO	RD50	774.	12.25	92.	26.	9.	.50
+ HYDROGRAPH AT	DD50RE	11.	16.00	8.	3.	1.	.50
+ 3 COMBINED AT	CPD50	264.	12.33	31.	11.	4.	37.25
+ ROUTED TO	D50D64	171.	12.75	30.	11.	4.	37.25
+ HYDROGRAPH AT	D60	710.	12.17	87.	30.	10.	.40
+ DIVERSION TO	RD60	710.	12.17	70.	20.	7.	.40
+ HYDROGRAPH AT	DD60RE	192.	12.50	31.	10.	3.	.40
+ HYDROGRAPH AT	DD481	66.	16.25	48.	20.	7.	34.45
+ ROUTED TO	D48D60	65.	16.42	48.	20.	7.	34.45
+ 2 COMBINED AT	CPD60	396.	12.75	126.	49.	17.	34.86
+ DIVERSION TO	DD601S	52.	16.42	38.	18.	6.	34.86
+ HYDROGRAPH AT	DD601	27.	16.42	20.	9.	3.	34.86
+ DIVERSION TO	DD602S	4.	16.42	3.	1.	0.	34.86
+ HYDROGRAPH AT	DD602	23.	16.42	17.	8.	3.	34.86
+ ROUTED TO	D60D63	23.	16.58	17.	8.	3.	34.86
+ HYDROGRAPH AT	D63	454.	12.08	49.	17.	6.	.22
+ DIVERSION TO	RD63	454.	12.08	43.	12.	4.	.22
+ HYDROGRAPH AT	DD63RE	47.	12.58	14.	5.	2.	.22
+ HYDROGRAPH AT	DD482	3.	16.25	2.	1.	0.	34.45
+ ROUTED TO	D48D63	3.	17.67	2.	1.	0.	34.45
+ HYDROGRAPH AT	DD491	347.	12.25	33.	10.	3.	36.49
+ ROUTED TO	D49D63	253.	12.33	33.	10.	3.	36.49
4 COMBINED AT							

+	CPD63	252.	12.33	53.	22.	7.	37.12
+ ROUTED TO	SRD63	22.	21.58	22.	17.	7.	37.12
+ ROUTED TO	D63D64	22.	22.42	22.	17.	7.	37.12
+ HYDROGRAPH AT	D62	492.	12.17	54.	18.	6.	.25
+ DIVERSION TO	RD62	492.	12.17	45.	13.	4.	.25
+ HYDROGRAPH AT	DD62RE	82.	12.42	17.	6.	2.	.25
+ HYDROGRAPH AT	DD601	52.	16.42	38.	18.	6.	34.86
+ ROUTED TO	D60D62	52.	16.67	38.	18.	6.	34.86
+ 2 COMBINED AT	CPD62	113.	13.17	60.	27.	9.	35.11
+ DIVERSION TO	DD621S	46.	16.58	34.	16.	6.	35.11
+ HYDROGRAPH AT	DD621	15.	16.58	11.	5.	2.	35.11
+ DIVERSION TO	DD622S	7.	16.58	5.	3.	1.	35.11
+ HYDROGRAPH AT	DD622	7.	16.58	5.	3.	1.	35.11
+ ROUTED TO	D62D64	7.	17.33	5.	3.	1.	35.11
+ HYDROGRAPH AT	DD602	4.	16.42	3.	1.	0.	34.86
+ ROUTED TO	D60D64	4.	18.83	3.	1.	0.	34.86
+ HYDROGRAPH AT	DD492	7.	12.25	1.	0.	0.	36.49
+ ROUTED TO	D49D64	3.	14.25	1.	0.	0.	36.49
+ HYDROGRAPH AT	D64	1189.	12.25	137.	45.	15.	.77
+ DIVERSION TO	RD64	1189.	12.25	137.	41.	14.	.77
+ HYDROGRAPH AT	DD64RE	21.	16.75	14.	4.	1.	.77
+ 5 COMBINED AT	CPD64A	33.	24.00	29.	21.	9.	38.14
+ 2 COMBINED AT	CPD64B	171.	12.75	48.	31.	12.	38.90
+ ROUTED TO	D64D74	151.	13.08	47.	31.	12.	38.90
+ HYDROGRAPH AT	D74	1509.	12.25	201.	68.	23.	.99
+ DIVERSION TO	RD74	1509.	12.25	170.	48.	16.	.99
+ HYDROGRAPH AT	DD74RE	338.	12.67	63.	20.	7.	.99
+ HYDROGRAPH AT	DD622	7.	16.58	5.	3.	1.	35.11
+ ROUTED TO	D62D74	7.	19.42	5.	3.	1.	35.11
+ 3 COMBINED AT	CPD74	353.	13.08	101.	54.	20.	39.89
+ DIVERSION TO	DD741S	191.	13.08	74.	40.	15.	39.89
+ HYDROGRAPH AT	DD741	32.	13.08	13.	7.	3.	39.89
+ DIVERSION TO	DD742S	11.	13.08	4.	2.	1.	39.89
+ HYDROGRAPH AT	DD742	21.	13.08	8.	5.	2.	39.89
+ ROUTED TO	D74D75	17.	13.75	8.	4.	2.	39.89
+ HYDROGRAPH AT	D79A	292.	12.25	36.	12.	4.	.17
+ DIVERSION TO	RD79A	292.	12.25	34.	10.	3.	.17
+ HYDROGRAPH AT	DD79AR	16.	13.50	7.	3.	1.	.17
+ HYDROGRAPH AT	DD742	11.	13.08	4.	2.	1.	39.89
+ ROUTED TO	D7479A	7.	14.33	4.	2.	1.	39.89
2 COMBINED AT							

+	CPD79A	22.	15.58	12.	5.	2.	40.07
+ HYDROGRAPH AT	D51	474.	12.25	46.	13.	4.	.29
+ DIVERSION TO	RD51	197.	12.00	10.	3.	1.	.29
+ HYDROGRAPH AT	DD51RE	474.	12.25	38.	10.	3.	.29
+ ROUTED TO	D51D65	243.	13.08	37.	10.	3.	.29
+ HYDROGRAPH AT	D65	1109.	12.17	116.	37.	12.	.69
+ DIVERSION TO	RD65	1109.	12.17	116.	36.	12.	.69
+ HYDROGRAPH AT	DD65RE	8.	21.00	5.	1.	0.	.69
+ 2 COMBINED AT	CPD65	243.	13.08	37.	11.	4.	.98
+ ROUTED TO	D65D75	176.	13.75	36.	11.	4.	.98
+ HYDROGRAPH AT	D75	1302.	12.25	150.	49.	16.	.88
+ DIVERSION TO	RD75	1302.	12.25	129.	35.	12.	.88
+ HYDROGRAPH AT	DD75RE	256.	12.58	41.	13.	4.	.88
+ 4 COMBINED AT	CPD75	198.	13.92	65.	24.	8.	41.93
+ ROUTED TO	D7579B	157.	14.75	62.	24.	8.	41.93
+ HYDROGRAPH AT	L33	627.	12.42	65.	17.	6.	.65
+ DIVERSION TO	RL33	435.	12.25	21.	5.	2.	.65
+ HYDROGRAPH AT	DL33RE	627.	12.42	46.	12.	4.	.65
+ DIVERSION TO	DL33S	1.	12.42	0.	0.	0.	.65
+ HYDROGRAPH AT	DL33SE	625.	12.42	46.	12.	4.	.65
+ ROUTED TO	L33L34	539.	12.58	46.	12.	4.	.65
+ HYDROGRAPH AT	L34	912.	12.17	115.	40.	13.	.51
+ DIVERSION TO	RL34	912.	12.17	97.	27.	9.	.51
+ HYDROGRAPH AT	DL34RE	183.	12.58	38.	12.	4.	.51
+ HYDROGRAPH AT	DL26SE	0.	.00	0.	0.	0.	10.07
+ ROUTED TO	L26L34	0.	.00	0.	0.	0.	10.07
+ HYDROGRAPH AT	DL271	299.	12.83	124.	43.	14.	12.53
+ ROUTED TO	L27L34	280.	13.00	122.	43.	14.	12.53
+ 4 COMBINED AT	CPL34	622.	12.75	190.	63.	21.	13.69
+ DIVERSION TO	DL341S	115.	12.67	33.	10.	3.	13.69
+ HYDROGRAPH AT	DL341	508.	12.75	157.	53.	18.	13.69
+ DIVERSION TO	DL342S	104.	12.75	29.	9.	3.	13.69
+ HYDROGRAPH AT	DL342	404.	12.75	129.	44.	15.	13.69
+ ROUTED TO	L34D57	392.	12.83	128.	44.	15.	13.69
+ HYDROGRAPH AT	D57	907.	12.17	109.	38.	13.	.48
+ DIVERSION TO	RD57	907.	12.17	88.	25.	8.	.48
+ HYDROGRAPH AT	DD57RE	264.	12.42	39.	13.	4.	.48
+ HYDROGRAPH AT	DL272	68.	12.83	32.	12.	4.	12.53
+ ROUTED TO	L27D57	57.	13.50	31.	12.	4.	12.53
+ HYDROGRAPH AT	DD451	17.	13.00	9.	4.	1.	13.02
ROUTED TO							

+	D45D57	15.	13.67	9.	4.	1.	13.02
+ 4 COMBINED AT	CPD57	470.	12.83	195.	69.	23.	14.66
+ ROUTED TO	D57D58	426.	13.33	193.	69.	23.	14.66
+ HYDROGRAPH AT	D58	1238.	12.25	149.	47.	16.	.92
+ DIVERSION TO	RD58	1238.	12.25	126.	35.	12.	.92
+ HYDROGRAPH AT	DD58RE	283.	12.67	41.	13.	4.	.92
+ HYDROGRAPH AT	DD452	51.	13.00	28.	11.	4.	13.02
+ ROUTED TO	D45D58	42.	14.08	26.	11.	4.	13.02
+ HYDROGRAPH AT	DD461	357.	14.75	226.	86.	29.	24.82
+ ROUTED TO	D46D58	354.	14.92	225.	86.	29.	24.82
+ DIVERSION TO	SSPILL	138.	15.17	89.	35.	12.	24.82
+ HYDROGRAPH AT	RMSBSN	237.	14.75	135.	51.	17.	24.82
+ HYDROGRAPH AT	RMSBSN	138.	15.17	89.	35.	12.	24.82
+ ROUTED TO	SRRMS	30.	24.83	29.	24.	11.	24.82
+ 2 COMBINED AT	CPRMS	248.	14.75	154.	75.	29.	24.82
+ ROUTED TO	RRMS	243.	14.92	153.	75.	29.	24.82
+ 4 COMBINED AT	CPD58	463.	14.83	338.	150.	54.	27.39
+ DIVERSION TO	DD581S	279.	14.83	204.	89.	32.	27.39
+ HYDROGRAPH AT	DD581	184.	14.83	134.	61.	22.	27.39
+ DIVERSION TO	DD582S	22.	14.83	17.	9.	3.	27.39
+ HYDROGRAPH AT	DD582	162.	14.83	117.	51.	18.	27.39
+ ROUTED TO	D58D59	161.	15.25	117.	51.	18.	27.39
+ HYDROGRAPH AT	D59	1581.	12.25	218.	75.	25.	.99
+ DIVERSION TO	RD59	1581.	12.25	188.	53.	18.	.99
+ HYDROGRAPH AT	DD59RE	280.	12.75	66.	22.	7.	.99
+ HYDROGRAPH AT	DD462	3.	14.75	2.	1.	0.	24.82
+ ROUTED TO	D46D59	2.	17.08	2.	1.	0.	24.82
+ HYDROGRAPH AT	DD47SE	63.	14.67	44.	18.	6.	28.82
+ ROUTED TO	D47D59	66.	15.00	44.	18.	6.	28.82
+ 4 COMBINED AT	CPD59	311.	13.42	212.	90.	31.	32.37
+ DIVERSION TO	DD59S	232.	15.25	178.	78.	27.	32.37
+ HYDROGRAPH AT	DD59SE	12.	15.25	10.	4.	1.	32.37
+ ROUTED TO	D59D61	12.	15.67	9.	4.	1.	32.37
+ HYDROGRAPH AT	D61	571.	12.25	78.	27.	9.	.35
+ DIVERSION TO	RD61	571.	12.25	67.	19.	6.	.35
+ HYDROGRAPH AT	DD61RE	95.	12.75	24.	8.	3.	.35
+ 2 COMBINED AT	CPD61	37.	13.83	24.	10.	3.	32.72
+ ROUTED TO	D61D72	33.	14.67	23.	9.	3.	32.72
+ HYDROGRAPH AT	L30	703.	12.25	80.	25.	8.	.54
+ DIVERSION TO	RL30	703.	12.25	75.	20.	7.	.54
HYDROGRAPH AT							

+	DL30RE	44.	13.00	13.	5.	2.	.54
+ ROUTED TO	L30L31	35.	13.33	13.	5.	2.	.54
+ HYDROGRAPH AT	L31	709.	12.17	64.	20.	7.	.42
+ DIVERSION TO	RL31	709.	12.17	59.	16.	5.	.42
+ HYDROGRAPH AT	DL31RE	50.	12.67	13.	4.	1.	.42
+ 2 COMBINED AT	CPL31	57.	13.33	25.	9.	3.	.96
+ ROUTED TO	L31L32	54.	13.50	25.	9.	3.	.96
+ HYDROGRAPH AT	L32	414.	12.25	33.	9.	3.	.35
+ DIVERSION TO	RL32	414.	12.25	33.	9.	3.	.35
+ HYDROGRAPH AT	DL32RE	0.	.00	0.	0.	0.	.35
+ 2 COMBINED AT	CPL32	54.	13.50	25.	9.	3.	1.31
+ ROUTED TO	L32L38	50.	14.17	24.	9.	3.	1.31
+ HYDROGRAPH AT	L28	406.	12.25	42.	13.	4.	.31
+ DIVERSION TO	RL28	406.	12.25	41.	11.	4.	.31
+ HYDROGRAPH AT	DL28RE	12.	13.58	5.	2.	1.	.31
+ ROUTED TO	L28L29	10.	14.33	5.	2.	1.	.31
+ HYDROGRAPH AT	L29	312.	12.25	35.	11.	4.	.25
+ DIVERSION TO	RL29	312.	12.25	35.	10.	3.	.25
+ HYDROGRAPH AT	DL29RE	5.	15.25	3.	1.	0.	.25
+ 2 COMBINED AT	CPL29	12.	14.33	8.	3.	1.	.56
+ DIVERSION TO	DL29S	6.	14.33	4.	2.	1.	.56
+ HYDROGRAPH AT	DL29SE	6.	14.33	4.	2.	1.	.56
+ ROUTED TO	L29L36	5.	16.42	4.	2.	1.	.56
+ HYDROGRAPH AT	L35	719.	12.25	77.	24.	8.	.52
+ DIVERSION TO	RL35	719.	12.25	77.	23.	8.	.52
+ HYDROGRAPH AT	DL35RE	6.	19.92	4.	1.	0.	.52
+ HYDROGRAPH AT	DL29SE	6.	14.33	4.	2.	1.	.56
+ ROUTED TO	L29L35	5.	17.17	4.	2.	1.	.56
+ 2 COMBINED AT	CPL35	10.	19.92	7.	3.	1.	1.07
+ ROUTED TO	L35L37	8.	21.75	7.	3.	1.	1.07
+ HYDROGRAPH AT	L37	496.	12.25	51.	16.	5.	.40
+ DIVERSION TO	RL37	496.	12.25	49.	13.	4.	.40
+ HYDROGRAPH AT	DL37RE	13.	13.67	6.	2.	1.	.40
+ HYDROGRAPH AT	L36	600.	12.25	69.	22.	7.	.47
+ DIVERSION TO	RL36	600.	12.25	69.	22.	7.	.47
+ HYDROGRAPH AT	DL36RE	0.	.00	0.	0.	0.	.47
+ 4 COMBINED AT	CPL36	13.	21.75	12.	6.	2.	1.94
+ ROUTED TO	L36L38	13.	22.17	12.	6.	2.	1.94
+ HYDROGRAPH AT	L38	1144.	12.33	107.	28.	9.	1.00
+ DIVERSION TO	RL38	1144.	12.33	95.	24.	8.	1.00
HYDROGRAPH AT							

+	DL38RE	302.	12.67	15.	4.	1.	1.00
+ HYDROGRAPH AT	DL33SE	1.	12.42	0.	0.	0.	.65
+ ROUTED TO	L33L38	1.	13.50	0.	0.	0.	.65
+ 4 COMBINED AT	CPL38	302.	12.67	45.	19.	6.	4.90
+ DIVERSION TO	DL381S	23.	12.67	1.	1.	0.	4.90
+ HYDROGRAPH AT	DL381	277.	12.67	41.	18.	6.	4.90
+ DIVERSION TO	DL382S	63.	12.67	12.	5.	2.	4.90
+ HYDROGRAPH AT	DL382	215.	12.67	29.	12.	4.	4.90
+ ROUTED TO	L38L39	85.	12.92	28.	12.	4.	4.90
+ HYDROGRAPH AT	L39	853.	12.25	112.	39.	13.	.51
+ DIVERSION TO	RL39	853.	12.25	94.	26.	9.	.51
+ HYDROGRAPH AT	DL39RE	206.	12.58	38.	12.	4.	.51
+ HYDROGRAPH AT	DL341	115.	12.67	33.	10.	3.	13.69
+ ROUTED TO	L34L39	104.	13.08	32.	10.	3.	13.69
+ 3 COMBINED AT	CPL39	201.	13.00	77.	28.	9.	18.45
+ DIVERSION TO	DL391S	159.	13.08	63.	23.	8.	18.45
+ HYDROGRAPH AT	DL391	22.	13.08	9.	3.	1.	18.45
+ DIVERSION TO	DL392S	12.	13.08	5.	2.	1.	18.45
+ HYDROGRAPH AT	DL392	9.	13.08	4.	1.	0.	18.45
+ ROUTED TO	L39D68	9.	13.33	4.	1.	0.	18.45
+ HYDROGRAPH AT	D68	864.	12.17	98.	33.	11.	.49
+ DIVERSION TO	RD68	864.	12.17	88.	25.	8.	.49
+ HYDROGRAPH AT	DD68RE	81.	12.75	26.	9.	3.	.49
+ HYDROGRAPH AT	DL342	104.	12.75	29.	9.	3.	13.69
+ ROUTED TO	L34D68	85.	13.42	27.	9.	3.	13.69
+ 3 COMBINED AT	CPD68	130.	13.42	48.	17.	6.	18.95
+ DIVERSION TO	DD681S	103.	13.42	38.	13.	4.	18.95
+ HYDROGRAPH AT	DD681	27.	13.42	10.	4.	1.	18.95
+ DIVERSION TO	DD682S	9.	13.42	3.	1.	0.	18.95
+ HYDROGRAPH AT	DD682	18.	13.42	7.	2.	1.	18.95
+ ROUTED TO	D68D69	16.	13.83	7.	2.	1.	18.95
+ HYDROGRAPH AT	D69	1193.	12.33	141.	45.	15.	.93
+ DIVERSION TO	RD69	1193.	12.33	137.	38.	13.	.93
+ HYDROGRAPH AT	DD69RE	42.	13.75	19.	7.	2.	.93
+ HYDROGRAPH AT	DD581	279.	14.83	204.	89.	32.	27.39
+ ROUTED TO	D58D69	272.	15.50	197.	89.	32.	27.39
+ 3 COMBINED AT	CPD69	250.	15.83	190.	88.	32.	33.56
+ DIVERSION TO	DD691S	21.	15.83	16.	7.	3.	33.56
+ HYDROGRAPH AT	DD691	229.	15.83	175.	81.	29.	33.56
+ DIVERSION TO	DD692S	17.	15.83	13.	6.	2.	33.56
HYDROGRAPH AT							

+	DD692	212.	15.83	162.	75.	27.	33.56
+ ROUTED TO	D69D70	212.	16.00	161.	75.	27.	33.56
+ HYDROGRAPH AT	D70A	586.	12.08	59.	20.	7.	.27
+ DIVERSION TO	RD70A	586.	12.08	49.	14.	5.	.27
+ HYDROGRAPH AT	DD70AR	84.	12.33	19.	6.	2.	.27
+ HYDROGRAPH AT	DD582	22.	14.83	17.	9.	3.	27.39
+ ROUTED TO	D5870A	22.	15.33	17.	9.	3.	27.39
+ 2 COMBINED AT	CPD70A	231.	12.67	49.	20.	7.	27.65
+ ROUTED TO	D70A70	35.	14.75	27.	13.	5.	27.65
+ HYDROGRAPH AT	D70	331.	12.17	25.	7.	2.	.26
+ DIVERSION TO	RD70	1.	9.00	1.	0.	0.	.26
+ HYDROGRAPH AT	DD70RE	331.	12.17	25.	7.	2.	.26
+ 3 COMBINED AT	CPD70	286.	12.17	187.	92.	33.	34.09
+ ROUTED TO	SRD70	135.	20.42	131.	82.	30.	34.09
+ ROUTED TO	D70D71	135.	20.50	131.	82.	30.	34.09
+ HYDROGRAPH AT	D71	821.	12.17	104.	35.	12.	.48
+ DIVERSION TO	RD71	821.	12.17	87.	24.	8.	.48
+ HYDROGRAPH AT	DD71RE	174.	12.50	34.	11.	4.	.48
+ HYDROGRAPH AT	DD59SE	232.	15.25	178.	78.	27.	32.37
+ ROUTED TO	D59D71	232.	15.00	178.	78.	27.	32.37
+ 3 COMBINED AT	CPD71	281.	16.67	263.	158.	57.	39.55
+ ROUTED TO	D71D72	281.	16.67	263.	158.	57.	39.55
+ HYDROGRAPH AT	D72	883.	12.25	114.	39.	13.	.52
+ DIVERSION TO	RD72	883.	12.25	97.	27.	9.	.52
+ HYDROGRAPH AT	DD72RE	172.	12.58	35.	12.	4.	.52
+ 3 COMBINED AT	CPD72	322.	16.67	297.	174.	63.	40.42
+ ROUTED TO	D72D73	322.	16.67	297.	174.	63.	40.42
+ HYDROGRAPH AT	D73	698.	12.33	91.	30.	10.	.52
+ DIVERSION TO	RD73	698.	12.33	68.	19.	6.	.52
+ HYDROGRAPH AT	DD73RE	324.	12.50	35.	11.	4.	.52
+ HYDROGRAPH AT	DD621	46.	16.58	34.	16.	6.	35.11
+ ROUTED TO	D62D73	45.	16.92	34.	16.	6.	35.11
+ 3 COMBINED AT	CPD73	356.	16.75	323.	188.	68.	47.23
+ ROUTED TO	D73D78	355.	16.92	323.	187.	68.	47.23
+ HYDROGRAPH AT	D78	688.	12.42	115.	39.	13.	.53
+ DIVERSION TO	RD78	688.	12.42	101.	28.	9.	.53
+ HYDROGRAPH AT	DD78RE	149.	13.00	33.	11.	4.	.53
+ HYDROGRAPH AT	DD741	191.	13.08	74.	40.	15.	39.89
+ ROUTED TO	D74D78	143.	13.83	72.	40.	15.	39.89
+ 3 COMBINED AT	CPD78	416.	14.25	389.	226.	82.	52.54
ROUTED TO							

+	D7879B	415.	14.42	388.	226.	82.	52.54
+ HYDROGRAPH AT	D79B	538.	12.17	64.	21.	7.	.32
+ DIVERSION TO	RD79B	538.	12.17	51.	14.	5.	.32
+ HYDROGRAPH AT	DD79BR	203.	12.42	23.	7.	2.	.32
+ 3 COMBINED AT	CPD79B	531.	14.75	449.	250.	90.	54.90
+ ROUTED TO	D79B80	533.	14.75	449.	250.	90.	54.90
+ HYDROGRAPH AT	D80	257.	12.08	22.	7.	2.	.13
+ DIVERSION TO	RD80	257.	12.08	17.	5.	2.	.13
+ HYDROGRAPH AT	DD80RE	124.	12.25	8.	3.	1.	.13
+ 2 COMBINED AT	CPD80	536.	14.75	451.	251.	91.	55.03
+ HYDROGRAPH AT	D52	658.	12.42	82.	24.	8.	.59
+ DIVERSION TO	RD52	12.	10.67	7.	2.	1.	.59
+ HYDROGRAPH AT	DD52RE	658.	12.42	81.	22.	7.	.59
+ ROUTED TO	D52D66	441.	13.08	81.	22.	7.	.59
+ HYDROGRAPH AT	D66	440.	12.25	49.	16.	5.	.30
+ DIVERSION TO	RD66	440.	12.25	49.	16.	5.	.30
+ HYDROGRAPH AT	DD66RE	0.	.00	0.	0.	0.	.30
+ 2 COMBINED AT	CPD66	441.	13.08	81.	22.	7.	.89
+ ROUTED TO	D66D67	435.	13.17	81.	22.	7.	.89
+ HYDROGRAPH AT	D67	467.	12.25	52.	17.	6.	.32
+ DIVERSION TO	RD67	317.	12.08	24.	7.	2.	.32
+ HYDROGRAPH AT	DD67RE	467.	12.25	34.	10.	3.	.32
+ 2 COMBINED AT	CPD67	550.	12.33	114.	31.	10.	1.20
+ HYDROGRAPH AT	D76	171.	12.25	19.	6.	2.	.11
+ DIVERSION TO	RD76	128.	12.08	9.	3.	1.	.11
+ HYDROGRAPH AT	DD76RE	171.	12.25	12.	3.	1.	.11
+ ROUTED TO	D76D77	143.	12.33	12.	3.	1.	.11
+ HYDROGRAPH AT	D77	630.	12.17	65.	22.	7.	.36
+ 2 COMBINED AT	CPD77	665.	12.25	76.	25.	8.	.47
+ HYDROGRAPH AT	B01	194.	12.08	16.	5.	2.	.10
+ 5 COMBINED AT	DUMMY	8406.	12.50	1976.	732.	262.	106.59
+ HYDROGRAPH AT	B03	581.	12.17	61.	20.	7.	.34
+ DIVERSION TO	RB03	581.	12.17	56.	15.	5.	.34
+ HYDROGRAPH AT	DB03RE	40.	12.83	13.	5.	2.	.34
+ ROUTED TO	B03B05	32.	13.25	13.	5.	2.	.34
+ HYDROGRAPH AT	B05	610.	12.25	74.	25.	8.	.40
+ DIVERSION TO	RB05	588.	12.25	47.	13.	4.	.40
+ HYDROGRAPH AT	DB05RE	539.	12.33	38.	11.	4.	.40
+ 2 COMBINED AT	CPB05	537.	12.33	50.	16.	5.	.73
+ ROUTED TO	B05B06	281.	12.58	48.	16.	5.	.73
HYDROGRAPH AT							

+		B06	622.	12.17	64.	20.	7.	.40
+	DIVERSION TO	RB06	135.	11.92	16.	5.	2.	.40
+	HYDROGRAPH AT	DB06RE	622.	12.17	56.	15.	5.	.40
+	2 COMBINED AT	CPB06	620.	12.17	102.	31.	10.	1.13
+	ROUTED TO	B06B15	423.	12.67	100.	31.	10.	1.13
+	HYDROGRAPH AT	B07	309.	12.33	32.	9.	3.	.25
+	DIVERSION TO	RB07	309.	12.33	32.	9.	3.	.25
+	HYDROGRAPH AT	DB07RE	0.	.00	0.	0.	0.	.25
+	ROUTED TO	B07B09	0.	.00	0.	0.	0.	.25
+	HYDROGRAPH AT	B08	576.	12.08	48.	16.	5.	.27
+	DIVERSION TO	RB08	576.	12.08	45.	13.	4.	.27
+	HYDROGRAPH AT	DB08RE	22.	13.08	9.	3.	1.	.27
+	ROUTED TO	B08B09	19.	13.50	9.	3.	1.	.27
+	HYDROGRAPH AT	B09	769.	12.17	65.	20.	7.	.43
+	DIVERSION TO	RB09	699.	12.08	36.	10.	3.	.43
+	HYDROGRAPH AT	DB09RE	616.	12.25	35.	10.	3.	.43
+	3 COMBINED AT	CPB09	614.	12.25	43.	13.	4.	.95
+	ROUTED TO	SRB11	20.	14.75	19.	12.	4.	.95
+	ROUTED TO	B09B11	20.	15.58	19.	12.	4.	.95
+	HYDROGRAPH AT	B10	307.	12.08	27.	9.	3.	.16
+	DIVERSION TO	RB10	307.	12.08	27.	8.	3.	.16
+	HYDROGRAPH AT	DB10RE	3.	18.00	2.	1.	0.	.16
+	ROUTED TO	B1011A	3.	18.67	2.	1.	0.	.16
+	ROUTED TO	B1011B	3.	20.42	2.	1.	0.	.16
+	HYDROGRAPH AT	B11	1163.	12.25	119.	36.	12.	.82
+	DIVERSION TO	RB11	43.	11.50	16.	6.	2.	.82
+	HYDROGRAPH AT	DB11RE	1163.	12.25	114.	31.	10.	.82
+	3 COMBINED AT	CPB11	1160.	12.25	127.	43.	15.	1.93
+	ROUTED TO	B11B12	971.	12.33	125.	43.	15.	1.93
+	HYDROGRAPH AT	B12	415.	12.33	45.	13.	4.	.38
+	DIVERSION TO	RB12	4.	9.58	3.	1.	0.	.38
+	HYDROGRAPH AT	DB12RE	415.	12.33	45.	12.	4.	.38
+	2 COMBINED AT	CPB12	1382.	12.33	167.	54.	19.	2.31
+	ROUTED TO	B12B14	1348.	12.42	167.	54.	19.	2.31
+	HYDROGRAPH AT	B13	618.	12.25	58.	16.	5.	.49
+	DIVERSION TO	RB13	618.	12.25	45.	12.	4.	.49
+	HYDROGRAPH AT	DB13RE	287.	12.50	17.	5.	2.	.49
+	ROUTED TO	B13B14	129.	12.83	16.	5.	2.	.49
+	HYDROGRAPH AT	B14	456.	12.25	49.	15.	5.	.33
+	DIVERSION TO	RB14	456.	12.25	46.	12.	4.	.33
	HYDROGRAPH AT							

+	DB14RE	27.	12.92	8.	3.	1.	.33
+ 3 COMBINED AT	CPB14	1348.	12.42	190.	62.	21.	3.13
+ ROUTED TO	B14B15	1156.	12.50	187.	61.	21.	3.13
+ HYDROGRAPH AT	B15	557.	12.25	66.	22.	7.	.38
+ 3 COMBINED AT	CPB15	1705.	12.50	343.	111.	38.	4.64
+ HYDROGRAPH AT	B16	207.	12.08	18.	6.	2.	.11
+ DIVERSION TO	RB16	207.	12.08	12.	3.	1.	.11
+ HYDROGRAPH AT	DB16RE	112.	12.25	7.	2.	1.	.11
+ ROUTED TO	B16B17	37.	12.33	7.	2.	1.	.11
+ HYDROGRAPH AT	B17	532.	12.25	59.	19.	6.	.33
+ DIVERSION TO	RB17	504.	12.17	33.	9.	3.	.33
+ HYDROGRAPH AT	DB17RE	532.	12.25	34.	10.	3.	.33
+ 2 COMBINED AT	CPB17	552.	12.25	41.	12.	4.	.45
+ ROUTED TO	B17B18	429.	12.42	41.	12.	4.	.45
+ HYDROGRAPH AT	B18	392.	12.25	43.	13.	4.	.28
+ DIVERSION TO	RB18	392.	12.25	38.	10.	3.	.28
+ HYDROGRAPH AT	DB18RE	46.	12.75	9.	3.	1.	.28
+ 2 COMBINED AT	CPB18	429.	12.42	50.	15.	5.	.73
+ ROUTED TO	B18B19	280.	12.58	48.	15.	5.	.73
+ HYDROGRAPH AT	B19	239.	12.08	21.	7.	2.	.12
+ 2 COMBINED AT	CPB19	296.	12.58	66.	22.	7.	.85
+ HYDROGRAPH AT	B20	416.	12.17	40.	13.	4.	.23
+ 4 COMBINED AT	DUMMY	9474.	12.50	2166.	784.	279.	112.30
+ HYDROGRAPH AT	B21	337.	12.25	38.	12.	4.	.24
+ DIVERSION TO	RB21	337.	12.25	38.	11.	4.	.24
+ HYDROGRAPH AT	DB21RE	4.	17.25	3.	1.	0.	.24
+ ROUTED TO	B21B22	4.	17.75	3.	1.	0.	.24
+ HYDROGRAPH AT	B22	397.	12.17	39.	13.	4.	.22
+ DIVERSION TO	RB22	4.	4.33	3.	1.	0.	.22
+ HYDROGRAPH AT	DB22RE	397.	12.17	39.	12.	4.	.22
+ 2 COMBINED AT	CPB22	396.	12.17	38.	13.	4.	.46
+ HYDROGRAPH AT	B23	362.	12.33	44.	13.	4.	.27
+ DIVERSION TO	RB23	4.	8.42	3.	1.	0.	.27
+ HYDROGRAPH AT	DB23RE	362.	12.33	44.	12.	4.	.27
+ ROUTED TO	B23B24	341.	12.42	44.	12.	4.	.27
+ HYDROGRAPH AT	B24	290.	12.17	28.	9.	3.	.19
+ DIVERSION TO	RB24	290.	12.17	23.	6.	2.	.19
+ HYDROGRAPH AT	DB24RE	77.	12.42	8.	3.	1.	.19
+ 2 COMBINED AT	CPB24	414.	12.42	51.	15.	5.	.46
+ ROUTED TO	B24B25	331.	12.67	51.	15.	5.	.46
HYDROGRAPH AT							

+	B25	346.	12.17	31.	10.	3.	.20
+ DIVERSION TO	RB25	306.	12.08	19.	5.	2.	.20
+ HYDROGRAPH AT	DB25RE	288.	12.25	16.	5.	2.	.20
+ 2 COMBINED AT	CPB25	361.	12.25	66.	20.	7.	.66
+ HYDROGRAPH AT	B26	487.	12.17	48.	15.	5.	.31
+ DIVERSION TO	RB26	487.	12.17	32.	9.	3.	.31
+ HYDROGRAPH AT	DB26RE	340.	12.33	21.	6.	2.	.31
+ ROUTED TO	B26B27	127.	13.00	21.	6.	2.	.31
+ HYDROGRAPH AT	B27	534.	12.25	65.	21.	7.	.36
+ 2 COMBINED AT	CPB27	533.	12.25	83.	28.	9.	.67
+ 4 COMBINED AT	DUMMY	9934.	12.50	2298.	827.	294.	114.09
+ HYDROGRAPH AT	B76	421.	12.33	46.	14.	5.	.39
+ DIVERSION TO	RB76	421.	12.33	46.	14.	5.	.39
+ HYDROGRAPH AT	DB76RE	0.	.00	0.	0.	0.	.39
+ ROUTED TO	B7676A	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	B75	553.	12.25	49.	14.	5.	.42
+ DIVERSION TO	RB75	553.	12.25	49.	14.	5.	.42
+ HYDROGRAPH AT	DB75RE	0.	.00	0.	0.	0.	.42
+ ROUTED TO	B75A75	0.	.00	0.	0.	0.	.42
+ HYDROGRAPH AT	B75A	414.	12.25	43.	13.	4.	.28
+ 2 COMBINED AT	CPB75A	413.	12.25	43.	13.	4.	.70
+ ROUTED TO	B7576A	379.	12.33	42.	13.	4.	.70
+ HYDROGRAPH AT	B76A	528.	12.17	46.	15.	5.	.31
+ 3 COMBINED AT	CPB76A	773.	12.17	88.	27.	9.	1.40
+ ROUTED TO	B76B78	773.	12.17	88.	27.	9.	1.40
+ HYDROGRAPH AT	B77	1204.	12.33	136.	40.	13.	.82
+ DIVERSION TO	RB77	1034.	12.17	58.	16.	5.	.82
+ HYDROGRAPH AT	DB77RE	1204.	12.33	89.	24.	8.	.82
+ ROUTED TO	B77B78	619.	13.00	86.	24.	8.	.82
+ HYDROGRAPH AT	B78	595.	12.58	102.	32.	11.	.57
+ DIVERSION TO	RB78	510.	12.42	48.	14.	5.	.57
+ HYDROGRAPH AT	DB78RE	595.	12.58	66.	19.	6.	.57
+ 2 COMBINED AT	CPB78A	884.	12.92	152.	43.	14.	1.39
+ DIVERSION TO	RB78BN	680.	12.75	37.	9.	3.	1.39
+ HYDROGRAPH AT	DB78BN	884.	12.92	116.	33.	11.	1.39
+ 2 COMBINED AT	CPB78B	958.	12.92	195.	60.	20.	2.79
+ ROUTED TO	B78B79	658.	13.58	194.	60.	20.	2.79
+ HYDROGRAPH AT	B79	1097.	12.33	133.	41.	14.	.85
+ DIVERSION TO	RB79	836.	12.17	64.	18.	6.	.85
+ HYDROGRAPH AT	DB79RE	1097.	12.33	84.	23.	8.	.85
2 COMBINED AT							

+	CPB79	1122.	12.33	277.	83.	28.	3.64
+ ROUTED TO	B79B80	1004.	12.50	276.	83.	28.	3.64
+ HYDROGRAPH AT	B80	363.	12.25	39.	12.	4.	.27
+ DIVERSION TO	RB80	363.	12.25	39.	11.	4.	.27
+ HYDROGRAPH AT	DB80RE	5.	15.33	4.	1.	0.	.27
+ 2 COMBINED AT	CPB80	1004.	12.50	278.	84.	28.	3.91
+ ROUTED TO	SRB80	896.	12.58	278.	84.	28.	3.91
+ ROUTED TO	B80B81	746.	12.92	276.	84.	28.	3.91
+ HYDROGRAPH AT	B81	394.	12.25	40.	12.	4.	.25
+ DIVERSION TO	RB81	7.	10.75	3.	1.	0.	.25
+ HYDROGRAPH AT	DB81RE	394.	12.25	40.	11.	4.	.25
+ 2 COMBINED AT	CPB81	767.	12.92	308.	94.	32.	4.16
+ ROUTED TO	SRB81	692.	13.08	307.	94.	32.	4.16
+ ROUTED TO	B81B84	683.	13.17	307.	94.	32.	4.16
+ HYDROGRAPH AT	B82	220.	12.25	22.	7.	2.	.15
+ DIVERSION TO	RB82	220.	12.25	21.	6.	2.	.15
+ HYDROGRAPH AT	DB82RE	7.	13.33	3.	1.	0.	.15
+ ROUTED TO	B82B83	6.	13.67	3.	1.	0.	.15
+ HYDROGRAPH AT	B83	477.	12.08	45.	15.	5.	.22
+ DIVERSION TO	RB83	18.	10.83	8.	3.	1.	.22
+ HYDROGRAPH AT	DB83RE	477.	12.08	43.	12.	4.	.22
+ 2 COMBINED AT	CPB83	476.	12.08	45.	13.	4.	.37
+ ROUTED TO	SRB83	28.	12.83	25.	13.	4.	.37
+ ROUTED TO	B83B84	28.	13.00	25.	13.	4.	.37
+ HYDROGRAPH AT	B71	1005.	12.42	140.	44.	15.	.96
+ DIVERSION TO	RB71	1005.	12.42	136.	37.	12.	.96
+ HYDROGRAPH AT	DB71RE	39.	13.92	18.	7.	2.	.96
+ ROUTED TO	B71B72	27.	16.42	17.	7.	2.	.96
+ HYDROGRAPH AT	B72	1241.	12.42	166.	51.	17.	1.12
+ DIVERSION TO	RB72	1187.	12.33	90.	25.	8.	1.12
+ HYDROGRAPH AT	DB72RE	1148.	12.50	94.	26.	9.	1.12
+ 2 COMBINED AT	CPB72	1146.	12.50	102.	33.	11.	2.08
+ ROUTED TO	B72B74	962.	12.58	101.	33.	11.	2.08
+ HYDROGRAPH AT	B73	530.	12.17	55.	18.	6.	.30
+ DIVERSION TO	RB73	530.	12.17	45.	13.	4.	.30
+ HYDROGRAPH AT	DB73RE	160.	12.42	18.	6.	2.	.30
+ ROUTED TO	SRB73	5.	20.00	5.	4.	2.	.30
+ ROUTED TO	B73B74	5.	21.08	5.	4.	2.	.30
+ HYDROGRAPH AT	B74	216.	12.08	22.	7.	2.	.11
+ DIVERSION TO	RB74	67.	11.83	8.	2.	1.	.11
HYDROGRAPH AT							

+	DB74RE	216.	12.08	17.	5.	2.	.11
+ 3 COMBINED AT	CPB74	980.	12.58	118.	41.	14.	2.49
+ ROUTED TO	SRB74	94.	13.50	64.	35.	13.	2.49
+ ROUTED TO	B74B84	93.	13.58	63.	35.	13.	2.49
+ HYDROGRAPH AT	B84	391.	12.17	44.	14.	5.	.22
+ DIVERSION TO	RB84	5.	6.83	4.	1.	0.	.22
+ HYDROGRAPH AT	DB84RE	391.	12.17	44.	13.	4.	.22
+ 4 COMBINED AT	CPB84	772.	13.25	408.	146.	51.	7.24
+ ROUTED TO	SRB84	380.	15.25	306.	135.	49.	7.24
+ HYDROGRAPH AT	B28	1073.	12.42	144.	45.	15.	.96
+ DIVERSION TO	RB28	9.	1.08	1.	0.	0.	.96
+ HYDROGRAPH AT	DB28RE	1073.	12.42	144.	45.	15.	.96
+ HYDROGRAPH AT	B29	302.	12.17	38.	13.	4.	.18
+ DIVERSION TO	RB29	302.	12.17	28.	8.	3.	.18
+ HYDROGRAPH AT	DB29RE	154.	12.42	15.	5.	2.	.18
+ HYDROGRAPH AT	B30	322.	12.17	39.	13.	4.	.17
+ DIVERSION TO	RB30	276.	12.08	22.	6.	2.	.17
+ HYDROGRAPH AT	DB30RE	297.	12.25	23.	7.	2.	.17
+ ROUTED TO	SRB30	31.	12.83	22.	7.	2.	.17
+ HYDROGRAPH AT	B31	1013.	12.25	110.	35.	12.	.68
+ DIVERSION TO	RB31	712.	12.08	46.	14.	5.	.68
+ HYDROGRAPH AT	DB31RE	1013.	12.25	77.	22.	7.	.68
+ ROUTED TO	SRB31	42.	13.42	38.	21.	7.	.68
+ 2 COMBINED AT	DUMMY	72.	13.08	60.	28.	9.	.85
+ 5 COMBINED AT	DUMMY	10718.	12.50	2606.	964.	344.	123.31
+ HYDROGRAPH AT	B32	961.	12.33	127.	40.	13.	.82
+ DIVERSION TO	RB32	961.	12.33	90.	25.	8.	.82
+ HYDROGRAPH AT	DB32RE	598.	12.58	51.	15.	5.	.82
+ ROUTED TO	SRB32	0.	.00	0.	0.	0.	.82
+ ROUTED TO	B32B33	0.	.00	0.	0.	0.	.82
+ HYDROGRAPH AT	B33	579.	12.08	51.	17.	6.	.28
+ DIVERSION TO	RB33	579.	12.08	51.	16.	5.	.28
+ HYDROGRAPH AT	DB33RE	4.	20.83	3.	1.	0.	.28
+ 2 COMBINED AT	CPB33	4.	20.83	3.	1.	0.	1.10
+ HYDROGRAPH AT	B34	251.	12.08	20.	6.	2.	.13
+ DIVERSION TO	RB34	12.	11.50	4.	1.	0.	.13
+ HYDROGRAPH AT	DB34RE	251.	12.08	18.	5.	2.	.13
+ HYDROGRAPH AT	B38	626.	12.17	60.	20.	7.	.34
+ DIVERSION TO	RB38	626.	12.17	60.	20.	7.	.34
+ HYDROGRAPH AT	DB38RE	1.	22.42	0.	0.	0.	.34
ROUTED TO							

+	B38B39	1.	25.17	0.	0.	0.	.34
+ HYDROGRAPH AT	B37	838.	12.17	86.	28.	9.	.47
+ DIVERSION TO	RB37	838.	12.17	86.	28.	9.	.47
+ HYDROGRAPH AT	DB37RE	0.	.00	0.	0.	0.	.47
+ ROUTED TO	B37B39	0.	.00	0.	0.	0.	.47
+ HYDROGRAPH AT	B39	1181.	12.25	130.	42.	14.	.77
+ DIVERSION TO	RB39	1181.	12.25	130.	41.	14.	.77
+ HYDROGRAPH AT	DB39RE	9.	23.58	2.	1.	0.	.77
+ 3 COMBINED AT	CPB39	9.	23.83	2.	0.	0.	1.58
+ ROUTED TO	SRB39	0.	.00	0.	0.	0.	1.58
+ HYDROGRAPH AT	B35	232.	12.17	18.	5.	2.	.14
+ DIVERSION TO	RB35	1.	4.67	1.	0.	0.	.14
+ HYDROGRAPH AT	DB35RE	232.	12.17	18.	5.	2.	.14
+ HYDROGRAPH AT	B36	123.	12.08	8.	2.	1.	.06
+ DIVERSION TO	RB36	26.	11.75	1.	0.	0.	.06
+ HYDROGRAPH AT	DB36RE	123.	12.08	7.	2.	1.	.06
+ 4 COMBINED AT	DUMMY	583.	12.08	42.	12.	4.	1.91
+ 3 COMBINED AT	DUMMY	10734.	12.50	2631.	970.	346.	126.33
+ HYDROGRAPH AT	L41	272.	12.33	26.	7.	2.	.25
+ DIVERSION TO	DL41S	171.	12.33	18.	5.	2.	.25
+ HYDROGRAPH AT	DL41SE	101.	12.33	8.	2.	1.	.25
+ ROUTED TO	L41L42	85.	12.50	8.	2.	1.	.25
+ HYDROGRAPH AT	L42	584.	12.50	70.	19.	6.	.74
+ 2 COMBINED AT	CPL42	668.	12.50	79.	21.	7.	.99
+ DIVERSION TO	DL421S	344.	12.50	40.	10.	3.	.99
+ HYDROGRAPH AT	DL421	324.	12.50	39.	10.	3.	.99
+ DIVERSION TO	DL422S	69.	12.50	10.	3.	1.	.99
+ HYDROGRAPH AT	DL422	255.	12.50	29.	8.	3.	.99
+ ROUTED TO	L42L43	203.	12.92	29.	8.	3.	.99
+ HYDROGRAPH AT	L43	979.	12.42	97.	25.	8.	1.00
+ DIVERSION TO	RL43	2.	7.33	2.	1.	0.	1.00
+ HYDROGRAPH AT	DL43RE	979.	12.42	97.	25.	8.	1.00
+ HYDROGRAPH AT	DL381	23.	12.67	1.	1.	0.	4.90
+ ROUTED TO	L38L43	5.	13.50	1.	1.	0.	4.90
+ 3 COMBINED AT	CPL43	1052.	12.42	123.	32.	11.	6.89
+ DIVERSION TO	DL431S	4.	12.42	0.	0.	0.	6.89
+ HYDROGRAPH AT	DL431	1048.	12.42	123.	32.	11.	6.89
+ DIVERSION TO	DL432S	22.	12.42	2.	1.	0.	6.89
+ HYDROGRAPH AT	DL432	1025.	12.42	121.	32.	11.	6.89
+ ROUTED TO	L43L44	835.	12.58	121.	32.	11.	6.89
HYDROGRAPH AT							

+		L44	855.	12.17	106.	37.	12.	.48
+	DIVERSION TO	RL44	855.	12.17	84.	24.	8.	.48
+	HYDROGRAPH AT	DL44RE	304.	12.42	40.	13.	4.	.48
+	HYDROGRAPH AT	DL382	63.	12.67	12.	5.	2.	4.90
+	ROUTED TO	L38L44	20.	14.00	11.	5.	2.	4.90
+	HYDROGRAPH AT	DL391	159.	13.08	63.	23.	8.	18.45
+	ROUTED TO	L39L44	139.	13.83	61.	23.	8.	18.45
+	4 COMBINED AT	CPL44	905.	12.58	194.	64.	21.	20.92
+	DIVERSION TO	DL441S	404.	12.58	82.	24.	8.	20.92
+	HYDROGRAPH AT	DL441	501.	12.58	112.	40.	13.	20.92
+	DIVERSION TO	DL442S	64.	12.58	13.	4.	1.	20.92
+	HYDROGRAPH AT	DL442	437.	12.58	98.	37.	12.	20.92
+	ROUTED TO	L44B40	389.	12.67	98.	37.	12.	20.92
+	HYDROGRAPH AT	B40	854.	12.17	105.	36.	12.	.51
+	DIVERSION TO	RB40	854.	12.17	66.	19.	6.	.51
+	HYDROGRAPH AT	DB40RE	681.	12.33	56.	17.	6.	.51
+	HYDROGRAPH AT	DL392	12.	13.08	5.	2.	1.	18.45
+	ROUTED TO	L39B40	9.	14.75	5.	2.	1.	18.45
+	HYDROGRAPH AT	DD681	103.	13.42	38.	13.	4.	18.95
+	ROUTED TO	D68B40	88.	13.75	37.	13.	4.	18.95
+	4 COMBINED AT	CPB40	757.	12.33	179.	65.	22.	21.92
+	DIVERSION TO	DB401S	482.	12.33	105.	37.	12.	21.92
+	HYDROGRAPH AT	DB401	275.	12.33	74.	28.	9.	21.92
+	DIVERSION TO	DB402S	83.	12.33	30.	12.	4.	21.92
+	HYDROGRAPH AT	DB402	192.	12.33	45.	16.	5.	21.92
+	ROUTED TO	B40B41	124.	13.08	44.	16.	5.	21.92
+	HYDROGRAPH AT	B41	995.	12.42	144.	45.	15.	.95
+	DIVERSION TO	RB41	892.	12.33	75.	21.	7.	.95
+	HYDROGRAPH AT	DB41RE	992.	12.50	85.	24.	8.	.95
+	HYDROGRAPH AT	DD682	9.	13.42	3.	1.	0.	18.95
+	ROUTED TO	D68B41	6.	14.92	3.	1.	0.	18.95
+	HYDROGRAPH AT	DD691	21.	15.83	16.	7.	3.	33.56
+	ROUTED TO	D69B41	21.	16.25	16.	7.	3.	33.56
+	4 COMBINED AT	CPB41	1750.	12.50	181.	62.	21.	37.49
+	DIVERSION TO	DB41S	768.	12.58	112.	39.	13.	37.49
+	HYDROGRAPH AT	DB41SE	42.	12.58	5.	2.	1.	37.49
+	ROUTED TO	B41B43	30.	12.75	5.	2.	1.	37.49
+	HYDROGRAPH AT	B43	701.	12.42	118.	40.	14.	.54
+	DIVERSION TO	RB43	701.	12.42	101.	28.	9.	.54
+	HYDROGRAPH AT	DB43RE	189.	12.92	37.	12.	4.	.54
	HYDROGRAPH AT							

+	DD692	17.	15.83	13.	6.	2.	33.56
+ ROUTED TO	D69B43	16.	17.67	12.	6.	2.	33.56
+ 3 COMBINED AT	CPB43	387.	13.42	70.	28.	10.	38.03
+ ROUTED TO	B43B45	46.	14.42	32.	15.	5.	38.03
+ HYDROGRAPH AT	L40	675.	12.33	78.	23.	8.	.61
+ DIVERSION TO	RL40	675.	12.33	77.	21.	7.	.61
+ HYDROGRAPH AT	DL40RE	10.	15.08	7.	2.	1.	.61
+ ROUTED TO	L40L45	9.	16.08	6.	2.	1.	.61
+ HYDROGRAPH AT	L45	616.	12.33	65.	19.	6.	.50
+ DIVERSION TO	RL45	616.	12.33	64.	17.	6.	.50
+ HYDROGRAPH AT	DL45RE	11.	14.33	6.	2.	1.	.50
+ 2 COMBINED AT	CPL45	16.	16.08	11.	4.	1.	1.11
+ ROUTED TO	L45L46	15.	16.33	11.	4.	1.	1.11
+ HYDROGRAPH AT	L46	513.	12.33	47.	12.	4.	.49
+ HYDROGRAPH AT	DL41SE	171.	12.33	18.	5.	2.	.25
+ ROUTED TO	L41L46	135.	12.67	18.	5.	2.	.25
+ 3 COMBINED AT	CPL46	568.	12.33	70.	21.	7.	1.85
+ DIVERSION TO	DL461S	110.	12.33	24.	8.	3.	1.85
+ HYDROGRAPH AT	DL461	458.	12.33	46.	13.	5.	1.85
+ DIVERSION TO	DL462S	50.	12.33	6.	2.	1.	1.85
+ HYDROGRAPH AT	DL462	408.	12.33	41.	12.	4.	1.85
+ ROUTED TO	L46L47	361.	12.50	41.	12.	4.	1.85
+ HYDROGRAPH AT	L47	466.	12.42	47.	12.	4.	.50
+ DIVERSION TO	RL47	331.	12.25	15.	4.	1.	.50
+ HYDROGRAPH AT	DL47RE	466.	12.42	33.	9.	3.	.50
+ HYDROGRAPH AT	DL421	344.	12.50	40.	10.	3.	.99
+ ROUTED TO	L42L47	310.	12.67	40.	10.	3.	.99
+ 3 COMBINED AT	CPL47	1022.	12.50	112.	30.	10.	3.09
+ DIVERSION TO	DL471S	185.	12.33	34.	10.	3.	3.09
+ HYDROGRAPH AT	DL471	837.	12.50	78.	21.	7.	3.09
+ DIVERSION TO	DL472S	713.	12.50	68.	18.	6.	3.09
+ HYDROGRAPH AT	DL472	124.	12.50	10.	3.	1.	3.09
+ ROUTED TO	L47L48	90.	12.83	10.	3.	1.	3.09
+ HYDROGRAPH AT	L48	1032.	12.33	106.	30.	10.	1.00
+ DIVERSION TO	RL48	924.	12.25	52.	14.	5.	1.00
+ HYDROGRAPH AT	DL48RE	1006.	12.42	59.	16.	5.	1.00
+ HYDROGRAPH AT	DL422	69.	12.50	10.	3.	1.	.99
+ ROUTED TO	L42L48	54.	13.08	10.	3.	1.	.99
+ HYDROGRAPH AT	DL431	4.	12.42	0.	0.	0.	6.89
+ ROUTED TO	L43L48	2.	13.08	0.	0.	0.	6.89
4 COMBINED AT							

+	CPL48	1006.	12.42	79.	21.	7.	9.99
+ DIVERSION TO	DL481S	10.	12.42	0.	0.	0.	9.99
+ HYDROGRAPH AT	DL481	953.	12.42	72.	19.	6.	9.99
+ DIVERSION TO	DL482S	14.	12.42	1.	0.	0.	9.99
+ HYDROGRAPH AT	DL482	939.	12.42	72.	19.	6.	9.99
+ ROUTED TO	L48L49	580.	12.67	71.	19.	6.	9.99
+ HYDROGRAPH AT	L49	841.	12.17	106.	37.	12.	.47
+ DIVERSION TO	RL49	841.	12.17	88.	25.	8.	.47
+ HYDROGRAPH AT	DL49RE	208.	12.50	36.	12.	4.	.47
+ HYDROGRAPH AT	DL432	22.	12.42	2.	1.	0.	6.89
+ ROUTED TO	L43L49	10.	13.83	2.	1.	0.	6.89
+ HYDROGRAPH AT	DL441	404.	12.58	82.	24.	8.	20.92
+ ROUTED TO	L44L49	331.	12.75	81.	24.	8.	20.92
+ 4 COMBINED AT	CPL49	844.	12.75	167.	49.	16.	24.49
+ DIVERSION TO	DL491S	664.	12.75	142.	42.	14.	24.49
+ HYDROGRAPH AT	DL491	180.	12.75	25.	7.	2.	24.49
+ DIVERSION TO	DL492S	96.	12.75	17.	5.	2.	24.49
+ HYDROGRAPH AT	DL492	84.	12.75	8.	2.	1.	24.49
+ ROUTED TO	L49B44	66.	12.92	8.	2.	1.	24.49
+ HYDROGRAPH AT	B44	866.	12.17	107.	36.	12.	.52
+ DIVERSION TO	RB44	866.	12.17	88.	25.	8.	.52
+ HYDROGRAPH AT	DB44RE	223.	12.50	35.	11.	4.	.52
+ HYDROGRAPH AT	DL442	64.	12.58	13.	4.	1.	20.92
+ ROUTED TO	L44B44	46.	13.42	13.	4.	1.	20.92
+ HYDROGRAPH AT	DB401	482.	12.33	105.	37.	12.	21.92
+ ROUTED TO	B40B44	273.	13.25	105.	37.	12.	21.92
+ 4 COMBINED AT	CPB44	385.	13.33	143.	49.	16.	26.02
+ DIVERSION TO	DB441S	47.	13.33	18.	6.	2.	26.02
+ HYDROGRAPH AT	DB441	338.	13.33	125.	43.	14.	26.02
+ DIVERSION TO	DB442S	30.	13.33	11.	4.	1.	26.02
+ HYDROGRAPH AT	DB442	309.	13.33	115.	39.	13.	26.02
+ ROUTED TO	B44B45	296.	13.42	114.	39.	13.	26.02
+ HYDROGRAPH AT	B45	1129.	12.33	157.	53.	18.	.81
+ DIVERSION TO	RB45	1129.	12.33	113.	32.	11.	.81
+ HYDROGRAPH AT	DB45RE	744.	12.50	67.	21.	7.	.81
+ HYDROGRAPH AT	DB402	83.	12.33	30.	12.	4.	21.92
+ ROUTED TO	B40B45	68.	12.92	29.	12.	4.	21.92
+ HYDROGRAPH AT	DB41SE	768.	12.58	112.	39.	13.	37.49
+ ROUTED TO	B41B45	382.	13.50	104.	39.	13.	37.49
+ 5 COMBINED AT	CPB45	760.	13.50	294.	112.	38.	42.94
ROUTED TO							

+	B45B47	662.	14.17	287.	112.	38.	42.94
+ HYDROGRAPH AT	W21	599.	12.25	58.	18.	6.	.42
+ DIVERSION TO	RW21	599.	12.25	58.	16.	5.	.42
+ HYDROGRAPH AT	DW21RE	7.	16.25	5.	2.	1.	.42
+ ROUTED TO	W21L50	6.	18.08	4.	2.	1.	.42
+ HYDROGRAPH AT	L50	608.	12.25	63.	19.	6.	.50
+ DIVERSION TO	RL50	608.	12.25	63.	17.	6.	.50
+ HYDROGRAPH AT	DL50RE	7.	16.08	5.	2.	1.	.50
+ 2 COMBINED AT	CPL50	11.	18.00	9.	3.	1.	.92
+ ROUTED TO	L50L51	11.	18.17	9.	3.	1.	.92
+ HYDROGRAPH AT	L51	545.	12.33	55.	16.	5.	.50
+ DIVERSION TO	RL51	545.	12.33	52.	14.	5.	.50
+ HYDROGRAPH AT	DL51RE	27.	13.00	6.	2.	1.	.50
+ HYDROGRAPH AT	DL461	110.	12.33	24.	8.	3.	1.85
+ ROUTED TO	L46L51	107.	12.75	23.	8.	3.	1.85
+ 3 COMBINED AT	CPL51	127.	13.00	31.	13.	4.	3.27
+ ROUTED TO	L51L52	117.	13.17	31.	13.	4.	3.27
+ HYDROGRAPH AT	L52	499.	12.42	58.	17.	6.	.50
+ DIVERSION TO	RL52	499.	12.42	58.	16.	5.	.50
+ HYDROGRAPH AT	DL52RE	5.	16.58	4.	1.	0.	.50
+ HYDROGRAPH AT	DL462	50.	12.33	6.	2.	1.	1.85
+ ROUTED TO	L46L52	34.	12.92	6.	2.	1.	1.85
+ HYDROGRAPH AT	DL471	185.	12.33	34.	10.	3.	3.09
+ ROUTED TO	L47L52	185.	12.92	34.	10.	3.	3.09
+ 4 COMBINED AT	CPL52	327.	13.00	71.	25.	8.	5.00
+ DIVERSION TO	DL521S	28.	13.00	6.	2.	1.	5.00
+ HYDROGRAPH AT	DL521	299.	13.00	65.	23.	8.	5.00
+ DIVERSION TO	DL522S	14.	13.00	3.	1.	0.	5.00
+ HYDROGRAPH AT	DL522	285.	13.00	62.	22.	7.	5.00
+ ROUTED TO	L52L53	262.	13.25	61.	22.	7.	5.00
+ HYDROGRAPH AT	L53	1288.	12.33	155.	49.	16.	1.00
+ DIVERSION TO	RL53	1288.	12.33	152.	42.	14.	1.00
+ HYDROGRAPH AT	DL53RE	43.	13.92	21.	8.	3.	1.00
+ HYDROGRAPH AT	DL472	713.	12.50	68.	18.	6.	3.09
+ ROUTED TO	L47L53	490.	12.92	68.	18.	6.	3.09
+ HYDROGRAPH AT	DL481	10.	12.42	0.	0.	0.	9.99
+ ROUTED TO	L48L53	2.	13.92	0.	0.	0.	9.99
+ 4 COMBINED AT	CPL53	623.	13.00	122.	38.	13.	12.90
+ DIVERSION TO	DL531S	118.	13.00	12.	3.	1.	12.90
+ HYDROGRAPH AT	DL531	504.	13.00	110.	35.	12.	12.90
DIVERSION TO							

+	DL532S	14.	13.00	2.	0.	0.	12.90
+ HYDROGRAPH AT	DL532	490.	13.00	109.	35.	12.	12.90
+ ROUTED TO	L53L54	475.	13.17	108.	35.	12.	12.90
+ HYDROGRAPH AT	L54	865.	12.17	105.	36.	12.	.48
+ DIVERSION TO	RL54	865.	12.17	85.	24.	8.	.48
+ HYDROGRAPH AT	DL54RE	238.	12.42	38.	12.	4.	.48
+ HYDROGRAPH AT	DL482	14.	12.42	1.	0.	0.	9.99
+ ROUTED TO	L48L54	4.	14.17	1.	0.	0.	9.99
+ HYDROGRAPH AT	DL491	664.	12.75	142.	42.	14.	24.49
+ ROUTED TO	L49L54	600.	13.00	141.	42.	14.	24.49
+ 4 COMBINED AT	CPL54	1038.	13.08	256.	77.	26.	27.88
+ DIVERSION TO	DL54S	824.	13.08	171.	50.	17.	27.88
+ HYDROGRAPH AT	DL54SE	214.	13.08	85.	27.	9.	27.88
+ ROUTED TO	L54B46	210.	13.25	84.	27.	9.	27.88
+ HYDROGRAPH AT	B46	962.	12.17	121.	41.	14.	.54
+ DIVERSION TO	RB46	962.	12.17	97.	27.	9.	.54
+ HYDROGRAPH AT	DB46RE	274.	12.50	43.	14.	5.	.54
+ HYDROGRAPH AT	DL492	96.	12.75	17.	5.	2.	24.49
+ ROUTED TO	L49B46	69.	13.58	17.	5.	2.	24.49
+ HYDROGRAPH AT	DB441	47.	13.33	18.	6.	2.	26.02
+ ROUTED TO	B44B46	44.	13.58	17.	6.	2.	26.02
+ 4 COMBINED AT	CPB46	348.	13.50	145.	47.	16.	29.96
+ ROUTED TO	B46B47	343.	13.67	143.	47.	16.	29.96
+ HYDROGRAPH AT	B47	851.	12.17	104.	35.	12.	.50
+ DIVERSION TO	RB47	851.	12.17	86.	24.	8.	.50
+ HYDROGRAPH AT	DB47RE	246.	12.50	34.	11.	4.	.50
+ HYDROGRAPH AT	DB442	30.	13.33	11.	4.	1.	26.02
+ ROUTED TO	B44B47	24.	14.42	11.	4.	1.	26.02
+ 4 COMBINED AT	CPB47	970.	14.08	436.	164.	55.	47.37
+ ROUTED TO	B47B48	963.	14.25	434.	164.	55.	47.37
+ HYDROGRAPH AT	B48	755.	12.17	88.	30.	10.	.40
+ DIVERSION TO	RB48	755.	12.17	75.	21.	7.	.40
+ HYDROGRAPH AT	DB48RE	111.	12.58	27.	9.	3.	.40
+ 2 COMBINED AT	CPB48	985.	14.25	449.	169.	57.	47.77
+ ROUTED TO	B48B54	955.	14.42	442.	169.	57.	47.77
+ HYDROGRAPH AT	B42	673.	12.08	49.	15.	5.	.35
+ DIVERSION TO	RB42	4.	4.25	2.	1.	0.	.35
+ HYDROGRAPH AT	DB42RE	673.	12.08	49.	14.	5.	.35
+ ROUTED TO	B42B53	173.	14.58	48.	14.	5.	.35
+ HYDROGRAPH AT	B53	982.	12.58	160.	49.	16.	1.10
DIVERSION TO							

+		RB53	352.	12.17	38.	12.	4.	1.10
+	HYDROGRAPH AT	DB53RE	982.	12.58	139.	38.	13.	1.10
+	2 COMBINED AT	CPB53	982.	12.58	184.	52.	17.	1.45
+	ROUTED TO	B53B54	858.	12.83	180.	52.	17.	1.45
+	HYDROGRAPH AT	B49	639.	12.08	45.	14.	5.	.32
+	ROUTED TO	B49B50	348.	12.42	45.	14.	5.	.32
+	HYDROGRAPH AT	B02	673.	12.33	86.	27.	9.	.54
+	DIVERSION TO	RB02	492.	12.17	36.	10.	3.	.54
+	HYDROGRAPH AT	DB02RE	673.	12.33	60.	17.	6.	.54
+	HYDROGRAPH AT	B04	641.	12.08	49.	15.	5.	.31
+	DIVERSION TO	RB04	537.	12.00	25.	7.	2.	.31
+	HYDROGRAPH AT	DB04RE	598.	12.08	29.	8.	3.	.31
+	ROUTED TO	B04B02	205.	12.58	28.	8.	3.	.31
+	2 COMBINED AT	CPB02	692.	12.42	88.	25.	8.	.86
+	ROUTED TO	B02B50	563.	12.75	85.	25.	8.	.86
+	HYDROGRAPH AT	B50	1209.	12.17	97.	29.	10.	.67
+	3 COMBINED AT	CPB50	1300.	12.17	220.	67.	23.	1.85
+	ROUTED TO	B50B52	954.	12.42	220.	67.	23.	1.85
+	HYDROGRAPH AT	B51	1060.	12.17	89.	27.	9.	.61
+	ROUTED TO	B51B52	603.	12.67	89.	27.	9.	.61
+	HYDROGRAPH AT	B52	1478.	12.17	158.	52.	17.	.84
+	DIVERSION TO	RB52	1478.	12.17	134.	37.	12.	.84
+	HYDROGRAPH AT	DB52RE	304.	12.50	47.	15.	5.	.84
+	3 COMBINED AT	CPB52	1640.	12.50	350.	108.	36.	3.30
+	ROUTED TO	B52B54	1474.	12.75	349.	108.	36.	3.30
+	HYDROGRAPH AT	B54	1870.	12.25	199.	64.	21.	1.23
+	DIVERSION TO	RB54	1870.	12.25	145.	40.	13.	1.23
+	HYDROGRAPH AT	DB54RE	905.	12.33	80.	24.	8.	1.23
+	4 COMBINED AT	CPB54	1859.	12.83	856.	308.	105.	53.74
+	ROUTED TO	B54B57	1732.	13.08	846.	308.	105.	53.74
+	HYDROGRAPH AT	L55	517.	12.33	51.	14.	5.	.50
+	DIVERSION TO	RL55	517.	12.33	47.	12.	4.	.50
+	HYDROGRAPH AT	DL55RE	52.	12.83	6.	2.	1.	.50
+	DIVERSION TO	DL551S	0.	.00	0.	0.	0.	.50
+	HYDROGRAPH AT	DL551	52.	12.83	6.	2.	1.	.50
+	DIVERSION TO	DL552S	3.	12.83	0.	0.	0.	.50
+	HYDROGRAPH AT	DL552	50.	12.83	6.	2.	1.	.50
+	ROUTED TO	L55L56	22.	13.33	6.	2.	1.	.50
+	HYDROGRAPH AT	L56	959.	12.42	99.	27.	9.	1.00
+	DIVERSION TO	RL56	959.	12.42	99.	27.	9.	1.00
	HYDROGRAPH AT							

+		DL56RE	0.	.00	0.	0.	0.	1.00
+	HYDROGRAPH AT	DL521	28.	13.00	6.	2.	1.	5.00
+	ROUTED TO	L52L56	26.	13.25	6.	2.	1.	5.00
+	3 COMBINED AT	CPL56	37.	13.33	10.	4.	1.	6.50
+	DIVERSION TO	DL561S	0.	.00	0.	0.	0.	6.50
+	HYDROGRAPH AT	DL561	37.	13.33	10.	4.	1.	6.50
+	DIVERSION TO	DL562S	1.	13.33	0.	0.	0.	6.50
+	HYDROGRAPH AT	DL562	36.	13.33	10.	3.	1.	6.50
+	ROUTED TO	L56L57	31.	13.75	9.	3.	1.	6.50
+	HYDROGRAPH AT	L57	1341.	12.33	170.	55.	19.	1.00
+	DIVERSION TO	RL57	1341.	12.33	170.	52.	17.	1.00
+	HYDROGRAPH AT	DL57RE	17.	18.50	14.	4.	1.	1.00
+	HYDROGRAPH AT	DL522	14.	13.00	3.	1.	0.	5.00
+	ROUTED TO	L52L57	10.	15.00	3.	1.	0.	5.00
+	HYDROGRAPH AT	DL531	118.	13.00	12.	3.	1.	12.90
+	ROUTED TO	L53L57	90.	13.50	11.	3.	1.	12.90
+	4 COMBINED AT	CPL57	103.	13.50	19.	7.	2.	15.40
+	DIVERSION TO	DL571S	7.	13.50	1.	0.	0.	15.40
+	HYDROGRAPH AT	DL571	96.	13.50	18.	7.	2.	15.40
+	DIVERSION TO	DL572S	5.	13.50	1.	0.	0.	15.40
+	HYDROGRAPH AT	DL572	91.	13.50	17.	6.	2.	15.40
+	ROUTED TO	L57L58	83.	13.75	17.	6.	2.	15.40
+	HYDROGRAPH AT	L58	777.	12.17	99.	34.	11.	.44
+	DIVERSION TO	RL58	777.	12.17	95.	27.	9.	.44
+	HYDROGRAPH AT	DL58RE	47.	13.50	21.	7.	2.	.44
+	HYDROGRAPH AT	DL532	14.	13.00	2.	0.	0.	12.90
+	ROUTED TO	L53L58	8.	14.83	2.	0.	0.	12.90
+	HYDROGRAPH AT	DL54SE	824.	13.08	171.	50.	17.	27.88
+	ROUTED TO	L54L58	747.	13.50	168.	50.	17.	27.88
+	4 COMBINED AT	CPL58	736.	13.50	188.	57.	19.	30.82
+	DIVERSION TO	DL581S	424.	13.50	115.	35.	12.	30.82
+	HYDROGRAPH AT	DL581	312.	13.50	72.	22.	7.	30.82
+	DIVERSION TO	DL582S	32.	13.50	9.	3.	1.	30.82
+	HYDROGRAPH AT	DL582	280.	13.50	63.	19.	6.	30.82
+	ROUTED TO	L58B55	273.	13.75	63.	19.	6.	30.82
+	HYDROGRAPH AT	B55	946.	12.17	120.	41.	14.	.53
+	DIVERSION TO	RB55	946.	12.17	116.	33.	11.	.53
+	HYDROGRAPH AT	DB55RE	45.	13.83	23.	8.	3.	.53
+	2 COMBINED AT	CPB55	273.	13.75	71.	23.	8.	31.35
+	ROUTED TO	B55B56	248.	14.17	69.	23.	8.	31.35
	HYDROGRAPH AT							

+	B56	964.	12.67	193.	62.	21.	1.14
+ DIVERSION TO	RB56	964.	12.67	193.	55.	18.	1.14
+ HYDROGRAPH AT	DB56RE	35.	15.58	22.	8.	3.	1.14
+ 2 COMBINED AT	CPB56	248.	14.17	69.	25.	8.	32.49
+ ROUTED TO	B56B57	237.	14.25	67.	24.	8.	32.49
+ HYDROGRAPH AT	B57	1347.	12.33	147.	43.	14.	1.12
+ DIVERSION TO	RB57	1347.	12.33	147.	41.	14.	1.12
+ HYDROGRAPH AT	DB57RE	10.	17.58	7.	2.	1.	1.12
+ 3 COMBINED AT	CPB57	1732.	13.08	897.	327.	112.	59.47
+ ROUTED TO	B57B58	1606.	13.33	871.	321.	110.	59.47
+ HYDROGRAPH AT	B58	1416.	12.33	172.	52.	17.	1.20
+ DIVERSION TO	RB58	1416.	12.33	102.	28.	9.	1.20
+ HYDROGRAPH AT	DB58RE	1146.	12.50	85.	24.	8.	1.20
+ 2 COMBINED AT	CPB58	1652.	13.33	900.	337.	115.	60.66
+ ROUTED TO	B58B59	1590.	13.58	892.	337.	115.	60.66
+ HYDROGRAPH AT	B59	1039.	12.25	134.	44.	15.	.70
+ DIVERSION TO	RB59	1039.	12.25	120.	33.	11.	.70
+ HYDROGRAPH AT	DB59RE	139.	12.83	32.	11.	4.	.70
+ 2 COMBINED AT	CPB59	1590.	13.58	904.	342.	116.	61.36
+ ROUTED TO	B59B65	1562.	13.67	902.	341.	116.	61.36
+ HYDROGRAPH AT	B61	880.	12.50	132.	40.	13.	.96
+ DIVERSION TO	RB61	880.	12.50	128.	34.	11.	.96
+ HYDROGRAPH AT	DB61RE	42.	13.75	16.	6.	2.	.96
+ ROUTED TO	B61B62	31.	14.42	15.	6.	2.	.96
+ HYDROGRAPH AT	B62	422.	12.42	56.	16.	5.	.43
+ DIVERSION TO	RB62	422.	12.42	53.	14.	5.	.43
+ HYDROGRAPH AT	DB62RE	29.	13.33	7.	2.	1.	.43
+ 2 COMBINED AT	CPB62	39.	14.42	21.	8.	3.	1.39
+ ROUTED TO	B62B63	37.	14.67	21.	8.	3.	1.39
+ HYDROGRAPH AT	B63	286.	12.08	29.	10.	3.	.12
+ DIVERSION TO	RB63	286.	12.08	25.	7.	2.	.12
+ HYDROGRAPH AT	DB63RE	30.	12.42	9.	3.	1.	.12
+ 2 COMBINED AT	CPB63	44.	14.67	27.	11.	4.	1.51
+ ROUTED TO	SRB63	44.	14.67	27.	11.	4.	1.51
+ ROUTED TO	B63B65	42.	14.92	27.	11.	4.	1.51
+ HYDROGRAPH AT	B64	386.	12.17	46.	15.	5.	.23
+ DIVERSION TO	RB64	386.	12.17	42.	12.	4.	.23
+ HYDROGRAPH AT	DB64RE	32.	12.92	11.	4.	1.	.23
+ ROUTED TO	B64B65	25.	13.67	11.	4.	1.	.23
+ HYDROGRAPH AT	B65	543.	12.08	53.	18.	6.	.23
DIVERSION TO							

+	RB65	543.	12.08	42.	12.	4.	.23
+ HYDROGRAPH AT	DB65RE	177.	12.17	20.	6.	2.	.23
+ 4 COMBINED AT	CPB65	1574.	13.67	914.	347.	118.	63.34
+ ROUTED TO	B65B66	1475.	14.00	907.	347.	118.	63.34
+ HYDROGRAPH AT	S01	507.	12.17	54.	18.	6.	.27
+ DIVERSION TO	RS01	507.	12.17	54.	18.	6.	.27
+ HYDROGRAPH AT	DS01RE	0.	.00	0.	0.	0.	.27
+ DIVERSION TO	DS011S	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	DS011	0.	.00	0.	0.	0.	.27
+ DIVERSION TO	DS012S	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	DS012	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S01B66	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	B66	1307.	12.17	139.	46.	15.	.76
+ DIVERSION TO	RB66	1307.	12.17	136.	38.	13.	.76
+ HYDROGRAPH AT	DB66RE	38.	14.08	21.	7.	2.	.76
+ 3 COMBINED AT	CPB66	1475.	14.00	907.	348.	119.	64.37
+ ROUTED TO	B66B68	1374.	14.42	893.	347.	118.	64.37
+ HYDROGRAPH AT	DS011	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S01S02	0.	.00	0.	0.	0.	.27
+ HYDROGRAPH AT	S02	878.	12.25	96.	30.	10.	.61
+ DIVERSION TO	RS02	878.	12.25	95.	27.	9.	.61
+ HYDROGRAPH AT	DS02RE	18.	14.67	11.	4.	1.	.61
+ 2 COMBINED AT	CPS02	18.	14.67	11.	4.	1.	.87
+ DIVERSION TO	DS021S	4.	14.67	2.	1.	0.	.87
+ HYDROGRAPH AT	DS021	14.	14.67	9.	3.	1.	.87
+ DIVERSION TO	DS022S	7.	14.67	4.	1.	0.	.87
+ HYDROGRAPH AT	DS022	8.	14.67	5.	2.	1.	.87
+ ROUTED TO	S02B67	7.	15.00	5.	2.	1.	.87
+ HYDROGRAPH AT	B67	521.	12.25	60.	20.	7.	.33
+ DIVERSION TO	RB67	521.	12.25	59.	17.	6.	.33
+ HYDROGRAPH AT	DB67RE	15.	14.33	8.	3.	1.	.33
+ HYDROGRAPH AT	DS012	0.	.00	0.	0.	0.	.27
+ ROUTED TO	S01B67	0.	.00	0.	0.	0.	.27
+ 3 COMBINED AT	CPB67	19.	15.00	13.	5.	2.	1.20
+ ROUTED TO	B67B68	18.	15.08	13.	5.	2.	1.20
+ HYDROGRAPH AT	B68	1167.	12.25	128.	41.	14.	.74
+ DIVERSION TO	RB68	1167.	12.25	128.	41.	14.	.74
+ HYDROGRAPH AT	DB68RE	1.	24.08	0.	0.	0.	.74
+ 3 COMBINED AT	CPB68	1374.	14.42	893.	347.	118.	66.04
+ ROUTED TO	B68B69	1297.	16.08	871.	345.	118.	66.04
HYDROGRAPH AT							

+		B69	1621.	12.17	172.	57.	19.	.91
+	DIVERSION TO	RB69	1621.	12.17	172.	50.	17.	.91
+	HYDROGRAPH AT	DB69RE	28.	15.67	20.	7.	2.	.91
+	HYDROGRAPH AT	DS022	7.	14.67	4.	1.	0.	.87
+	ROUTED TO	S02B69	6.	17.00	4.	1.	0.	.87
+	3 COMBINED AT	CPB69	1297.	16.08	871.	345.	118.	66.94
+	ROUTED TO	B69B70	1291.	16.25	867.	344.	118.	66.94
+	HYDROGRAPH AT	B85	719.	12.17	94.	32.	11.	.41
+	DIVERSION TO	RB85	719.	12.17	84.	24.	8.	.41
+	HYDROGRAPH AT	DB85RE	79.	12.83	25.	9.	3.	.41
+	ROUTED TO	B85B86	59.	13.50	24.	9.	3.	.41
+	HYDROGRAPH AT	B86	928.	12.25	109.	35.	12.	.62
+	DIVERSION TO	RB86	623.	12.08	46.	14.	5.	.62
+	HYDROGRAPH AT	DB86RE	928.	12.25	77.	22.	7.	.62
+	2 COMBINED AT	CPB86	927.	12.25	98.	30.	10.	1.03
+	ROUTED TO	B86B89	724.	12.50	95.	30.	10.	1.03
+	HYDROGRAPH AT	B87	484.	12.17	49.	16.	5.	.27
+	DIVERSION TO	RB87	175.	11.92	15.	5.	2.	.27
+	HYDROGRAPH AT	DB87RE	484.	12.17	40.	11.	4.	.27
+	ROUTED TO	B87B88	256.	12.67	38.	11.	4.	.27
+	HYDROGRAPH AT	B88	609.	12.42	89.	29.	10.	.51
+	DIVERSION TO	RB88	198.	12.00	24.	8.	3.	.51
+	HYDROGRAPH AT	DB88RE	609.	12.42	77.	21.	7.	.51
+	2 COMBINED AT	CPB88	657.	12.50	115.	33.	11.	.78
+	ROUTED TO	B88B89	603.	12.75	112.	33.	11.	.78
+	HYDROGRAPH AT	B89	598.	12.25	69.	23.	8.	.38
+	DIVERSION TO	RB89	305.	12.00	25.	8.	3.	.38
+	HYDROGRAPH AT	DB89RE	598.	12.25	54.	15.	5.	.38
+	3 COMBINED AT	CPB89	1292.	12.50	258.	77.	26.	2.18
+	ROUTED TO	SRB89	371.	13.25	254.	77.	26.	2.18
+	DIVERSION TO	DB89SD	371.	13.25	254.	77.	26.	2.18
+	HYDROGRAPH AT	DB89SW	0.	.00	0.	0.	0.	2.18
+	ROUTED TO	B89B92	0.	.00	0.	0.	0.	2.18
+	HYDROGRAPH AT	B90	947.	12.08	89.	30.	10.	.46
+	DIVERSION TO	RB90	947.	12.08	89.	28.	9.	.46
+	HYDROGRAPH AT	DB90RE	10.	18.50	8.	2.	1.	.46
+	ROUTED TO	B90B91	10.	21.50	7.	2.	1.	.46
+	HYDROGRAPH AT	B91	1033.	12.17	107.	35.	12.	.59
+	DIVERSION TO	RB91	1033.	12.17	107.	35.	12.	.59
+	HYDROGRAPH AT	DB91RE	0.	.00	0.	0.	0.	.59
	2 COMBINED AT							

+	CPB91	10.	21.50	7.	2.	1.	1.04
+ ROUTED TO	B91B92	9.	25.00	7.	2.	1.	1.04
+ HYDROGRAPH AT	B92	2037.	12.25	199.	61.	20.	1.37
+ DIVERSION TO	RB92	30.	9.58	19.	6.	2.	1.37
+ HYDROGRAPH AT	DB92RE	2037.	12.25	198.	55.	18.	1.37
+ 3 COMBINED AT	CPB92	2029.	12.25	197.	57.	19.	4.60
+ ROUTED TO	B92B70	2040.	12.25	197.	57.	19.	4.60
+ HYDROGRAPH AT	B70	206.	12.08	18.	6.	2.	.11
+ DIVERSION TO	RB70	206.	12.08	13.	4.	1.	.11
+ HYDROGRAPH AT	DB70RE	131.	12.25	8.	2.	1.	.11
+ 3 COMBINED AT	CPB70	3077.	14.75	1208.	500.	172.	71.65
+ ROUTED TO	B70B93	1775.	12.25	872.	381.	132.	71.65
+ HYDROGRAPH AT	B93	592.	12.33	84.	28.	10.	.42
+ DIVERSION TO	RB93	592.	12.33	73.	20.	7.	.42
+ HYDROGRAPH AT	DB93RE	109.	12.75	25.	8.	3.	.42
+ 2 COMBINED AT	CPB93	1775.	12.25	883.	385.	133.	72.08
+ ROUTED TO	B93B94	1465.	12.33	874.	384.	133.	72.08
+ HYDROGRAPH AT	B94	884.	12.17	86.	27.	9.	.51
+ DIVERSION TO	RB94	884.	12.17	86.	26.	9.	.51
+ HYDROGRAPH AT	DB94RE	6.	20.42	4.	1.	0.	.51
+ 2 COMBINED AT	CPB94	1465.	12.33	874.	384.	133.	72.58
+ HYDROGRAPH AT	L63	202.	12.08	20.	7.	2.	.09
+ DIVERSION TO	RL63	202.	12.08	19.	5.	2.	.09
+ HYDROGRAPH AT	DL63RE	10.	13.17	4.	2.	1.	.09
+ HYDROGRAPH AT	DL572	5.	13.50	1.	0.	0.	15.40
+ ROUTED TO	L57L63	4.	14.17	1.	0.	0.	15.40
+ HYDROGRAPH AT	DL581	424.	13.50	115.	35.	12.	30.82
+ ROUTED TO	L58L63	419.	13.58	115.	35.	12.	30.82
+ 3 COMBINED AT	CPL63	419.	13.58	118.	36.	12.	30.91
+ DIVERSION TO	DL63S	159.	13.58	16.	4.	1.	30.91
+ HYDROGRAPH AT	DL63SE	260.	13.42	102.	32.	11.	30.91
+ ROUTED TO	L63B95	260.	13.92	101.	32.	11.	30.91
+ HYDROGRAPH AT	B95	174.	12.08	17.	6.	2.	.08
+ DIVERSION TO	RB95	174.	12.08	16.	5.	2.	.08
+ HYDROGRAPH AT	DB95RE	7.	13.58	3.	1.	0.	.08
+ HYDROGRAPH AT	DL582	32.	13.50	9.	3.	1.	30.82
+ ROUTED TO	L58B95	31.	13.75	9.	3.	1.	30.82
+ 3 COMBINED AT	CPB95	291.	13.75	112.	36.	12.	30.98
+ ROUTED TO	B95B96	284.	14.67	106.	36.	12.	30.98
+ HYDROGRAPH AT	B96	933.	12.25	94.	28.	9.	.69
DIVERSION TO							

+	RB96	933.	12.25	65.	18.	6.	.69
+ HYDROGRAPH AT	DB96RE	616.	12.42	38.	11.	4.	.69
+ 2 COMBINED AT	CPB96	341.	12.50	120.	43.	14.	31.68
+ ROUTED TO	B96B97	309.	15.08	115.	43.	14.	31.68
+ HYDROGRAPH AT	B97	1003.	12.42	124.	37.	12.	.93
+ 2 COMBINED AT	CPB97	885.	12.42	205.	73.	25.	32.61
+ DIVERSION TO	RB97	885.	12.42	175.	47.	16.	32.61
+ HYDROGRAPH AT	DB97RE	162.	16.17	77.	29.	10.	32.61
+ ROUTED TO	SRB97	28.	25.17	27.	21.	9.	32.61
+ DIVERSION TO	DD97S	16.	21.00	16.	15.	8.	32.61
+ HYDROGRAPH AT	DB97SE	12.	25.17	11.	5.	2.	32.61
+ ROUTED TO	B97B99	12.	27.25	11.	5.	2.	32.61
+ HYDROGRAPH AT	L60	1491.	12.25	193.	65.	22.	1.00
+ DIVERSION TO	RL60	1491.	12.25	177.	50.	17.	1.00
+ HYDROGRAPH AT	DL60RE	136.	13.00	46.	16.	5.	1.00
+ HYDROGRAPH AT	DL552	3.	12.83	0.	0.	0.	.50
+ ROUTED TO	L55L60	1.	14.83	0.	0.	0.	.50
+ HYDROGRAPH AT	DL561	0.	.00	0.	0.	0.	6.50
+ ROUTED TO	L56L60	0.	.00	0.	0.	0.	6.50
+ 3 COMBINED AT	CPL60	149.	13.00	47.	16.	5.	7.50
+ DIVERSION TO	DL601S	55.	13.25	23.	8.	3.	7.50
+ HYDROGRAPH AT	DL601	50.	13.25	19.	7.	2.	7.50
+ DIVERSION TO	DL602S	10.	13.25	5.	2.	1.	7.50
+ HYDROGRAPH AT	DL602	40.	13.25	14.	5.	2.	7.50
+ ROUTED TO	L60L61	29.	14.00	14.	5.	2.	7.50
+ HYDROGRAPH AT	L61	890.	12.17	114.	39.	13.	.51
+ DIVERSION TO	RL61	890.	12.17	113.	33.	11.	.51
+ HYDROGRAPH AT	DL61RE	25.	15.08	17.	6.	2.	.51
+ HYDROGRAPH AT	DL562	1.	13.33	0.	0.	0.	6.50
+ ROUTED TO	L56L61	1.	15.08	0.	0.	0.	6.50
+ 3 COMBINED AT	CPL61	34.	16.08	25.	10.	3.	8.01
+ DIVERSION TO	DL61S	22.	16.08	16.	6.	2.	8.01
+ HYDROGRAPH AT	DL61SE	12.	16.08	9.	3.	1.	8.01
+ ROUTED TO	L61L62	11.	17.08	9.	3.	1.	8.01
+ HYDROGRAPH AT	L62	881.	12.17	110.	38.	13.	.49
+ DIVERSION TO	RL62	881.	12.17	110.	32.	11.	.49
+ HYDROGRAPH AT	DL62RE	24.	15.08	16.	6.	2.	.49
+ HYDROGRAPH AT	DL571	7.	13.50	1.	0.	0.	15.40
+ ROUTED TO	L57L62	3.	14.75	1.	0.	0.	15.40
+ 3 COMBINED AT	CPL62	24.	18.00	19.	7.	2.	17.41
ROUTED TO							

+	L62L68	23.	18.58	19.	7.	2.	17.41
+ HYDROGRAPH AT	L64	396.	12.17	45.	16.	5.	.20
+ DIVERSION TO	RL64	396.	12.17	39.	11.	4.	.20
+ HYDROGRAPH AT	DL64RE	46.	12.58	14.	5.	2.	.20
+ HYDROGRAPH AT	DL63SE	159.	13.58	16.	4.	1.	30.91
+ ROUTED TO	L63L64	134.	14.08	16.	4.	1.	30.91
+ 2 COMBINED AT	CPL64	147.	14.08	25.	7.	2.	31.10
+ ROUTED TO	L64L67	118.	14.58	25.	7.	2.	31.10
+ HYDROGRAPH AT	L67	206.	12.17	24.	8.	3.	.10
+ DIVERSION TO	RL67	206.	12.17	19.	5.	2.	.10
+ HYDROGRAPH AT	DL67RE	78.	12.33	9.	3.	1.	.10
+ 2 COMBINED AT	CPL67	124.	14.58	30.	9.	3.	31.21
+ ROUTED TO	L67L68	121.	14.58	30.	9.	3.	31.21
+ HYDROGRAPH AT	DL602	10.	13.25	5.	2.	1.	7.50
+ ROUTED TO	L60L68	8.	16.25	5.	2.	1.	7.50
+ HYDROGRAPH AT	DL61SE	22.	16.08	16.	6.	2.	8.01
+ ROUTED TO	L61L68	21.	16.83	16.	6.	2.	8.01
+ HYDROGRAPH AT	L68	1222.	12.33	142.	45.	15.	1.00
+ DIVERSION TO	RL68	826.	12.17	57.	17.	6.	1.00
+ HYDROGRAPH AT	DL68RE	1222.	12.33	101.	28.	9.	1.00
+ 5 COMBINED AT	CPL68	1079.	12.33	115.	41.	14.	34.21
+ ROUTED TO	L68L72	979.	12.42	115.	41.	14.	34.21
+ HYDROGRAPH AT	L72	375.	12.17	46.	16.	5.	.19
+ DIVERSION TO	RL72	11.	9.25	7.	2.	1.	.19
+ HYDROGRAPH AT	DL72RE	375.	12.17	46.	14.	5.	.19
+ 2 COMBINED AT	CPL72	1097.	12.42	149.	53.	18.	34.41
+ DIVERSION TO	DL72S	262.	12.42	48.	19.	6.	34.41
+ HYDROGRAPH AT	DL72SE	835.	12.42	101.	34.	11.	34.41
+ ROUTED TO	L72B99	615.	12.67	100.	34.	11.	34.41
+ HYDROGRAPH AT	B99	318.	12.08	28.	9.	3.	.16
+ DIVERSION TO	RB99	247.	12.00	15.	4.	1.	.16
+ HYDROGRAPH AT	DB99RE	288.	12.17	16.	5.	2.	.16
+ 3 COMBINED AT	CPB99	629.	12.67	112.	41.	14.	36.26
+ ROUTED TO	B99S11	605.	12.67	111.	41.	14.	36.26
+ HYDROGRAPH AT	S11	137.	12.08	14.	5.	2.	.06
+ DIVERSION TO	RS11	116.	12.08	9.	3.	1.	.06
+ HYDROGRAPH AT	DS11RE	128.	12.17	8.	2.	1.	.06
+ 2 COMBINED AT	CPS11	616.	12.67	117.	43.	15.	36.33
+ ROUTED TO	SRS11	358.	13.00	77.	32.	11.	36.33
+ ROUTED TO	S11S14	298.	13.25	75.	32.	11.	36.33
HYDROGRAPH AT							

+		S12	421.	12.08	38.	12.	4.	.20
+	DIVERSION TO	RS12	224.	12.00	17.	5.	2.	.20
+	HYDROGRAPH AT	DS12RE	421.	12.08	26.	7.	2.	.20
+	HYDROGRAPH AT	DL72SE	262.	12.42	48.	19.	6.	34.41
+	ROUTED TO	L72S12	235.	12.50	48.	19.	6.	34.41
+	2 COMBINED AT	CPS12	421.	12.17	69.	26.	9.	34.61
+	ROUTED TO	SRS12	358.	12.25	63.	24.	8.	34.61
+	ROUTED TO	S12S13	257.	12.50	62.	24.	8.	34.61
+	HYDROGRAPH AT	S13	534.	12.17	52.	17.	6.	.31
+	DIVERSION TO	RS13	534.	12.17	43.	12.	4.	.31
+	HYDROGRAPH AT	DS13RE	161.	12.42	16.	5.	2.	.31
+	2 COMBINED AT	CPS13	277.	12.67	71.	27.	9.	34.92
+	DIVERSION TO	DS13S	56.	12.67	3.	1.	0.	34.92
+	HYDROGRAPH AT	DS13SE	221.	12.67	68.	26.	9.	34.92
+	ROUTED TO	S13S14	216.	12.75	68.	26.	9.	34.92
+	HYDROGRAPH AT	S14	612.	12.17	59.	19.	6.	.36
+	DIVERSION TO	RS14	612.	12.17	59.	19.	6.	.36
+	HYDROGRAPH AT	DS14RE	1.	23.08	0.	0.	0.	.36
+	3 COMBINED AT	CPS14	414.	13.25	139.	58.	19.	37.20
+	ROUTED TO	S14S16	370.	13.50	136.	57.	19.	37.20
+	HYDROGRAPH AT	B98	425.	12.17	39.	12.	4.	.27
+	DIVERSION TO	RB98	425.	12.17	39.	12.	4.	.27
+	HYDROGRAPH AT	DB98RE	0.	.00	0.	0.	0.	.27
+	ROUTED TO	B98100	0.	.00	0.	0.	0.	.27
+	HYDROGRAPH AT	B100	265.	12.08	25.	8.	3.	.12
+	DIVERSION TO	RB100	265.	12.08	20.	6.	2.	.12
+	HYDROGRAPH AT	DB100R	59.	12.17	8.	3.	1.	.12
+	HYDROGRAPH AT	DB97SE	16.	21.00	16.	15.	8.	32.61
+	3 COMBINED AT	CPB100	1028.	12.58	224.	105.	62.	32.99
+	ROUTED TO	B100S	18.	20.25	18.	16.	8.	32.99
+	HYDROGRAPH AT	S15	722.	12.25	70.	22.	7.	.48
+	DIVERSION TO	RS15	722.	12.25	65.	17.	6.	.48
+	HYDROGRAPH AT	DS15RE	48.	12.75	13.	4.	1.	.48
+	2 COMBINED AT	CPS15	23.	19.92	22.	17.	9.	33.48
+	ROUTED TO	S15S16	23.	20.42	22.	17.	9.	33.48
+	HYDROGRAPH AT	S16	784.	12.42	102.	31.	10.	.68
+	DIVERSION TO	RS16	784.	12.42	102.	31.	10.	.68
+	HYDROGRAPH AT	DS16RE	0.	.00	0.	0.	0.	.68
+	3 COMBINED AT	CPS16	366.	13.50	141.	72.	28.	38.75
+	ROUTED TO	S16S18	335.	13.75	138.	71.	28.	38.75
	HYDROGRAPH AT							

+	S17	502.	12.17	53.	17.	6.	.26
+ DIVERSION TO	RS17	502.	12.17	52.	15.	5.	.26
+ HYDROGRAPH AT	DS17RE	11.	14.75	7.	3.	1.	.26
+ ROUTED TO	S17S18	10.	15.92	7.	3.	1.	.26
+ HYDROGRAPH AT	S18	816.	12.42	99.	29.	10.	.74
+ DIVERSION TO	RS18	816.	12.42	99.	29.	10.	.74
+ HYDROGRAPH AT	DS18RE	0.	.00	0.	0.	0.	.74
+ 3 COMBINED AT	CPS18	335.	13.75	138.	72.	28.	39.75
+ ROUTED TO	S18S21	316.	13.92	135.	71.	28.	39.75
+ HYDROGRAPH AT	S19	992.	12.33	123.	39.	13.	.81
+ DIVERSION TO	RS19	992.	12.33	123.	39.	13.	.81
+ HYDROGRAPH AT	DS19RE	0.	.00	0.	0.	0.	.81
+ HYDROGRAPH AT	DS13SE	56.	12.67	3.	1.	0.	34.92
+ ROUTED TO	S13S19	17.	13.42	3.	1.	0.	34.92
+ 2 COMBINED AT	CPS19	17.	13.42	2.	1.	0.	35.72
+ ROUTED TO	S19S20	13.	13.83	2.	1.	0.	35.72
+ HYDROGRAPH AT	S20	724.	12.33	91.	28.	9.	.61
+ DIVERSION TO	RS20	724.	12.33	85.	23.	8.	.61
+ HYDROGRAPH AT	DS20RE	55.	13.17	15.	5.	2.	.61
+ 2 COMBINED AT	CPS20	12.	13.83	6.	3.	1.	36.33
+ ROUTED TO	S20S21	9.	15.42	6.	3.	1.	36.33
+ HYDROGRAPH AT	S21	301.	12.17	33.	11.	4.	.16
+ DIVERSION TO	RS21	301.	12.17	33.	10.	3.	.16
+ HYDROGRAPH AT	DS21RE	5.	17.83	3.	1.	0.	.16
+ 3 COMBINED AT	CPS21	311.	13.92	137.	72.	28.	41.32
+ DIVERSION TO	DS21S	156.	13.92	69.	36.	14.	41.32
+ HYDROGRAPH AT	DS21SE	156.	13.92	69.	36.	14.	41.32
+ ROUTED TO	S21S23	142.	14.50	67.	36.	14.	41.32
+ HYDROGRAPH AT	B101	179.	12.08	18.	6.	2.	.08
+ DIVERSION TO	RB101	179.	12.08	14.	4.	1.	.08
+ HYDROGRAPH AT	DB101R	33.	12.25	7.	2.	1.	.08
+ ROUTED TO	SRB101	14.	12.75	6.	2.	1.	.08
+ ROUTED TO	B101S	13.	13.50	6.	2.	1.	.08
+ HYDROGRAPH AT	S06	557.	12.25	56.	17.	6.	.39
+ DIVERSION TO	RS06	557.	12.25	56.	17.	6.	.39
+ HYDROGRAPH AT	DS06RE	0.	.00	0.	0.	0.	.39
+ 2 COMBINED AT	CPS06	13.	13.50	6.	2.	1.	.47
+ ROUTED TO	S06S07	12.	14.58	6.	2.	1.	.47
+ HYDROGRAPH AT	S07	542.	12.33	65.	20.	7.	.42
+ DIVERSION TO	RS07	542.	12.33	65.	20.	7.	.42
HYDROGRAPH AT							

+		DS07RE	1.	23.42	0.	0.	0.	.42
+	2 COMBINED AT	CPS07	12.	14.58	6.	2.	1.	.89
+	ROUTED TO	S07S08	10.	15.42	5.	2.	1.	.89
+	HYDROGRAPH AT	S08	377.	12.25	39.	12.	4.	.27
+	DIVERSION TO	RS08	377.	12.25	39.	12.	4.	.27
+	HYDROGRAPH AT	DS08RE	0.	.00	0.	0.	0.	.27
+	2 COMBINED AT	CPS08	10.	15.42	5.	2.	1.	1.16
+	ROUTED TO	S08S09	10.	16.00	5.	2.	1.	1.16
+	HYDROGRAPH AT	S09	580.	12.17	59.	19.	6.	.37
+	DIVERSION TO	RS09	580.	12.17	59.	19.	6.	.37
+	HYDROGRAPH AT	DS09RE	0.	.00	0.	0.	0.	.37
+	2 COMBINED AT	CPS09	10.	16.00	5.	2.	1.	1.53
+	ROUTED TO	SRS09	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS091W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+	DIVERSION TO	DS092W	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S23	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S22	304.	12.33	28.	7.	2.	.27
+	DIVERSION TO	RS22	304.	12.33	23.	6.	2.	.27
+	HYDROGRAPH AT	DS22RE	114.	12.58	5.	1.	0.	.27
+	ROUTED TO	S22S23	33.	13.42	5.	1.	0.	.27
+	HYDROGRAPH AT	S23	1623.	12.17	150.	47.	16.	1.03
+	DIVERSION TO	RS23	1623.	12.17	150.	47.	16.	1.03
+	HYDROGRAPH AT	DS23RE	0.	.00	0.	0.	0.	1.03
+	4 COMBINED AT	CPS23	143.	14.50	67.	36.	14.	44.14
+	ROUTED TO	SRS23	143.	14.42	65.	35.	14.	44.14
+	ROUTED TO	S23S24	133.	14.83	64.	35.	14.	44.14
+	HYDROGRAPH AT	S03	766.	12.50	116.	37.	12.	.72
+	DIVERSION TO	RS03	766.	12.50	116.	33.	11.	.72
+	HYDROGRAPH AT	DS03RE	15.	16.67	10.	3.	1.	.72
+	HYDROGRAPH AT	DS021	4.	14.67	2.	1.	0.	.87
+	ROUTED TO	S02S03	3.	15.75	2.	1.	0.	.87
+	2 COMBINED AT	CPS03	18.	16.67	12.	4.	1.	1.59
+	ROUTED TO	S03S04	16.	18.83	11.	4.	1.	1.59
+	HYDROGRAPH AT	S04	1131.	12.17	122.	40.	13.	.70
+	DIVERSION TO	RS04	1131.	12.17	122.	39.	13.	.70
+	HYDROGRAPH AT	DS04RE	2.	23.17	0.	0.	0.	.70
+	2 COMBINED AT	CPS04	16.	18.83	11.	4.	1.	2.30
+	ROUTED TO	SRS04	15.	18.83	11.	4.	1.	2.30
	ROUTED TO							

+		S04S10	13.	20.58	11.	4.	1.	2.30
+	HYDROGRAPH AT	DS091	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S10	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S05	385.	12.17	40.	13.	4.	.21
+	DIVERSION TO	RS05	385.	12.17	40.	11.	4.	.21
+	HYDROGRAPH AT	DS05RE	8.	15.00	5.	2.	1.	.21
+	ROUTED TO	S05S10	7.	18.33	5.	2.	1.	.21
+	HYDROGRAPH AT	S10	845.	12.25	104.	33.	11.	.62
+	DIVERSION TO	RS10	845.	12.25	104.	33.	11.	.62
+	HYDROGRAPH AT	DS10RE	0.	.00	0.	0.	0.	.62
+	4 COMBINED AT	CPS10	18.	20.50	14.	6.	2.	4.65
+	ROUTED TO	S10S24	17.	21.17	14.	6.	2.	4.65
+	HYDROGRAPH AT	DS092	0.	.00	0.	0.	0.	1.53
+	ROUTED TO	S09S24	0.	.00	0.	0.	0.	1.53
+	HYDROGRAPH AT	S24	689.	12.17	66.	21.	7.	.42
+	DIVERSION TO	RS24	689.	12.17	66.	21.	7.	.42
+	HYDROGRAPH AT	DS24RE	1.	21.50	0.	0.	0.	.42
+	4 COMBINED AT	CPS24	133.	14.83	64.	35.	14.	47.68
+	ROUTED TO	S24S25	110.	15.92	59.	34.	14.	47.68
+	HYDROGRAPH AT	S25	905.	12.25	106.	33.	11.	.59
+	DIVERSION TO	RS25	905.	12.25	106.	33.	11.	.59
+	HYDROGRAPH AT	DS25RE	1.	24.25	0.	0.	0.	.59
+	2 COMBINED AT	CPS25	110.	15.92	59.	34.	14.	48.27
+	HYDROGRAPH AT	S81	248.	12.17	21.	6.	2.	.13
+	DIVERSION TO	RS81	248.	12.17	21.	6.	2.	.13
+	HYDROGRAPH AT	DS81RE	0.	.00	0.	0.	0.	.13
+	HYDROGRAPH AT	S82	364.	12.17	40.	13.	4.	.20
+	DIVERSION TO	RS82	364.	12.17	40.	13.	4.	.20
+	HYDROGRAPH AT	DS82RE	3.	24.00	1.	0.	0.	.20
+	ROUTED TO	S82S83	1.	28.25	1.	0.	0.	.20
+	HYDROGRAPH AT	S83	243.	12.42	33.	10.	3.	.22
+	DIVERSION TO	RS83	243.	12.42	20.	5.	2.	.22
+	HYDROGRAPH AT	DS83RE	190.	12.58	17.	5.	2.	.22
+	2 COMBINED AT	CPS83	190.	12.58	17.	5.	2.	.42
+	HYDROGRAPH AT	S84	345.	12.25	36.	10.	3.	.21
+	DIVERSION TO	RS84	246.	12.08	13.	3.	1.	.21
+	HYDROGRAPH AT	DS84RE	345.	12.25	25.	6.	2.	.21
+	4 COMBINED AT	DUMMY	305.	12.25	64.	40.	16.	49.03
+	3 COMBINED AT	DUMMY	11402.	12.42	2973.	1205.	431.	247.94
+	HYDROGRAPH AT	W28	996.	12.42	119.	34.	11.	.99
	DIVERSION TO							

+		RW28	996.	12.42	118.	32.	11.	.99
	HYDROGRAPH AT							
+		DW28RE	10.	15.83	7.	2.	1.	.99
	ROUTED TO							
+		W28W29	9.	17.33	7.	2.	1.	.99
	HYDROGRAPH AT							
+		W29	632.	12.42	72.	21.	7.	.64
	DIVERSION TO							
+		RW29	632.	12.42	72.	21.	7.	.64
	HYDROGRAPH AT							
+		DW29RE	0.	.00	0.	0.	0.	.64
	2 COMBINED AT							
+		CPW29	9.	17.33	7.	2.	1.	1.63
	ROUTED TO							
+		W29W30	9.	17.58	7.	2.	1.	1.63
	HYDROGRAPH AT							
+		W30	355.	12.25	30.	8.	3.	.27
	DIVERSION TO							
+		RW30	233.	12.08	11.	3.	1.	.27
	HYDROGRAPH AT							
+		DW30RE	355.	12.25	21.	5.	2.	.27
	2 COMBINED AT							
+		CPW30	353.	12.25	22.	8.	3.	1.90
	ROUTED TO							
+		W30L59	238.	12.42	21.	8.	3.	1.90
	HYDROGRAPH AT							
+		L59	492.	12.33	48.	13.	4.	.50
	DIVERSION TO							
+		RL59	492.	12.33	48.	13.	4.	.50
	HYDROGRAPH AT							
+		DL59RE	0.	.00	0.	0.	0.	.50
	HYDROGRAPH AT							
+		DL551	0.	.00	0.	0.	0.	.50
	ROUTED TO							
+		L55L59	0.	.00	0.	0.	0.	.50
	3 COMBINED AT							
+		CPL59	238.	12.42	21.	8.	3.	2.90
	ROUTED TO							
+		L59L65	166.	12.83	20.	8.	3.	2.90
	HYDROGRAPH AT							
+		W31	277.	12.25	23.	6.	2.	.23
	DIVERSION TO							
+		RW31	156.	12.08	8.	2.	1.	.23
	HYDROGRAPH AT							
+		DW31RE	277.	12.25	16.	4.	1.	.23
	ROUTED TO							
+		W31W32	167.	12.67	16.	4.	1.	.23
	HYDROGRAPH AT							
+		W32	543.	12.50	67.	19.	6.	.61
	DIVERSION TO							
+		RW32	378.	12.25	23.	6.	2.	.61
	HYDROGRAPH AT							
+		DW32RE	543.	12.50	48.	13.	4.	.61
	2 COMBINED AT							
+		CPW32	622.	12.50	64.	17.	6.	.85
	DIVERSION TO							
+		DW32S	622.	12.50	64.	17.	6.	.85
	HYDROGRAPH AT							
+		DW32SE	0.	.00	0.	0.	0.	.85
	ROUTED TO							
+		W32L65	0.	.00	0.	0.	0.	.85
	HYDROGRAPH AT							
+		L65	838.	12.25	96.	32.	11.	.55
	DIVERSION TO							
+		RL65	838.	12.25	87.	24.	8.	.55
	HYDROGRAPH AT							
+		DL65RE	71.	12.83	23.	8.	3.	.55
	3 COMBINED AT							
+		CPL65	236.	12.83	42.	15.	5.	4.29
	ROUTED TO							
+		L65S34	195.	13.08	41.	15.	5.	4.29
	HYDROGRAPH AT							
+		DW32SE	622.	12.50	64.	17.	6.	.85
	ROUTED TO							
+		W32S34	540.	12.75	64.	17.	6.	.85
	HYDROGRAPH AT							
+		S34	1243.	12.25	161.	53.	18.	.91
	DIVERSION TO							
+		RS34	1064.	12.17	86.	25.	8.	.91
	HYDROGRAPH AT							

+	DS34RE	1240.	12.33	98.	28.	9.	.91
+ 3 COMBINED AT	CPS34	1235.	12.33	199.	60.	20.	5.19
+ DIVERSION TO	DS34S	663.	12.33	104.	31.	10.	5.19
+ HYDROGRAPH AT	DS34SE	572.	12.33	95.	28.	9.	5.19
+ ROUTED TO	S34S44	511.	12.50	94.	28.	9.	5.19
+ HYDROGRAPH AT	L66	1426.	12.33	207.	71.	24.	1.00
+ DIVERSION TO	RL66	1426.	12.33	167.	47.	16.	1.00
+ HYDROGRAPH AT	DL66RE	479.	12.67	73.	23.	8.	1.00
+ HYDROGRAPH AT	DL601	55.	13.25	23.	8.	3.	7.50
+ ROUTED TO	L60L66	42.	14.25	22.	8.	3.	7.50
+ 2 COMBINED AT	CPL66	479.	12.67	94.	32.	11.	8.50
+ ROUTED TO	L66L71	342.	12.75	85.	29.	10.	8.50
+ HYDROGRAPH AT	L71	206.	12.08	19.	6.	2.	.11
+ DIVERSION TO	RL71	3.	8.83	2.	1.	0.	.11
+ HYDROGRAPH AT	DL71RE	206.	12.08	19.	5.	2.	.11
+ 2 COMBINED AT	CPL71	352.	12.75	95.	34.	11.	8.61
+ ROUTED TO	L71S35	232.	13.25	94.	34.	11.	8.61
+ HYDROGRAPH AT	L69	124.	12.08	11.	4.	1.	.06
+ ROUTED TO	SRL69	60.	12.25	11.	4.	1.	.06
+ ROUTED TO	L69S35	45.	12.83	11.	4.	1.	.06
+ HYDROGRAPH AT	L70	104.	12.08	9.	3.	1.	.05
+ ROUTED TO	SRL70	67.	12.17	9.	3.	1.	.05
+ ROUTED TO	L70S35	46.	12.67	9.	3.	1.	.05
+ HYDROGRAPH AT	S35	1055.	12.25	89.	26.	9.	.74
+ DIVERSION TO	RS35	1051.	12.17	63.	17.	6.	.74
+ HYDROGRAPH AT	DS35RE	753.	12.33	32.	9.	3.	.74
+ 4 COMBINED AT	CPS35	583.	12.33	138.	48.	16.	9.45
+ ROUTED TO	S35S44	288.	13.08	133.	48.	16.	9.45
+ HYDROGRAPH AT	S44	126.	12.17	9.	3.	1.	.08
+ DIVERSION TO	RS44	105.	12.08	5.	1.	0.	.08
+ HYDROGRAPH AT	DS44RE	114.	12.25	5.	1.	0.	.08
+ 3 COMBINED AT	CPS44	528.	13.00	206.	72.	24.	14.23
+ ROUTED TO	SRS44	201.	14.58	132.	51.	17.	14.23
+ ROUTED TO	S44S45	192.	15.92	131.	51.	17.	14.23
+ HYDROGRAPH AT	DS34SE	663.	12.33	104.	31.	10.	5.19
+ ROUTED TO	S34S45	495.	12.75	102.	31.	10.	5.19
+ HYDROGRAPH AT	S45	537.	12.42	69.	21.	7.	.49
+ DIVERSION TO	RS45	537.	12.42	69.	21.	7.	.49
+ HYDROGRAPH AT	DS45RE	0.	.00	0.	0.	0.	.49
+ 3 COMBINED AT	CPS45	518.	12.75	237.	93.	31.	14.72
ROUTED TO							

+	S45S46	397.	13.00	186.	78.	26.	14.72
+ HYDROGRAPH AT	S46	1078.	12.33	122.	37.	12.	.90
+ DIVERSION TO	RS46	1078.	12.33	122.	37.	12.	.90
+ HYDROGRAPH AT	DS46RE	0.	.00	0.	0.	0.	.90
+ 2 COMBINED AT	CPS46	397.	13.00	186.	78.	26.	15.62
+ ROUTED TO	SRS46	331.	13.25	177.	75.	25.	15.62
+ ROUTED TO	S46S47	295.	13.83	172.	74.	25.	15.62
+ HYDROGRAPH AT	S47	697.	12.25	89.	30.	10.	.48
+ DIVERSION TO	RS47	697.	12.25	69.	19.	6.	.48
+ HYDROGRAPH AT	DS47RE	335.	12.50	35.	11.	4.	.48
+ 2 COMBINED AT	CPS47	325.	13.83	187.	83.	28.	16.10
+ ROUTED TO	S47S48	305.	14.08	186.	83.	28.	16.10
+ HYDROGRAPH AT	S48	510.	12.25	49.	15.	5.	.36
+ DIVERSION TO	RS48	357.	12.08	23.	6.	2.	.36
+ HYDROGRAPH AT	DS48RE	510.	12.25	32.	9.	3.	.36
+ 2 COMBINED AT	CPS48	476.	12.25	191.	91.	30.	16.46
+ DIVERSION TO	DS48S	2.	12.25	1.	0.	0.	16.46
+ HYDROGRAPH AT	DS48S	474.	12.25	190.	90.	30.	16.46
+ ROUTED TO	S48S50	397.	12.67	189.	90.	30.	16.46
+ HYDROGRAPH AT	S49	503.	12.25	51.	15.	5.	.38
+ DIVERSION TO	RS49	503.	12.25	49.	13.	4.	.38
+ HYDROGRAPH AT	DS49RE	12.	13.50	6.	2.	1.	.38
+ ROUTED TO	S49S50	11.	14.58	6.	2.	1.	.38
+ HYDROGRAPH AT	S50	475.	12.17	47.	14.	5.	.31
+ DIVERSION TO	RS50	475.	12.17	44.	12.	4.	.31
+ HYDROGRAPH AT	DS50RE	19.	13.08	7.	3.	1.	.31
+ 3 COMBINED AT	CPS50	398.	12.67	194.	92.	31.	17.14
+ ROUTED TO	SRS50	204.	18.25	183.	92.	31.	17.14
+ ROUTED TO	S50S51	204.	18.33	183.	92.	31.	17.14
+ HYDROGRAPH AT	S36	497.	12.17	47.	15.	5.	.29
+ DIVERSION TO	RS36	497.	12.17	47.	15.	5.	.29
+ HYDROGRAPH AT	DS36RE	0.	.00	0.	0.	0.	.29
+ ROUTED TO	SRS36	0.	.00	0.	0.	0.	.29
+ ROUTED TO	S36S37	0.	.00	0.	0.	0.	.29
+ HYDROGRAPH AT	S37	1334.	12.25	133.	39.	13.	1.03
+ DIVERSION TO	RS37	1334.	12.25	116.	31.	10.	1.03
+ HYDROGRAPH AT	DS37RE	332.	12.58	28.	9.	3.	1.03
+ 2 COMBINED AT	CPS37	330.	12.58	28.	9.	3.	1.32
+ ROUTED TO	S37S38	129.	13.17	26.	9.	3.	1.32
+ HYDROGRAPH AT	S38	1053.	12.25	103.	31.	10.	.78
DIVERSION TO							

+	RS38	1053.	12.25	99.	27.	9.	.78
+ HYDROGRAPH AT	DS38RE	29.	13.33	12.	4.	1.	.78
+ 2 COMBINED AT	CPS38	143.	13.25	38.	13.	4.	2.10
+ ROUTED TO	S38S39	113.	13.75	36.	13.	4.	2.10
+ HYDROGRAPH AT	S39	769.	12.25	80.	24.	8.	.60
+ DIVERSION TO	RS39	769.	12.25	80.	23.	8.	.60
+ HYDROGRAPH AT	DS39RE	5.	19.92	3.	1.	0.	.60
+ 2 COMBINED AT	CPS39	113.	13.75	36.	13.	4.	2.70
+ ROUTED TO	S39S43	90.	14.50	34.	13.	4.	2.70
+ HYDROGRAPH AT	S40	989.	12.17	113.	39.	13.	.51
+ DIVERSION TO	RS40	989.	12.17	98.	28.	9.	.51
+ HYDROGRAPH AT	DS40RE	129.	12.58	34.	11.	4.	.51
+ ROUTED TO	S40S41	86.	13.25	32.	11.	4.	.51
+ HYDROGRAPH AT	S41	1202.	12.33	132.	39.	13.	1.00
+ DIVERSION TO	RS41	1202.	12.33	122.	32.	11.	1.00
+ HYDROGRAPH AT	DS41RE	115.	12.83	21.	7.	2.	1.00
+ 2 COMBINED AT	CPS41	141.	13.17	52.	18.	6.	1.51
+ ROUTED TO	S41S42	125.	13.58	50.	18.	6.	1.51
+ HYDROGRAPH AT	S42	743.	12.25	78.	24.	8.	.51
+ DIVERSION TO	RS42	743.	12.25	73.	20.	7.	.51
+ HYDROGRAPH AT	DS42RE	39.	13.00	14.	5.	2.	.51
+ 2 COMBINED AT	CPS42	149.	13.58	62.	22.	7.	2.02
+ ROUTED TO	S42S43	137.	13.92	61.	22.	7.	2.02
+ HYDROGRAPH AT	S43	548.	12.17	55.	17.	6.	.35
+ DIVERSION TO	RS43	548.	12.17	51.	14.	5.	.35
+ HYDROGRAPH AT	DS43RE	29.	12.92	10.	3.	1.	.35
+ 3 COMBINED AT	CPS43	201.	14.50	100.	39.	13.	5.07
+ ROUTED TO	SRS43	59.	18.92	59.	39.	13.	5.07
+ ROUTED TO	S43S51	59.	19.58	59.	39.	13.	5.07
+ HYDROGRAPH AT	S28	263.	12.08	19.	6.	2.	.14
+ DIVERSION TO	RS28	263.	12.08	19.	6.	2.	.14
+ HYDROGRAPH AT	DS28RE	0.	.00	0.	0.	0.	.14
+ ROUTED TO	S28S29	0.	.00	0.	0.	0.	.14
+ HYDROGRAPH AT	S29	760.	12.33	76.	22.	7.	.62
+ DIVERSION TO	RS29	760.	12.33	55.	15.	5.	.62
+ HYDROGRAPH AT	DS29RE	411.	12.50	26.	7.	2.	.62
+ 2 COMBINED AT	CPS29	411.	12.50	26.	7.	2.	.76
+ ROUTED TO	S29S30	241.	12.75	26.	7.	2.	.76
+ HYDROGRAPH AT	S30	613.	12.25	62.	19.	6.	.47
+ DIVERSION TO	RS30	613.	12.25	62.	18.	6.	.47
HYDROGRAPH AT							

+	DS30RE	3.	21.42	2.	1.	0.	.47
+ 2 COMBINED AT	CPS30	241.	12.75	26.	8.	3.	1.22
+ ROUTED TO	S30S32	198.	12.92	25.	8.	3.	1.22
+ HYDROGRAPH AT	S31	628.	12.25	62.	19.	6.	.44
+ DIVERSION TO	RS31	628.	12.25	62.	18.	6.	.44
+ HYDROGRAPH AT	DS31RE	5.	19.08	3.	1.	0.	.44
+ ROUTED TO	S31S32	5.	20.17	3.	1.	0.	.44
+ HYDROGRAPH AT	S32	232.	12.17	24.	8.	3.	.15
+ DIVERSION TO	RS32	232.	12.17	21.	6.	2.	.15
+ HYDROGRAPH AT	DS32RE	35.	12.58	6.	2.	1.	.15
+ 3 COMBINED AT	CPS32	210.	12.92	31.	10.	3.	1.81
+ HYDROGRAPH AT	S26	685.	12.17	76.	25.	8.	.43
+ DIVERSION TO	RS26	685.	12.17	76.	23.	8.	.43
+ HYDROGRAPH AT	DS26RE	10.	17.17	7.	2.	1.	.43
+ HYDROGRAPH AT	DS21SE	156.	13.92	69.	36.	14.	41.32
+ ROUTED TO	S21S26	142.	14.33	67.	36.	14.	41.32
+ 2 COMBINED AT	CPS26	142.	14.42	67.	36.	14.	41.75
+ DIVERSION TO	DS26S	0.	.00	0.	0.	0.	41.75
+ HYDROGRAPH AT	DS26SE	142.	14.42	67.	36.	14.	41.75
+ ROUTED TO	S26S27	114.	14.83	64.	35.	14.	41.75
+ HYDROGRAPH AT	S27	227.	12.08	20.	7.	2.	.11
+ DIVERSION TO	RS27	227.	12.08	20.	6.	2.	.11
+ HYDROGRAPH AT	DS27RE	3.	17.67	2.	1.	0.	.11
+ 2 COMBINED AT	CPS27	114.	14.83	64.	35.	14.	41.86
+ 2 COMBINED AT	CP3227	256.	13.00	134.	73.	28.	43.67
+ ROUTED TO	SR3227	92.	15.58	72.	40.	16.	43.67
+ ROUTED TO	S32S33	92.	16.58	71.	39.	15.	43.67
+ HYDROGRAPH AT	S33	585.	12.33	84.	28.	9.	.42
+ DIVERSION TO	RS33	585.	12.33	84.	28.	9.	.42
+ HYDROGRAPH AT	DS33RE	0.	.00	0.	0.	0.	.42
+ HYDROGRAPH AT	DS26SE	0.	.00	0.	0.	0.	41.75
+ ROUTED TO	S26S33	0.	.00	0.	0.	0.	41.75
+ 3 COMBINED AT	CPS33	92.	16.58	71.	39.	15.	44.09
+ ROUTED TO	S33S51	91.	17.42	70.	38.	15.	44.09
+ HYDROGRAPH AT	S51	249.	12.17	25.	8.	3.	.12
+ DIVERSION TO	RS51	249.	12.17	22.	6.	2.	.12
+ HYDROGRAPH AT	DS51RE	18.	12.67	6.	2.	1.	.12
+ 4 COMBINED AT	CPS51	211.	18.00	196.	114.	41.	58.92
+ ROUTED TO	SRS51	190.	20.83	166.	72.	26.	58.92
+ ROUTED TO	S51S54	190.	21.17	166.	72.	26.	58.92
HYDROGRAPH AT							

+	S52	539.	12.42	63.	16.	5.	.42
+ DIVERSION TO	RS52	539.	12.42	48.	12.	4.	.42
+ HYDROGRAPH AT	DS52RE	281.	12.67	16.	4.	1.	.42
+ ROUTED TO	S52S54	129.	13.08	16.	4.	1.	.42
+ HYDROGRAPH AT	S54	914.	12.08	93.	32.	11.	.42
+ DIVERSION TO	RS54	914.	12.08	76.	21.	7.	.42
+ HYDROGRAPH AT	DS54RE	218.	12.33	32.	10.	3.	.42
+ 3 COMBINED AT	CPS54	196.	21.17	170.	76.	29.	59.76
+ ROUTED TO	S54S55	195.	21.67	169.	75.	29.	59.76
+ HYDROGRAPH AT	S53	584.	12.33	63.	17.	6.	.40
+ DIVERSION TO	RS53	584.	12.33	50.	13.	4.	.40
+ HYDROGRAPH AT	DS53RE	269.	12.58	16.	4.	1.	.40
+ ROUTED TO	S53S55	93.	13.42	15.	4.	1.	.40
+ HYDROGRAPH AT	S55	1265.	12.25	174.	59.	20.	.75
+ DIVERSION TO	RS55	1265.	12.25	142.	40.	13.	.75
+ HYDROGRAPH AT	DS55RE	440.	12.58	60.	19.	6.	.75
+ 3 COMBINED AT	CPS55	204.	22.00	175.	88.	33.	60.92
+ ROUTED TO	S55S74	200.	23.17	172.	87.	33.	60.92
+ HYDROGRAPH AT	W59	328.	12.08	32.	11.	4.	.17
+ DIVERSION TO	RW59	328.	12.08	29.	8.	3.	.17
+ HYDROGRAPH AT	DW59RE	26.	12.67	9.	3.	1.	.17
+ ROUTED TO	W59W60	23.	12.92	8.	3.	1.	.17
+ HYDROGRAPH AT	W61	664.	12.17	53.	17.	6.	.39
+ DIVERSION TO	RW61	664.	12.17	51.	14.	5.	.39
+ HYDROGRAPH AT	DW61RE	19.	13.17	8.	3.	1.	.39
+ DIVERSION TO	DW61S	19.	13.17	8.	3.	1.	.39
+ HYDROGRAPH AT	DW61SE	0.	.00	0.	0.	0.	.39
+ HYDROGRAPH AT	W60	349.	12.08	36.	12.	4.	.16
+ DIVERSION TO	RW60	349.	12.08	29.	8.	3.	.16
+ HYDROGRAPH AT	DW60RE	77.	12.33	12.	4.	1.	.16
+ 3 COMBINED AT	CPW60	77.	12.33	20.	7.	2.	.72
+ ROUTED TO	SRW60	33.	13.33	20.	7.	2.	.72
+ ROUTED TO	W60S61	33.	13.83	19.	7.	2.	.72
+ HYDROGRAPH AT	S61	449.	12.08	36.	12.	4.	.23
+ DIVERSION TO	RS61	124.	11.92	12.	4.	1.	.23
+ HYDROGRAPH AT	DS61RE	449.	12.08	29.	8.	3.	.23
+ 2 COMBINED AT	CPS61	447.	12.08	46.	15.	5.	.95
+ ROUTED TO	S61S62	336.	12.17	45.	15.	5.	.95
+ HYDROGRAPH AT	S62	296.	12.08	29.	10.	3.	.13
+ DIVERSION TO	RS62	296.	12.08	23.	7.	2.	.13
HYDROGRAPH AT							

+	DS62RE	93.	12.25	11.	4.	1.	.13
2 COMBINED AT +	CPS62	396.	12.25	56.	18.	6.	1.08
ROUTED TO +	S62S64	246.	12.50	54.	18.	6.	1.08
HYDROGRAPH AT +	S63	906.	12.17	86.	27.	9.	.60
DIVERSION TO +	RS63	95.	11.83	19.	6.	2.	.60
HYDROGRAPH AT +	DS63RE	906.	12.17	78.	21.	7.	.60
ROUTED TO +	S63S64	818.	12.25	78.	21.	7.	.60
HYDROGRAPH AT +	S64	866.	12.17	95.	32.	11.	.47
DIVERSION TO +	RS64	866.	12.17	92.	26.	9.	.47
HYDROGRAPH AT +	DS64RE	39.	13.58	18.	6.	2.	.47
3 COMBINED AT +	CPS64	914.	12.33	145.	46.	15.	2.16
ROUTED TO +	S64S67	707.	12.58	142.	46.	15.	2.16
HYDROGRAPH AT +	S67	283.	12.17	25.	8.	3.	.16
DIVERSION TO +	RS67	283.	12.17	20.	5.	2.	.16
HYDROGRAPH AT +	DS67RE	102.	12.33	8.	2.	1.	.16
2 COMBINED AT +	CPS67	725.	12.58	150.	48.	16.	2.32
ROUTED TO +	SRS67	720.	12.75	128.	42.	14.	2.32
ROUTED TO +	S67S68	480.	13.08	123.	42.	14.	2.32
HYDROGRAPH AT +	S68	434.	12.25	43.	13.	4.	.34
DIVERSION TO +	RS68	289.	12.17	18.	5.	2.	.34
HYDROGRAPH AT +	DS68RE	434.	12.25	29.	8.	3.	.34
2 COMBINED AT +	CPS68	496.	13.08	145.	50.	17.	2.65
ROUTED TO +	S68S69	417.	13.42	141.	50.	17.	2.65
HYDROGRAPH AT +	S69	725.	12.25	85.	28.	9.	.47
DIVERSION TO +	RS69	725.	12.25	60.	17.	6.	.47
HYDROGRAPH AT +	DS69RE	415.	12.33	38.	11.	4.	.47
2 COMBINED AT +	CPS69	454.	13.42	176.	61.	21.	3.12
ROUTED TO +	S69S70	404.	13.75	172.	61.	21.	3.12
HYDROGRAPH AT +	S70	1273.	12.17	139.	46.	15.	.75
DIVERSION TO +	RS70	1273.	12.17	139.	40.	13.	.75
HYDROGRAPH AT +	DS70RE	26.	15.42	17.	6.	2.	.75
2 COMBINED AT +	CPS70	403.	13.75	182.	67.	22.	3.87
ROUTED TO +	S70S71	379.	14.00	179.	67.	22.	3.87
HYDROGRAPH AT +	S71	207.	12.17	22.	7.	2.	.13
DIVERSION TO +	RS71	207.	12.17	18.	5.	2.	.13
HYDROGRAPH AT +	DS71RE	50.	12.50	6.	2.	1.	.13
2 COMBINED AT +	CPS71	385.	14.00	184.	69.	23.	4.00
ROUTED TO +	SRS71	386.	14.00	183.	69.	23.	4.00
DIVERSION TO +	DS71W	0.	.00	0.	0.	0.	4.00
HYDROGRAPH AT +	DS71SW	386.	14.00	183.	69.	23.	4.00
ROUTED TO							

+	S71S74	329.	14.25	177.	69.	23.	4.00
+ HYDROGRAPH AT	S56	936.	12.25	107.	36.	12.	.61
+ DIVERSION TO	RS56	936.	12.25	77.	22.	7.	.61
+ HYDROGRAPH AT	DS56RE	480.	12.33	46.	14.	5.	.61
+ ROUTED TO	S56S57	236.	12.75	44.	14.	5.	.61
+ HYDROGRAPH AT	S57	1090.	12.25	123.	40.	13.	.77
+ DIVERSION TO	RS57	1090.	12.25	80.	22.	7.	.77
+ HYDROGRAPH AT	DS57RE	798.	12.33	60.	18.	6.	.77
+ 2 COMBINED AT	CPS57	785.	12.33	103.	31.	10.	1.37
+ ROUTED TO	S57S58	504.	12.58	100.	31.	10.	1.37
+ HYDROGRAPH AT	DS48S	2.	12.25	1.	0.	0.	16.46
+ ROUTED TO	S48S58	1.	14.83	1.	0.	0.	16.46
+ HYDROGRAPH AT	S58	366.	12.17	38.	13.	4.	.20
+ DIVERSION TO	RS58	366.	12.17	37.	11.	4.	.20
+ HYDROGRAPH AT	DS58RE	12.	13.92	6.	2.	1.	.20
+ 3 COMBINED AT	CPS58	554.	12.58	110.	35.	12.	18.04
+ ROUTED TO	SRS58	373.	12.67	86.	28.	9.	18.04
+ ROUTED TO	S58S59	275.	13.08	84.	28.	9.	18.04
+ HYDROGRAPH AT	S59	352.	12.08	30.	10.	3.	.17
+ DIVERSION TO	RS59	352.	12.08	30.	9.	3.	.17
+ HYDROGRAPH AT	DS59RE	6.	14.67	4.	1.	0.	.17
+ 2 COMBINED AT	CPS59	275.	13.08	85.	29.	10.	18.20
+ ROUTED TO	SRS59	94.	14.42	52.	22.	7.	18.20
+ ROUTED TO	S59S74	84.	15.58	49.	22.	7.	18.20
+ HYDROGRAPH AT	S72	625.	12.33	85.	27.	9.	.40
+ DIVERSION TO	RS72	625.	12.33	66.	18.	6.	.40
+ HYDROGRAPH AT	DS72RE	277.	12.58	29.	9.	3.	.40
+ ROUTED TO	S72S73	137.	13.08	28.	9.	3.	.40
+ HYDROGRAPH AT	S73	521.	12.17	62.	20.	7.	.28
+ DIVERSION TO	RS73	521.	12.17	42.	12.	4.	.28
+ HYDROGRAPH AT	DS73RE	366.	12.33	28.	8.	3.	.28
+ 2 COMBINED AT	CPS73	366.	12.33	55.	17.	6.	.68
+ ROUTED TO	S73S74	142.	13.83	51.	17.	6.	.68
+ HYDROGRAPH AT	S74	2118.	12.42	332.	108.	36.	1.61
+ DIVERSION TO	RS74	2118.	12.42	261.	72.	24.	1.61
+ HYDROGRAPH AT	DS74RE	1013.	12.75	114.	35.	12.	1.61
+ 5 COMBINED AT	CPS74	327.	15.33	247.	170.	61.	68.95
+ DIVERSION TO	DS741W	138.	15.33	105.	72.	26.	68.95
+ HYDROGRAPH AT	DS741	183.	15.33	140.	96.	35.	68.95
+ DIVERSION TO	DS742W	20.	15.42	16.	11.	4.	68.95
HYDROGRAPH AT							

+	DS742	163.	15.33	124.	85.	31.	68.95
+ ROUTED TO	S74S79	160.	15.92	121.	84.	31.	68.95
+ HYDROGRAPH AT	DW61SE	19.	13.17	8.	3.	1.	.39
+ ROUTED TO	W61S65	13.	15.75	8.	3.	1.	.39
+ HYDROGRAPH AT	S65	1137.	12.33	152.	50.	17.	.88
+ DIVERSION TO	RS65	1137.	12.33	109.	31.	10.	.88
+ HYDROGRAPH AT	DS65RE	731.	12.50	64.	19.	6.	.88
+ 2 COMBINED AT	CPS65	728.	12.50	70.	22.	7.	1.27
+ ROUTED TO	S65S66	270.	13.25	65.	22.	7.	1.27
+ HYDROGRAPH AT	S66	911.	12.25	100.	31.	10.	.65
+ DIVERSION TO	RS66	911.	12.25	100.	31.	10.	.65
+ HYDROGRAPH AT	DS66RE	0.	.00	0.	0.	0.	.65
+ 2 COMBINED AT	CPS66	270.	13.25	65.	22.	7.	1.92
+ ROUTED TO	SRS66	35.	17.17	24.	9.	3.	1.92
+ ROUTED TO	S66S75	35.	17.58	23.	9.	3.	1.92
+ HYDROGRAPH AT	S75	479.	12.25	53.	17.	6.	.34
+ DIVERSION TO	RS75	479.	12.25	44.	12.	4.	.34
+ HYDROGRAPH AT	DS75RE	139.	12.50	16.	5.	2.	.34
+ 2 COMBINED AT	CPS75	127.	12.50	28.	13.	4.	2.26
+ ROUTED TO	S75S76	55.	13.17	27.	13.	4.	2.26
+ HYDROGRAPH AT	S76	1707.	12.25	223.	77.	26.	1.01
+ DIVERSION TO	RS76	1707.	12.25	195.	55.	18.	1.01
+ HYDROGRAPH AT	DS76RE	223.	12.75	65.	22.	7.	1.01
+ 2 COMBINED AT	CPS76	223.	12.75	83.	35.	12.	3.27
+ ROUTED TO	S76S77	195.	13.25	80.	35.	12.	3.27
+ HYDROGRAPH AT	S77	1332.	12.25	155.	51.	17.	.91
+ DIVERSION TO	RS77	1332.	12.25	112.	31.	10.	.91
+ HYDROGRAPH AT	DS77RE	855.	12.42	65.	19.	6.	.91
+ 2 COMBINED AT	CPS77	851.	12.42	137.	54.	18.	4.18
+ ROUTED TO	SRS77	714.	12.42	137.	54.	18.	4.18
+ ROUTED TO	S77S78	463.	12.75	133.	54.	18.	4.18
+ HYDROGRAPH AT	S78	283.	12.25	32.	11.	4.	.18
+ DIVERSION TO	RS78	283.	12.25	32.	9.	3.	.18
+ HYDROGRAPH AT	DS78RE	8.	14.25	5.	2.	1.	.18
+ HYDROGRAPH AT	DS71SW	0.	.00	0.	0.	0.	4.00
+ ROUTED TO	S71S78	0.	.00	0.	0.	0.	4.00
+ 3 COMBINED AT	CPS78	464.	12.75	136.	56.	19.	7.97
+ ROUTED TO	SRS78	90.	16.17	70.	33.	11.	7.97
+ ROUTED TO	S78S79	88.	16.67	69.	33.	11.	7.97
+ HYDROGRAPH AT	S79	1233.	12.33	151.	44.	15.	.92
DIVERSION TO							

+	RS79	1233.	12.33	119.	31.	10.	.92
+ HYDROGRAPH AT	DS79RE	553.	12.67	43.	12.	4.	.92
+ 3 COMBINED AT	CPS79	170.	24.58	150.	102.	37.	73.83
+ ROUTED TO	S79S80	168.	25.00	150.	102.	37.	73.83
+ HYDROGRAPH AT	S92	1140.	12.25	150.	49.	16.	.69
+ DIVERSION TO	RS92	1140.	12.25	121.	33.	11.	.69
+ HYDROGRAPH AT	DS92RE	400.	12.58	50.	16.	5.	.69
+ HYDROGRAPH AT	DS741	138.	15.33	105.	72.	26.	68.95
+ ROUTED TO	S74S92	137.	15.50	104.	72.	26.	68.95
+ 2 COMBINED AT	CPS92	862.	13.00	304.	186.	66.	69.64
+ ROUTED TO	S92S80	159.	16.08	126.	80.	29.	69.64
+ HYDROGRAPH AT	DS742	20.	15.42	16.	11.	4.	68.95
+ ROUTED TO	S74S80	19.	16.75	15.	11.	4.	68.95
+ HYDROGRAPH AT	S80	456.	12.42	54.	16.	5.	.44
+ DIVERSION TO	RS80	456.	12.42	44.	12.	4.	.44
+ HYDROGRAPH AT	DS80RE	175.	12.75	14.	4.	1.	.44
+ 4 COMBINED AT	CPS80	337.	16.25	284.	190.	69.	74.95
+ HYDROGRAPH AT	S89	329.	12.25	33.	9.	3.	.20
+ DIVERSION TO	RS89	329.	12.25	23.	6.	2.	.20
+ HYDROGRAPH AT	DS89RE	203.	12.42	12.	3.	1.	.20
+ HYDROGRAPH AT	S90	190.	12.17	19.	6.	2.	.09
+ DIVERSION TO	RS90	190.	12.17	15.	4.	1.	.09
+ HYDROGRAPH AT	DS90RE	59.	12.33	6.	2.	1.	.09
+ ROUTED TO	S90S91	30.	12.67	6.	2.	1.	.09
+ HYDROGRAPH AT	S91	372.	12.25	43.	13.	4.	.22
+ DIVERSION TO	RS91	360.	12.17	27.	7.	2.	.22
+ HYDROGRAPH AT	DS91RE	328.	12.33	21.	6.	2.	.22
+ 2 COMBINED AT	CPS91	328.	12.33	27.	8.	3.	.31
+ HYDROGRAPH AT	S88	135.	12.17	11.	3.	1.	.07
+ DIVERSION TO	RS88	129.	12.17	7.	2.	1.	.07
+ HYDROGRAPH AT	DS88RE	110.	12.25	4.	1.	0.	.07
+ HYDROGRAPH AT	S87	219.	12.17	24.	7.	2.	.12
+ DIVERSION TO	RS87	219.	12.17	18.	5.	2.	.12
+ HYDROGRAPH AT	DS87RE	100.	12.42	8.	2.	1.	.12
+ HYDROGRAPH AT	S86	356.	12.17	30.	8.	3.	.20
+ DIVERSION TO	RS86	356.	12.17	24.	6.	2.	.20
+ HYDROGRAPH AT	DS86RE	147.	12.42	7.	2.	1.	.20
+ HYDROGRAPH AT	S85	448.	12.33	49.	13.	4.	.34
+ DIVERSION TO	RS85	448.	12.33	40.	10.	3.	.34
+ HYDROGRAPH AT	DS85RE	148.	12.67	9.	2.	1.	.34
5 COMBINED AT							

```
+                        DUMMY      499.   12.42        54.        15.        5.      1.04
          4 COMBINED AT
+                        DUMMY    11402.   12.42      3028.      1286.      464.    324.13
 *** NORMAL END OF HEC-1 ***
```

Future Conditions HEC-1 (MB02)

Loop 303/White Tanks ADMPU Area Hydrologic Analysis in Maricopa County, Arizona

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1****************************************                                    ****************************************
*                                      *                                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN   1998              *                                    *   HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.1               *                                    *         609 SECOND STREET            *
*                                      *                                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   02SEP09  TIME  19:12:46  *                                    *          (916) 756-1104              *
*                                      *                                    *                                      *
****************************************                                    ****************************************

                                        X     X  XXXXXXX   XXXXX          X
                                        X     X  X        X     X        XX
                                        X     X  X        X              X
                                        XXXXXXX  XXXX     X        XXXXX  X
                                        X     X  X        X              X
                                        X     X  X        X     X        X
                                        X     X  XXXXXXX   XXXXX        XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                                HEC-1 INPUT                                                    PAGE  1

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

        1           ID        Flood Control District of Maricopa County
        2           ID        L303_FU_MB02 - Loop 303/ White Tanks ADMPU AHA
        3           ID        100 YEAR
        4           ID        24 Hour Storm
        5           ID        Unit Hydrograph: S-Graph
        6           ID        09/02/2009
        7           ID            FCDMC CONTRACT 2007C031
        8           ID            BY HDR ENGINEERING (#79902)
        9           ID            FUTURE CONDITIONS-SEPTEMBER 2009
       10           ID            MAJOR BASIN 02
       11           ID            FILE NAME: FU-MB02.DAT
       12           IT       5       0       0    2000
       13           IN      15
       14           IO       3
                   *DIAGRAM
                   *
       15           JD   3.941  0.0001
       16           PC   0.000   0.002   0.005   0.008   0.011   0.014   0.017   0.020   0.023   0.026
       17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056   0.060
       18           PC   0.064   0.068   0.072   0.076   0.080   0.085   0.090   0.095   0.100   0.105
       19           PC   0.110   0.115   0.120   0.126   0.133   0.140   0.147   0.155   0.163   0.172
       20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
       21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
       22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
       23           PC   0.913   0.918   0.922   0.926   0.930   0.934   0.938   0.942   0.946   0.950
       24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977   0.980
       25           PC   0.983   0.986   0.989   0.992   0.995   0.998   1.000
       26           JD   3.843     5.0
       27           JD   3.744    10.0
       28           JD   3.646    20.0
       29           JD   3.547    30.0
       30           JD   3.429    60.0
                   *

       31           KK     L21BASIN
       32           KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
       33           BA   0.525
       34           LG    0.33    0.24    4.55    0.44      14
       35           UI       0      21      21      21      27      70      79      96     107     116
       36           UI     124     136     151     163     189     232     260     263     226     200
       37           UI     185     169     155     139     127     114     105      95      77      60
       38           UI      42      37      36      34      31      21      21      21      16       6
       39           UI       7       6       7       6       7       6       7       6       7       6
                   *

       40           KK  DL21REDIVERT
       41           KM        Mass grading and Storage along canal
       42           KM        Additional Retention based on 100yr 2hr retention.
       43           KM        C value is based on future land use, P=2.7, A=acres
       44           DT    RL21    81.8     0.0
       45           DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
       46           DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                   *
1                                                HEC-1 INPUT                                                    PAGE  2

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

       47           KK  L21L22ROUTE
       48           KM        Cross-section: Cross-section determined from A-team survey
       49           KM        Manning's N Value: earth w/sparse trees and brush, ponding against canal
       50           RS       1    FLOW
       51           RC   0.032   0.032   0.032    8793  0.0020    0.00
       52           RX  100.00  101.00  107.00  117.00  169.00  409.00  512.00  513.00
       53           RY  1328.1 1328.00 1326.00 1324.00 1324.10 1326.00 1328.00 1328.10
                   *

       54           KK     L22BASIN
       55           KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
       56           BA   0.362
       57           LG    0.45    0.24    4.35    0.57       1
       58           UI       0      10      11      10      10      11      22      29      38      44
       59           UI      51      58      65      71      74      84      87      94      93      96
       60           UI     100      99      99     100      95      94      91      84      78      73
       61           UI      68      62      59      54      50      47      44      40      37      35
       62           UI      32      30      28      25      23      22      20      20      18      16
                   *

       63           KK  DL22REDIVERT
       64           KM        Storage along canal
       65           KM        Additional Retention based on 100yr 2hr retention.
       66           KM        C value is based on future land use, P=2.7, A=acres
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 67          DT    RL22     17.8      0.0
 68          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 69          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

 70          KK   CPL22COMBINE
 71          HC       2   0.887
             *

 72          KK  L22W01ROUTE
 73          KM        Cross-section: Cross-section determined from 1991 topo
 74          KM        Manning's N Value: earth w/ sparse trees and brush
 75          RS       1     FLOW
 76          RC   0.032    0.032    0.032     3159  0.0063     0.00
 77          RX  100.00   101.00   102.00   115.00  128.00   140.00   141.00   142.00
 78          RY  1320.2 1320.10 1320.00 1314.00 1314.10 1320.00 1320.10 1320.20
             *

 79          KK     W01BASIN
 80          KM        BASIN BOUNDARY FROM FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
 81          BA   0.191
 82          LG    0.48     0.24     3.95     0.40        0
 83          UI       0       16       23       56       90      120      142      153      155      141
 84          UI     117       94       75       60       49       38       31       25       19       17
 85          UI      11       11        9        4        3        4        4        4        4        4
 86          UI       0        0        0        0        0        0        0        0        0        0
 87          UI       0        0        0        0        0        0        0        0        0        0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 88          KK   CPW01COMBINE
 89          HC       2   1.078
             *

 90          KK  W01W02ROUTE
 91          KM        Cross-section: Assumed 25' bottom width,
 92          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
 93          RS       2     FLOW
 94          RC   0.035    0.035    0.035     2650  0.0053     0.00
 95          RX   25.00    50.00    75.00    99.00  124.00   148.00   173.00   198.00
 96          RY  1000.0   999.50   999.00   993.00  993.05   999.00   999.50  1000.00
             *

 97          KK     W02BASIN
 98          KM        BASIN BOUNDARY FROM 1990 TOPO, ALL FLOW TO SOUTH
 99          KM        FRS#3 ON THE WEST AND THE BEARDSLEY CSR ON THE EAST
100          BA   0.394
101          LG    0.31     0.25     4.65     0.40       16
102          UI       0       58      223      334      483      690      475      337      212       99
103          UI      65       28       17       18        0        0        0        0        0        0
104          UI       0        0        0        0        0        0        0        0        0        0
105          UI       0        0        0        0        0        0        0        0        0        0
106          UI       0        0        0        0        0        0        0        0        0        0
             *

107          KK  DW02REDIVERT
108          KM        Additional Retention based on 100yr 2hr retention.
109          KM        C value is based on future land use, P=2.7, A=acres
110          DT    RW02     20.2      0.0
111          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
112          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

113          KK   CPW02COMBINE
114          HC       2   1.472
             *

115          KK  W02W05ROUTE
116          KM        Cross-section: Natural Desert Wash w/ vegatation
117          RS       1     FLOW
118          RC   0.035    0.035    0.035     2214  0.0045     0.00
119          RX  100.00   106.00   112.00   119.00  135.00   137.00   138.00   141.00
120          RY  1280.0 1278.00 1277.00 1276.00 1275.90 1277.00 1278.00 1280.00
             *

121          KK     W03BASIN
122          KM        BASIN BOUNDARY FROM 1990 TOPO
123          BA   1.971
124          LG    0.10     0.25     4.00     0.74       25
125          UI       0      258      789     1569     2132     2665     1637     1329     1092      839
126          UI     639      545      386      305      249      198      134      128       88       50
127          UI      50       49       50       50        0        0        0        0        0        0
128          UI       0        0        0        0        0        0        0        0        0        0
129          UI       0        0        0        0        0        0        0        0        0        0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

130          KK  W03W04ROUTE
131          KM        Cross-section: Side slopes and width based on aerial and topo
132          KM        Manning's N Value: natural desert wash w/ vegetation
133          RS       3     FLOW
134          RC   0.035    0.035    0.035    18417  0.0490     0.00
135          RX  100.00   140.00   180.00   210.00  235.00   305.00   345.00   385.00
136          RY  1511.0 1510.50 1510.00 1502.00 1502.10 1510.00 1511.00 1512.00
             *

137          KK     W04BASIN
138          KM        BASIN BOUNDARY FROM 1990 TOPO
139          BA   2.034
140          LG    0.14     0.25     4.60     0.50       26
141          UI       0      249      673     1409     1895     2731     1753     1401     1167      947
142          UI     720      594      480      353      293      233      191      135      121      103
143          UI      48       48       48       48       48       47        0        0        0        0
144          UI       0        0        0        0        0        0        0        0        0        0
145          UI       0        0        0        0        0        0        0        0        0        0
             *

146          KK  DW04REDIVERT
147          KM        Additional Retention based on 100yr 2hr retention.
148          KM        C value is based on future land use, P=2.7, A=acres
149          DT    RW04     22.7      0.0
150          DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
151          DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *
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152          KK   CPW04COMBINE
153          HC       2   4.005
             *

154          KK  W04W05ROUTE
155          KM        Cross-section: Estimated 3' deep and 4:1 side slopes
156          KM        width based on aerial / Manning's N Value: clean straight earth
157          RS       2    FLOW
158          RC   0.035   0.035   0.035    5298  0.0098    0.00
159          RX  100.00  120.00  140.00  160.00  174.00  214.00  234.00  254.00
160          RY  1313.5 1312.50 1312.00 1308.00 1308.10 1312.00 1312.50 1313.50
             *

161          KK     W05BASIN
162          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
163          BA   0.316
164          LG    0.26    0.25    4.25    0.47      14
165          UI       0      46     175     264     380     549     385     273     177      80
166          UI      54      24      15      14       0       0       0       0       0       0
167          UI       0       0       0       0       0       0       0       0       0       0
168          UI       0       0       0       0       0       0       0       0       0       0
169          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

170          KK  DW05REDIVERT
171          KM        Additional Retention based on 100yr 2hr retention.
172          KM        C value is based on future land use, P=2.7, A=acres
173          DT    RW05     19.1     0.0
174          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
175          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

176          KK   CPW05COMBINE
177          HC       3   5.793
             *

178          KK  DW05SEDIVERT
179          KM        North Inlet Channel Divert from L303M3LA.OUT model given to HDR by FCDMC
180          DT   DW05S      0.0     0.0
181          DI   600.0   800.0  1000.0  1200.0  1400.0  1600.0  2000.0  2400.0  2715.0  2800.0
182          DQ   105.0   163.0   361.0   498.0   640.0   792.0  1100.0  1437.0  1605.0  1630.0
             *

183          KK  W0512AROUTE
184          KM        North Inlet Channel Main Wash Route from L303M3LA.OUT model given to HDR
185          KM        Cross section from HEC-1
186          RS       2    FLOW
187          RC   0.050   0.030   0.050    5306  0.0083    0.00
188          RX  1010.0 1015.00 1020.00 1050.00 1100.00 1275.00 1580.00 1750.00
189          RY  1251.0 1249.00 1249.00 1245.00 1244.90 1250.00 1250.00 1254.00
             *

190          KK     W06BASIN
191          KM        BASIN BOUNDARY FROM 1990 TOPO
192          BA   0.707
193          LG    0.10    0.25    4.30    0.65      23
194          UI       0     358    1306    1525     879     546     341     206     125      83
195          UI      35      35      36       0       0       0       0       0       0       0
196          UI       0       0       0       0       0       0       0       0       0       0
197          UI       0       0       0       0       0       0       0       0       0       0
198          UI       0       0       0       0       0       0       0       0       0       0
             *

199          KK     W07BASIN
200          KM        BASIN BOUNDARY FROM 1990 TOPO
201          BA   0.312
202          LG    0.10    0.25    4.25    0.60      73
203          UI       0     363    1119     709     177      37       0       0       0       0
204          UI       0       0       0       0       0       0       0       0       0       0
205          UI       0       0       0       0       0       0       0       0       0       0
206          UI       0       0       0       0       0       0       0       0       0       0
207          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE  6

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

208          KK  DW07REDIVERT
209          KM        Additional Retention based on 100yr 2hr retention.
210          KM        C value is based on future land use, P=2.7, A=acres
211          DT    RW07     21.3     0.0
212          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
213          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

214          KK   CPW07COMBINE
215          HC       2   1.019
             *

216          KK  W07W08ROUTE
217          KM        Cross-section: Based on aerial and topo
218          KM        Manning's N Value: Natural Desert wash w/ vegetation
219          RS       1    FLOW
220          RC   0.045   0.035   0.045    5589  0.0796    0.00
221          RX  100.00  136.00  173.00  197.00  234.00  254.00  298.00  342.00
222          RY  2880.0 2865.00 2850.00 2840.00 2840.00 2850.00 2865.00 2880.00
             *

223          KK     W08BASIN
224          KM        BASIN BOUNDARY FROM 1990 TOPO
225          BA   0.445
226          LG    0.10    0.25    3.95    0.40      25
227          UI       0     579    1455     735     356     173      83      33       0       0
228          UI       0       0       0       0       0       0       0       0       0       0
229          UI       0       0       0       0       0       0       0       0       0       0
230          UI       0       0       0       0       0       0       0       0       0       0
231          UI       0       0       0       0       0       0       0       0       0       0
             *

232          KK   CPW08COMBINE
233          HC       2   1.464
             *

234          KK     W09BASIN
```

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235          KM        BASIN BOUNDARY FROM 1990 TOPO
236          BA   0.335
237          LG    0.15     0.25     3.95     0.40       25
238          UI       0      380     1177      787      195       41        0        0        0        0
239          UI       0        0        0        0        0        0        0        0        0        0
240          UI       0        0        0        0        0        0        0        0        0        0
241          UI       0        0        0        0        0        0        0        0        0        0
242          UI       0        0        0        0        0        0        0        0        0        0
             *

243          KK  DW09REDIVERT
244          KM        Additional Retention based on 100yr 2hr retention.
245          KM        C value is based on future land use, P=2.7, A=acres
246          DT    RW09      5.6      0.0
247          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
248          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *
1                                          HEC-1 INPUT                                          PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

249          KK   CPW09COMBINE
250          HC        2    1.799
             *

251          KK  W09W10ROUTE
252          KM        Cross-section: Based on aerial and topo
253          KM        Manning's N Value: Natural Desert wash w/ vegetation
254          RS        1     FLOW
255          RC   0.045    0.035    0.045    11134   0.0683     0.00
256          RX  100.00   137.00   172.00   192.00   220.00   230.00   284.00   338.00
257          RY  1990.0  1975.00  1960.00  1950.00  1950.00  1960.00  1975.00  1990.00
             *

258          KK     W10BASIN
259          KM        BASIN BOUNDARY FROM 1990 TOPO
260          BA   1.338
261          LG    0.10     0.25     3.95     0.40       25
262          UI       0      405     1564     2668     1770     1286      859      604      392      269
263          UI     182      136       64       53       53       53        0        0        0        0
264          UI       0        0        0        0        0        0        0        0        0        0
265          UI       0        0        0        0        0        0        0        0        0        0
266          UI       0        0        0        0        0        0        0        0        0        0
             *

267          KK   CPW10COMBINE
268          HC        2    3.137
             *

269          KK     W11BASIN
270          KM        BASIN BOUNDARY FROM 1990 TOPO
271          BA   0.812
272          LG    0.10     0.25     3.95     0.40       25
273          UI       0      285     1067     1713     1051      752      477      333      212      144
274          UI      87       60       34       34       34        0        0        0        0        0
275          UI       0        0        0        0        0        0        0        0        0        0
276          UI       0        0        0        0        0        0        0        0        0        0
277          UI       0        0        0        0        0        0        0        0        0        0
             *

278          KK   CPW11COMBINE
279          HC        2    3.949
             *

280          KK  W11W12ROUTE
281          KM        Cross-section: Based on aerial and topo
282          KM        Manning's N Value: Natural Desert wash w/ vegetation
283          RS        8     FLOW
284          RC   0.045    0.035    0.045    21182   0.0205     0.00
285          RX  100.00   110.30   290.50   304.40   319.20   330.60   344.60   569.70
286          RY  1312.0  1310.00  1308.00  1306.00  1305.90  1308.00  1310.00  1312.00
             *
1                                          HEC-1 INPUT                                          PAGE  8

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

287          KK     W12BASIN
288          KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
289          BA   1.868
290          LG    0.18     0.25     4.60     0.45       12
291          UI       0      171      300      686      904     1107     1384     1986     1948     1487
292          UI    1218      990      758      457      299      246      171       98       52       53
293          UI      53       53        0        0        0        0        0        0        0        0
294          UI       0        0        0        0        0        0        0        0        0        0
295          UI       0        0        0        0        0        0        0        0        0        0
             *

296          KK  DW12REDIVERT
297          KM        Additional Retention based on 100yr 2hr retention.
298          KM        C value is based on future land use, P=2.7, A=acres
299          DT    RW12     43.6      0.0
300          DI     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
301          DQ     0.0    500.0   5000.0  50000.0      0.0      0.0      0.0      0.0      0.0      0.0
             *

302          KK  DW05SERETRIEVE
303          KM        Flow traveling down North Inlet Channel
304          DR   DW05S
             *

305          KK  W0512BROUTE
306          KM        Cross section from North Inlet Channel As-Built Plans
307          RS        2     FLOW
308          RC   0.022    0.022    0.022     5494   0.0170     0.00
309          RX  100.00   120.00   135.00   165.00   220.00   300.00   315.00   379.00
310          RY  1244.7  1239.65  1239.50  1232.00  1231.90  1239.50  1239.65  1255.65
             *

311          KK   CPW12COMBINE
312          HC        4   11.61
             *

313          KK  W12W13ROUTE
314          KM        From NIC South Channel Plans at Sta. 535+00
315          RS        1     FLOW
316          RC   0.045    0.035    0.045     2062   0.0051     0.00
317          RX  100.00   120.00   162.50   205.00   355.00   397.50   440.00   460.00
318          RY  1218.4  1218.18  1211.10  1203.98  1204.45  1211.53  1218.65  1218.85
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                *

 319            KK     W13BASIN
 320            KM        BASIN BOUNDARY FROM 1990 TOPO AND BEARDSELY CSR
 321            BA   1.584
 322            LG    0.21     0.25     4.90     0.36       14
 323            UI       0      167      387      769      980     1263     1831     1902     1426     1111
 324            UI     864      585      292      246      170       71       51       52       51        0
 325            UI       0        0        0        0        0        0        0        0        0        0
 326            UI       0        0        0        0        0        0        0        0        0        0
 327            UI       0        0        0        0        0        0        0        0        0        0
                *
1                                          HEC-1 INPUT                                                    PAGE  9

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 328            KK  DW13REDIVERT
 329            KM        Additional Retention based on 100yr 2hr retention.
 330            KM        C value is based on future land use, P=2.7, A=acres
 331            DT    RW13     62.2      0.0
 332            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 333            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 334            KK   CPW13COMBINE
 335            HC        2  13.194
                *

 336            KK  W13W16ROUTE
 337            KM        Cross-section: Based on aerial and topo
 338            KM        Manning's N Value: Natural Desert wash w/ vegetation
 339            KM        and clean earth;straight
 340            RS        1    FLOW
 341            RC   0.022    0.022    0.022     6257   0.0051     0.00
 342            RX  100.00   115.00   162.00   209.10   359.10   435.90   465.00   480.00
 343            RY  1216.9  1216.77  1208.93  1201.09  1203.09  1215.09  1223.54  1223.69
                *

 344            KK     W15BASIN
 345            KM        BASIN BOUNDARY FROM 1990 TOPO
 346            BA   1.227
 347            LG    0.26     0.25     4.55     0.40       23
 348            UI       0      150      437      764      997     1434     1764     1280      966      697
 349            UI     372      255      151       77       46       46       46        0        0        0
 350            UI       0        0        0        0        0        0        0        0        0        0
 351            UI       0        0        0        0        0        0        0        0        0        0
 352            UI       0        0        0        0        0        0        0        0        0        0
                *

 353            KK  DW15REDIVERT
 354            KM        Additional Retention based on 100yr 2hr retention.
 355            KM        C value is based on future land use, P=2.7, A=acres
 356            DT    RW15     80.9      0.0
 357            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 358            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 359            KK     W14BASIN
 360            KM        BASIN BOUNDARY FROM 1990 TOPO
 361            BA   1.582
 362            LG    0.14     0.25     5.20     0.37       19
 363            UI       0      363     1377     2355     2543     1579     1187      811      622      407
 364            UI     301      219      141      116       55       55       55       55        0        0
 365            UI       0        0        0        0        0        0        0        0        0        0
 366            UI       0        0        0        0        0        0        0        0        0        0
 367            UI       0        0        0        0        0        0        0        0        0        0
                *
1                                          HEC-1 INPUT                                                    PAGE 10

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 368            KK  DW14REDIVERT
 369            KM        Additional Retention based on 100yr 2hr retention.
 370            KM        C value is based on future land use, P=2.7, A=acres
 371            DT    RW14     18.6      0.0
 372            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 373            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
                *

 374            KK  W14W15ROUTE
 375            KM        Cross-section: Assumed 25' bottom width,
 376            KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
 377            RS        1    FLOW
 378            RC   0.035    0.035    0.035     7308   0.0104     0.00
 379            RX   25.00    50.00    75.00    99.00   124.00   148.00   173.00   198.00
 380            RY  1000.0   999.50   999.00   993.00   993.05   999.00   999.50  1000.00
                *

 381            KK   CPW15COMBINE
 382            HC        2   2.809
                *

 383            KK  W15W16ROUTE
 384            KM        Cross-section: Based on aerial and topo
 385            KM        Manning's N Value: Natural Desert wash w/ vegetation
 386            RS        2    FLOW
 387            RC   0.035    0.035    0.035     2750   0.0087     0.00
 388            RX  100.00   135.00   232.00   328.00   360.00   498.00   635.00   735.00
 389            RY  1202.0  1200.00  1199.00  1198.00  1197.90  1199.00  1200.00  1202.00
                *

 390            KK     W16BASIN
 391            KM        BASIN BOUNDARY FROM BEARDSLEY CSR, THE FRS#4 AND 1990 TOPO
 392            BA   0.530
 393            LG    0.16     0.15     4.55     0.36       15
 394            UI       0       89      360      529      855      884      596      390      178      108
 395            UI      49       26       26        0        0        0        0        0        0        0
 396            UI       0        0        0        0        0        0        0        0        0        0
 397            UI       0        0        0        0        0        0        0        0        0        0
 398            UI       0        0        0        0        0        0        0        0        0        0
                *

 399            KK  DW16REDIVERT
 400            KM        Additional Retention based on 100yr 2hr retention.
 401            KM        C value is based on future land use, P=2.7, A=acres
 402            DT    RW16     22.6      0.0
 403            DI     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
 404            DQ     0.0    500.0   5000.0 50000.0      0.0      0.0      0.0      0.0      0.0      0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 405            KK   CPW16COMBINE
 406            HC       3  16.533
                *

 407            KK  W16W20ROUTE
 408            KM        Cross-section: Based on aerial and topo
 409            KM        Manning's N Value: clean earth; straight
 410            RS       1    FLOW
 411            RC   0.022   0.022   0.022    3633  0.0130    0.00
 412            RX  100.00  113.00  127.00  136.00  245.00  272.00  318.00  384.00
 413            RY  1186.0 1184.00 1182.00 1180.00 1179.90 1182.00 1184.00 1186.00
                *

 414            KK     W18BASIN
 415            KM        BASIN BOUNDARY FROM 1990 TOPO
 416            BA   1.260
 417            LG   0.24    0.25    4.40    0.45      23
 418            UI      0      48      50      48      48     161     181     213     240     265
 419            UI    280     308     335     365     407     476     568     653     565     493
 420            UI    457     411     382     354     314     288     265     238     217     179
 421            UI    139      97      87      82      80      78      48      49      49      45
 422            UI     15      15      15      15      15      15      15      15      15      15
                *

 423            KK  DW18REDIVERT
 424            KM        Additional Retention based on 100yr 2hr retention.
 425            KM        C value is based on future land use, P=2.7, A=acres
 426            DT    RW18    55.7     0.0
 427            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 428            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 429            KK     W17BASIN
 430            KM        BASIN BOUNDARY FROM 1990 TOPO
 431            BA   1.497
 432            LG   0.28    0.25    4.30    0.43      23
 433            UI      0     290    1084    1617    2673    2405    1592     995     434     262
 434            UI     83      77      76       0       0       0       0       0       0       0
 435            UI      0       0       0       0       0       0       0       0       0       0
 436            UI      0       0       0       0       0       0       0       0       0       0
 437            UI      0       0       0       0       0       0       0       0       0       0
                *

 438            KK  DW17REDIVERT
 439            KM        Additional Retention based on 100yr 2hr retention.
 440            KM        C value is based on future land use, P=2.7, A=acres
 441            DT    RW17    82.9     0.0
 442            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 443            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 444            KK  W17W18ROUTE
 445            KM        Cross-section: Assumed 25' bottom width,
 446            KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
 447            RS       3    FLOW
 448            RC   0.035   0.035   0.035    8559  0.0257    0.00
 449            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
 450            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

 451            KK   CPW18COMBINE
 452            HC       2   2.757
                *

 453            KK  W18W20ROUTE
 454            KM        Cross-section: Assumed 25' bottom width,
 455            KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
 456            RS       4    FLOW
 457            RC   0.035   0.035   0.035    6914  0.0058    0.00
 458            RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
 459            RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
                *

 460            KK     W19BASIN
 461            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 462            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 463            BA   1.158
 464            LG   0.17    0.25    3.88    0.42      29
 465            UI      0     443    1418    2551    2314    1345     512     224      81      79
 466            UI      0       0       0       0       0       0       0       0       0       0
 467            UI      0       0       0       0       0       0       0       0       0       0
 468            UI      0       0       0       0       0       0       0       0       0       0
 469            UI      0       0       0       0       0       0       0       0       0       0
                *

 470            KK  DW19REDIVERT
 471            KM        Additional Retention based on 100yr 2hr retention.
 472            KM        C value is based on future land use, P=2.7, A=acres
 473            DT    RW19    29.1     0.0
 474            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 475            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 476            KK   SRW19STORAGE
 477            KM        Master Drainage Plan for the Caterpillar Property (Basin #16)
 478            KO
 479            RS       1    STOR
 480            SV            1.00   31.00  114.00  270.00  502.00  807.00 1319.00 1388.00 1460.00
 481            SQ                                                                          135.00
 482            SE  1198.0 1200.00 1210.00 1220.00 1230.00 1240.00 1250.00 1260.00 1261.00 1262.00
 483            ST
                *
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 484            KK  W19W20ROUTE
 485            KM        Cross-section: Estimated 4' deep and 3:1 side slopes, width based
 486            KM        on aerial / Manning's N Value: earth with sparse treese and shrubs
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```
487          RS       1    FLOW
488          RC   0.032   0.032   0.032    3790  0.0158    0.00
489          RX  100.00  120.00  140.00  152.00  158.00  170.00  190.00  210.00
490          RY  1240.5 1240.25 1240.00 1236.00 1236.00 1240.00 1240.25 1240.50
             *

491          KK     W20BASIN
492          KM        BASIN BOUNDARY FROM WHITE TANKS #4 FRS, S-S-D CURVES
493          KM        FROM JAN 2009 FCDMC, AND FROM 1990 TOPO
494          BA   1.137
495          LG    0.22    0.21    4.10    0.51      19
496          UI       0     146     462     770    1014    1570    1561    1134     845     558
497          UI     269     196     117      44      45      45       0       0       0       0
498          UI       0       0       0       0       0       0       0       0       0       0
499          UI       0       0       0       0       0       0       0       0       0       0
500          UI       0       0       0       0       0       0       0       0       0       0
             *

501          KK  DW20REDIVERT
502          KM        Additional Retention based on 100yr 2hr retention.
503          KM        C value is based on future land use, P=2.7, A=acres
504          DT    RW20    66.8     0.0
505          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
506          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

507          KK   CPW20COMBINE
508          HC       4  21.585
             *

509          KK   SRW20STORAGE
510          KM        White Tanks FRS #3 from FCDMC 1/8/2009
511          KO
512          RS       1    STOR
513          SV          135.00  385.00  810.00 1600.00 2200.00 2560.00 3175.00 4300.00 5500.00
514          SQ                                                  68.00 1343.0016310.0045000.00
515          SE  1196.0 1196.30 1199.00 1201.00 1206.00 1208.60 1210.00 1212.00 1215.00 1218.00
516          ST
             *

517          KK     W22BASIN
518          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
519          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
520          BA   0.782
521          LG    0.16    0.25    4.15    0.63      26
522          UI       0     337    1056    1925    1473     792     279     107      57       0
523          UI       0       0       0       0       0       0       0       0       0       0
524          UI       0       0       0       0       0       0       0       0       0       0
525          UI       0       0       0       0       0       0       0       0       0       0
526          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

527          KK  DW22REDIVERT
528          KM        Additional Retention based on 100yr 2hr retention.
529          KM        C value is based on future land use, P=2.7, A=acres
530          DT    RW22    17.3     0.0
531          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
532          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

533          KK  W22W23ROUTE
534          KM        Cross-section: Assumed 25' bottom width,
535          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
536          RS       1    FLOW
537          RC   0.035   0.035   0.035    4866  0.0719    0.00
538          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
539          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

540          KK     W23BASIN
541          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
542          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
543          BA   0.897
544          LG    0.19    0.25    4.35    0.54      26
545          UI       0     371    1157    2140    1719     967     344     139      63       0
546          UI       0       0       0       0       0       0       0       0       0       0
547          UI       0       0       0       0       0       0       0       0       0       0
548          UI       0       0       0       0       0       0       0       0       0       0
549          UI       0       0       0       0       0       0       0       0       0       0
             *

550          KK  DW23REDIVERT
551          KM        Additional Retention based on 100yr 2hr retention.
552          KM        C value is based on future land use, P=2.7, A=acres
553          DT    RW23    26.5     0.0
554          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
555          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

556          KK   CPW23COMBINE
557          HC       2   1.679
             *

558          KK  W23W24ROUTE
559          KM        Cross-section: Assumed 25' bottom width,
560          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
561          RS       1    FLOW
562          RC   0.035   0.035   0.035    5335  0.0367    0.00
563          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
564          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

565          KK     W24BASIN
566          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
567          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
568          BA   0.475
569          LG    0.17    0.25    4.90    0.41      23
570          UI       0     136     460     728    1030     662     372     152      74      28
571          UI      28       0       0       0       0       0       0       0       0       0
572          UI       0       0       0       0       0       0       0       0       0       0
573          UI       0       0       0       0       0       0       0       0       0       0
574          UI       0       0       0       0       0       0       0       0       0       0
```

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*

KK  DW24REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RW24     12.2      0.0
DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPW24COMBINE
HC       2   2.154
*

KK  W24W27ROUTE
KM        Cross-section: Based on aerial and topo
KM        Manning's N Value: natural desert wash w/ vegetation
RS       1    FLOW
RC   0.035   0.035   0.035    5873  0.0289    0.00
RX  100.00  120.00  140.00  160.00  180.00  200.00  220.00  240.00
RY  1094.0 1092.00 1090.00 1084.00 1084.10 1090.00 1090.25 1090.50
*

KK     W25BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   1.099
LG    0.11     0.25     4.80     0.47       21
UI       0      150      523      825     1123     1784     1397     1036      740      374
UI     238      150       46       46       47        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DW25REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RW25      4.2      0.0
DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   SRW25STORAGE
KM        Verrado on-line storage basin (WoodPatel ID SR20)
KO
RS       1    STOR
SV            1.05    26.91    54.31    92.89   138.67   176.47   190.08   219.05   249.57
SQ                                                                265.00  1377.00  2963.00
SE  1443.0 1446.00 1454.00 1458.00 1462.00 1466.00 1469.00 1470.00 1472.00 1474.00
ST
*

KK  W25W26ROUTE
KM        Cross-section: Based on aerial and topo
KM        Manning's N Value: natural desert wash w/ vegetation
RS       1    FLOW
RC   0.035   0.035   0.035    6978  0.0178    0.00
RX  100.00  120.00  140.00  156.00  176.00  192.00  212.00  232.00
RY  1451.5 1451.25 1451.00 1447.00 1447.10 1451.00 1451.25 1451.50
*

KK     W26BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.682
LG    0.19     0.23     6.20     0.24       19
UI       0      119      466      693     1109     1131      760      498      225      137
UI      60       34       33        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
UI       0        0        0        0        0        0        0        0        0        0
*

KK  DW26REDIVERT
KM        Additional Retention based on 100yr 2hr retention.
KM        C value is based on future land use, P=2.7, A=acres
DT    RW26     20.1      0.0
DI     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
DQ     0.0    500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
*

KK   CPW26COMBINE
HC       2   1.781
*

KK   SRW26STORAGE
KM        Verrado on-line storage basin (WoodPatel ID SR21 and PH 6 Golf)
KO
RS       1    STOR
SV            0.68    20.68    57.58    95.91   102.34   117.65   130.00
SQ                                                 265.00  1377.00  2000.00
SE  1319.0 1320.00 1330.00 1340.00 1347.00 1348.00 1350.00 1351.00
ST
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  W26W27ROUTE
KM        Cross-section: Assumed 25' bottom width,
KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
RS       1    FLOW
RC   0.035   0.035   0.035    3484  0.0172    0.00
RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
*

KK     W27BASIN
KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
BA   0.410
LG    0.21     0.25     5.80     0.26       19
UI       0      208      636     1104      725      318      123       31        0        0
UI       0        0        0        0        0        0        0        0        0        0
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661          UI       0       0       0       0       0       0       0       0       0       0
662          UI       0       0       0       0       0       0       0       0       0       0
663          UI       0       0       0       0       0       0       0       0       0       0
             *

664          KK  DW27REDIVERT
665          KM        Additional Retention based on 100yr 2hr retention.
666          KM        C value is based on future land use, P=2.7, A=acres
667          DT    RW27    19.2     0.0
668          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
669          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

670          KK   CPW27COMBINE
671          HC       3   4.345
             *

672          KK  W27W44ROUTE
673          KM        Cross-section: Assumed 25' bottom width,
674          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
675          RS       2    FLOW
676          RC   0.035   0.035   0.035    7169  0.0098    0.00
677          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
678          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

679          KK     W43BASIN
680          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
681          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
682          BA   0.209
683          LG   0.15    0.26    3.48    0.55      30
684          UI      0     583     911     109       0       0       0       0       0       0
685          UI      0       0       0       0       0       0       0       0       0       0
686          UI      0       0       0       0       0       0       0       0       0       0
687          UI      0       0       0       0       0       0       0       0       0       0
688          UI      0       0       0       0       0       0       0       0       0       0
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

689          KK  DW43REDIVERT
690          KM        Additional Retention based on 100yr 2hr retention.
691          KM        C value is based on future land use, P=2.7, A=acres
692          DT    RW43     5.3     0.0
693          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
694          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

695          KK   SRW43STORAGE
696          KM        Verrado on-line storage basin (WLB) (WoodPatel ID SR23)
697          KO
698          RS       1    STOR
699          SV            6.04   20.38   53.82  325.98  455.42  606.10  645.49  685.61  767.98
700          SQ                                                                   928.00 8950.00
701          SE  1272.0 1276.00 1280.00 1284.00 1296.00 1300.00 1304.00 1305.00 1306.00 1308.00
702          ST
             *

703          KK  W43W44ROUTE
704          KM        Cross-section: Side slopes and width based on aerial and topo
705          KM        Manning's N Value: natural desert wash w/ vegetation
706          RS       1    FLOW
707          RC   0.035   0.035   0.035    8415  0.0125    0.00
708          RX  100.00  145.00  180.00  210.00  220.00  245.00  270.00  295.00
709          RY  1266.0 1264.00 1262.00 1258.00 1258.00 1262.00 1265.50 1266.00
             *

710          KK     W44BASIN
711          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
712          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
713          BA   0.598
714          LG   0.25    0.25    4.90    0.36      18
715          UI      0      86     320     492     689    1027     741     525     350     161
716          UI    107      54      27      26       0       0       0       0       0       0
717          UI      0       0       0       0       0       0       0       0       0       0
718          UI      0       0       0       0       0       0       0       0       0       0
719          UI      0       0       0       0       0       0       0       0       0       0
             *

720          KK  DW44REDIVERT
721          KM        Additional Retention based on 100yr 2hr retention.
722          KM        C value is based on future land use, P=2.7, A=acres
723          DT    RW44    99.4     0.0
724          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
725          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

726          KK   CPW44COMBINE
727          HC       3   5.152
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

728          KK  W44W46ROUTE
729          KM        Cross-section: Assumed 25' bottom width,
730          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
731          RS       1    FLOW
732          RC   0.035   0.035   0.035    1706  0.0070    0.00
733          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
734          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

735          KK     W45BASIN
736          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
737          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
738          BA   1.035
739          LG   0.20    0.15    7.30    0.15      17
740          UI      0     187     732    1085    1790    1688    1122     710     319     193
741          UI     72      53      52       0       0       0       0       0       0       0
742          UI      0       0       0       0       0       0       0       0       0       0
743          UI      0       0       0       0       0       0       0       0       0       0
744          UI      0       0       0       0       0       0       0       0       0       0
             *

745          KK  DW45REDIVERT
746          KM        Additional Retention based on 100yr 2hr retention.
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747          KM        C value is based on future land use, P=2.7, A=acres
748          DT    RW45    38.1     0.0
749          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
750          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

751          KK  W45W46ROUTE
752          KM        Cross-section: Based on aerial and topo
753          KM        Manning's N Value: natural desert wash w/ vegetation
754          RS       4    FLOW
755          RC   0.035   0.035   0.035    9372  0.0125    0.00
756          RX  100.00  160.00  205.00  265.00  285.00  310.00  345.00  385.00
757          RY  1274.0 1270.00 1268.00 1262.00 1262.10 1272.00 1275.50 1276.00
             *

758          KK     W46BASIN
759          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
760          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
761          BA   0.926
762          LG    0.24    0.21    6.40    0.20      22
763          UI       0     108     292     533     683     940    1316     994     775     574
764          UI     382     189     146      99      34      33      33      34       0       0
765          UI       0       0       0       0       0       0       0       0       0       0
766          UI       0       0       0       0       0       0       0       0       0       0
767          UI       0       0       0       0       0       0       0       0       0       0
             *
1                                          HEC-1 INPUT                                          PAGE 20

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

768          KK  DW46RBDIVERT
769          KM        Additional Retention based on 100yr 2hr retention.
770          KM        C value is based on future land use, P=2.7, A=acres
771          DT    RW46    59.3     0.0
772          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
773          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

774          KK  CPW46ACOMBINE
775          HC       2   1.961
             *

776          KK  DW46REDIVERT
777          KM        Master Drainage Plan for the Caterpillar Property (Basin #27)
778          DT   RW46R     0.0     0.0
779          DI     0.0    35.0    98.0   179.0   276.0   520.0   888.0  1339.0  1859.0  2439.0
780          DQ     0.0     0.0     0.0     0.0     0.0   135.0   382.0   701.0  1080.0  1509.0
             *

781          KK  CPW46BCOMBINE
782          HC       2   7.113
             *

783          KK  W46W54ROUTE
784          KM        Cross-section: side slopes, width based on aerial and topo
785          KM        Manning's N Value: natural desert wash w/ vegetation
786          RS       1    FLOW
787          RC   0.035   0.035   0.035    3908  0.0397    0.00
788          RX  100.00  112.00  124.00  140.00  160.00  190.00  220.00  240.00
789          RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
             *

790          KK     W47BASIN
791          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
792          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
793          BA   0.666
794          LG    0.11    0.25    3.95    0.40      25
795          UI       0      98     363     665     981     752     539     428     331     240
796          UI     194     139     109      78      60      48      36      19      19      19
797          UI      19      19       0       0       0       0       0       0       0       0
798          UI       0       0       0       0       0       0       0       0       0       0
799          UI       0       0       0       0       0       0       0       0       0       0
             *

800          KK  DW47REDIVERT
801          KM        Additional Retention based on 100yr 2hr retention.
802          KM        C value is based on future land use, P=2.7, A=acres
803          DT    RW47     2.7     0.0
804          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
805          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *
1                                          HEC-1 INPUT                                          PAGE 21

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

806          KK     W48BASIN
807          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
808          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
809          BA   0.353
810          LG    0.10    0.25    3.95    0.40      25
811          UI       0      57     232     395     573     367     281     216     157     124
812          UI      85      65      48      36      28      20      10      11      11      11
813          UI       0       0       0       0       0       0       0       0       0       0
814          UI       0       0       0       0       0       0       0       0       0       0
815          UI       0       0       0       0       0       0       0       0       0       0
             *

816          KK   CPW47COMBINE
817          HC       2   1.019
             *

818          KK  W47W49ROUTE
819          KM        Cross-section: Based on aerial and topo
820          KM        Manning's N Value: natural desert wash w/ vegetation
821          RS       1    FLOW
822          RC   0.035   0.035   0.035    5077  0.0414    0.00
823          RX  100.00  150.00  190.00  210.00  235.00  255.00  275.00  310.00
824          RY  1740.0 1720.00 1710.00 1707.00 1708.00 1714.00 1730.00 1740.00
             *

825          KK     W50BASIN
826          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
827          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
828          BA   1.345
829          LG    0.11    0.25    4.25    0.65      24
830          UI       0     127     235     523     682     845    1065    1542    1349    1050
831          UI     851     688     492     277     215     149     120      39      39      39
832          UI      40      39       0       0       0       0       0       0       0       0
```

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833          UI       0       0       0       0       0       0       0       0       0       0
834          UI       0       0       0       0       0       0       0       0       0       0
             *

835          KK  DW50REDIVERT
836          KM        Additional Retention based on 100yr 2hr retention.
837          KM        C value is based on future land use, P=2.7, A=acres
838          DT    RW50     5.5     0.0
839          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
840          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

841          KK     W49BASIN
842          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
843          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
844          BA   0.384
845          LG    0.14    0.25    3.95    0.40      27
846          UI       0      89     318     485     790     573     371     170      93      39
847          UI      21      21       0       0       0       0       0       0       0       0
848          UI       0       0       0       0       0       0       0       0       0       0
849          UI       0       0       0       0       0       0       0       0       0       0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

850          UI       0       0       0       0       0       0       0       0       0       0
             *

851          KK  DW49REDIVERT
852          KM        Additional Retention based on 100yr 2hr retention.
853          KM        C value is based on future land use, P=2.7, A=acres
854          DT    RW49     5.5     0.0
855          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
856          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

857          KK   CPW49COMBINE
858          HC       3   2.748
             *

859          KK  W49W51ROUTE
860          KM        Cross-section: Assumed 25' bottom width,
861          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
862          RS       1    FLOW
863          RC   0.035   0.035   0.035    5726  0.0253    0.00
864          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
865          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
             *

866          KK     W51BASIN
867          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
868          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
869          BA   0.149
870          LG    0.21    0.25    3.85    0.43      13
871          UI       0      52     170     298     308     185      79      38      11       9
872          UI       0       0       0       0       0       0       0       0       0       0
873          UI       0       0       0       0       0       0       0       0       0       0
874          UI       0       0       0       0       0       0       0       0       0       0
875          UI       0       0       0       0       0       0       0       0       0       0
             *

876          KK  DW51REDIVERT
877          KM        Additional Retention based on 100yr 2hr retention.
878          KM        C value is based on future land use, P=2.7, A=acres
879          DT    RW51     5.6     0.0
880          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
881          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

882          KK   CPW51COMBINE
883          HC       2   2.897
             *

884          KK     W52BASIN
885          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
886          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
887          BA   1.123
888          LG    0.13    0.25    4.40    0.59      23
889          UI       0     120     284     549     709     910    1351    1322    1016     774
890          UI     605     381     209     167     122      39      37      37      36       0
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

891          UI       0       0       0       0       0       0       0       0       0       0
892          UI       0       0       0       0       0       0       0       0       0       0
893          UI       0       0       0       0       0       0       0       0       0       0
             *

894          KK  DW52REDIVERT
895          KM        Additional Retention based on 100yr 2hr retention.
896          KM        C value is based on future land use, P=2.7, A=acres
897          DT    RW52     9.8     0.0
898          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
899          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
             *

900          KK   CPW52COMBINE
901          HC       2    4.02
             *

902          KK  W52W53ROUTE
903          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
904          KM        Manning's N Value: natural desert wash w/ vegetation
905          RS       1    FLOW
906          RC   0.035   0.035   0.035    4917  0.0112    0.00
907          RX  100.00  118.00  124.00  130.00  146.00  150.00  164.00  182.00
908          RY  1376.0 1373.00 1370.00 1368.00 1368.00 1370.00 1373.00 1376.00
             *

909          KK     W53BASIN
910          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
911          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
912          BA   0.568
913          LG    0.20    0.25    4.45    0.51      18
914          UI       0     420    1295    1653     723     222      53       0       0       0
915          UI       0       0       0       0       0       0       0       0       0       0
916          UI       0       0       0       0       0       0       0       0       0       0
917          UI       0       0       0       0       0       0       0       0       0       0
918          UI       0       0       0       0       0       0       0       0       0       0
```

```
                *
 919            KK  DW53RBDIVERT
 920            KM        Additional Retention based on 100yr 2hr retention.
 921            KM        C value is based on future land use, P=2.7, A=acres
 922            DT   RW53B    19.2     0.0
 923            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 924            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 925            KK   CPW53COMBINE
 926            HC       2   4.588
                *
1                                   HEC-1 INPUT                                                PAGE 24

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 927            KK  DW53REDIVERT
 928            KM        Verrado - Planning Unti Drainage Plan for Portions of Planning Unit V
 929            KM        (2nd Submittal) (ESTIMATED FROM GOLF BASINS IN REPORT)
 930            DT    RW53      0.0      0.0
 931            DI     0.0  1000.0  1500.0  2000.0  2500.0  3000.0  3500.0  4000.0  4145.0  4500.0
 932            DQ     0.0    10.0   115.0   290.0   460.0   715.0   980.0  1100.0  1145.0  1260.0
                *

 933            KK  W53W54ROUTE
 934            KM        Cross-section: side slopes, width based on aerial and topo
 935            KM        Manning's N Value: natural desert wash w/ vegetation
 936            RS       2    FLOW
 937            RC   0.035   0.035   0.035    9900  0.0157    0.00
 938            RX  100.00  124.00  144.00  150.00  160.00  190.00  220.00  240.00
 939            RY  1194.5 1194.00 1190.00 1184.00 1184.10 1186.00 1190.00 1190.50
                *

 940            KK     W54BASIN
 941            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 942            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 943            BA   0.980
 944            LG    0.22    0.25    4.50    0.47      16
 945            UI       0     116     317     573     745    1032    1398    1038     810     599
 946            UI     374     202     147      95      36      35      36      36       0       0
 947            UI       0       0       0       0       0       0       0       0       0       0
 948            UI       0       0       0       0       0       0       0       0       0       0
 949            UI       0       0       0       0       0       0       0       0       0       0
                *

 950            KK  DW54REDIVERT
 951            KM        Additional Retention based on 100yr 2hr retention.
 952            KM        C value is based on future land use, P=2.7, A=acres
 953            DT    RW54     46.2     0.0
 954            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 955            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 956            KK   CPW54COMBINE
 957            HC       3  12.681
                *

 958            KK  W54W57ROUTE
 959            KM        Cross-section: side slopes and width based on aerial
 960            KM        Manning's N Value: natural desert wash w/ vegetation
 961            RS       1    FLOW
 962            RC   0.035   0.035   0.035    5173  0.0151    0.00
 963            RX  100.00  124.00  144.00  156.00  180.00  204.00  216.00  228.00
 964            RY  1126.0 1125.00 1124.00 1114.00 1114.10 1117.00 1117.50 1118.00
                *
1                                   HEC-1 INPUT                                                PAGE 25

LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 965            KK     W56BASIN
 966            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 967            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 968            BA   0.448
 969            LG    0.23    0.25    4.20    0.53      36
 970            UI       0     167     535     963     902     532     209      97      30      30
 971            UI       0       0       0       0       0       0       0       0       0       0
 972            UI       0       0       0       0       0       0       0       0       0       0
 973            UI       0       0       0       0       0       0       0       0       0       0
 974            UI       0       0       0       0       0       0       0       0       0       0
                *

 975            KK  DW56REDIVERT
 976            KM        Sienna Hills (aka Tesota Hills) Preliminary Drainage Report
 977            KM        Additional Retention based on 100yr 2hr retention.
 978            KM        C value is based on future land use, P=2.7, A=acres
 979            DT    RW56     69.5     0.0
 980            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
 981            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
                *

 982            KK  W56W57ROUTE
 983            KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width
 984            KM        based on aerial / Manning's N Value: clean straight earth
 985            RS       1    FLOW
 986            RC   0.022   0.022   0.022    4948  0.0038    0.00
 987            RX  100.00  108.00  116.00  128.00  131.00  143.00  153.00  163.00
 988            RY  1108.5 1108.25 1108.00 1105.00 1105.10 1108.00 1108.25 1108.50
                *

 989            KK     W55BASIN
 990            KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
 991            KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
 992            BA   0.496
 993            LG    0.21    0.25    4.00    0.62      27
 994            UI       0     126     438     676    1043     726     448     190     108      35
 995            UI      28       0       0       0       0       0       0       0       0       0
 996            UI       0       0       0       0       0       0       0       0       0       0
 997            UI       0       0       0       0       0       0       0       0       0       0
 998            UI       0       0       0       0       0       0       0       0       0       0
                *

 999            KK  DW55RBDIVERT
1000            KM        Additional Retention based on 100yr 2hr retention.
1001            KM        C value is based on future land use, P=2.7, A=acres
1002            DT    RW55     21.0     0.0
1003            DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1004            DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
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                    *
1                                          HEC-1 INPUT                                                          PAGE 26

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1005          KK  DW55REDIVERT
1006          KM        Verrado GOB5
1007          DT   DW55S      0.0      0.0
1008          DI     0.0     55.0    101.0    537.0   1297.0   2269.0   4708.0   7684.0  11074.0      0.0
1009          DQ     0.0      0.0      0.0    382.0   1080.0   1984.0   4269.0   7072.0  10310.0      0.0
              *

1010          KK  W55W57ROUTE
1011          KM        Cross-section: Estimated 2' deep and 4:1 side slopes, width
1012          KM        based on aerial / Manning's N Value: natural desert wash w/ vegetation
1013          RS       5    FLOW
1014          RC   0.035   0.035   0.035    5747  0.0096     0.00
1015          RX  100.00  110.00  120.00  136.00  156.00  172.00  192.00  212.00
1016          RY  1136.5 1136.25 1136.00 1134.00 1134.10 1136.00 1136.25 1136.50
              *

1017          KK     W57BASIN
1018          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1019          KM        WOOD/PATEL, 2006 MODIFIED SLIGHTLY TO MATCH NEW TOPO
1020          BA   1.161
1021          LG    0.20    0.26    4.65    0.41      33
1022          UI       0     187     748    1118    1723    1996    1331     903     437     256
1023          UI     133      57      55       0       0       0       0       0       0       0
1024          UI       0       0       0       0       0       0       0       0       0       0
1025          UI       0       0       0       0       0       0       0       0       0       0
1026          UI       0       0       0       0       0       0       0       0       0       0
              *

1027          KK  DW57REDIVERT
1028          KM        Master Drainage Plan for the Caterpillar Property (Basin #42)
1029          KM        Additional Retention based on 100yr 2hr retention.
1030          KM        C value is based on future land use, P=2.7, A=acres
1031          DT    RW57    49.2     0.0
1032          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1033          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1034          KK   CPW57COMBINE
1035          HC       4  14.786
              *

1036          KK   SRW57STORAGE
1037          KM        Verrado SR42
1038          KO
1039          RS       1    STOR
1040          SV           24.40   29.60   35.70   42.00   48.50   55.20   62.20   69.30   76.70
1041          SQ                                  368.00 1040.00 1912.00 2944.00 4114.00 5410.00
1042          SE  1084.0 1090.00 1091.00 1092.00 1093.00 1094.00 1095.00 1096.00 1097.00 1098.00
1043          ST
              *
1                                          HEC-1 INPUT                                                          PAGE 27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1044          KK  W57W58ROUTE
1045          KM        Cross-section: Ag field, assumed 0.5% side slopes, V-ditch
1046          KM        Manning's N Value: avg value for cultivated areas  from Estimated Mannin
1047          KM        Roughness Coefficient for Stream Channels and Flood Plains in MC
1048          RS       1    FLOW
1049          RC   0.022   0.022   0.022    1236  0.0067     0.00
1050          RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
1051          RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
              *

1052          KK     W58BASIN
1053          KM        BASIN BOUNDARY VARIES FROM VERRADO DEVEL.COND.PLAN WOOD/PATEL 2006
1054          KM        NEW 2' CI TOPO OBTAINED 2008
1055          BA   0.131
1056          LG    0.10    0.25    4.65    0.47      71
1057          UI       0     166     499     273      59      16       0       0       0       0
1058          UI       0       0       0       0       0       0       0       0       0       0
1059          UI       0       0       0       0       0       0       0       0       0       0
1060          UI       0       0       0       0       0       0       0       0       0       0
1061          UI       0       0       0       0       0       0       0       0       0       0
              *

1062          KK  DW58REDIVERT
1063          KM        Additional Retention based on 100yr 2hr retention.
1064          KM        C value is based on future land use, P=2.7, A=acres
1065          DT    RW58    11.5     0.0
1066          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1067          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1068          KK   CPW58COMBINE
1069          HC       2  14.917
              *

1070          KK   SRW58STORAGE
1071          KM        Storage based on new topo section calculations
1072          KO
1073          RS       1    STOR
1074          SV           0.17    2.57    5.40   13.08   31.52   47.89   64.25  111.96  171.81
1075          SQ                  784.10 2217.60 3099.20 3799.80 4122.90 4540.00 6879.0012250.00
1076          SE  1084.0 1086.00 1088.00 1090.00 1092.00 1094.00 1095.00 1096.00 1098.00 1100.00
1077          ST
              *

1078          KK  DW58SEDIVERT
1079          KM        Divert is stage storage on 4-10x8 boxes under I-10. Diverted flow goes e
1080          DT   DW58S      0.0      0.0
1081          DI     0.0   100.0  2000.0  4100.0  4200.0  5000.0  6000.0  7000.0  8000.0  9000.0
1082          DQ     0.0   100.0  2000.0  4100.0  4195.5  4606.7  4833.2  4983.7  5102.6  5203.3
              *
1                                          HEC-1 INPUT                                                          PAGE 28

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1083          KK     W38BASIN
1084          KM        BASIN BOUNDARY FORMED BY MCDOWELL, I-10, JACKRABBIT
1085          KM        AND TUTHILL, DETAILED I-10 TOPO AND CULVERT INFO
1086          BA   0.251
```

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1087          LG    0.24    0.25    4.65    0.38      34
1088          UI       0      54     197     297     491     387     253     132      67      32
1089          UI      13      14       0       0       0       0       0       0       0       0
1090          UI       0       0       0       0       0       0       0       0       0       0
1091          UI       0       0       0       0       0       0       0       0       0       0
1092          UI       0       0       0       0       0       0       0       0       0       0
              *

1093          KK  DW38REDIVERT
1094          KM        Additional Retention based on 100yr 2hr retention.
1095          KM        C value is based on future land use, P=2.7, A=acres
1096          DT    RW38    13.9     0.0
1097          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1098          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1099          KK   CPW38COMBINE
1100          HC       2  15.168
              *

1101          KK  DW38SEDIVERT
1102          KM        Full flow capacity of culverts under I-10 is main flow. Diverted flow go
1103          DT   DW38S     0.0     0.0
1104          DI     0.0   100.0   200.0   300.0   400.0   467.0   500.0   800.0  1000.0 10000.0
1105          DQ     0.0   100.0   200.0   300.0   400.0   467.0   467.0   467.0   467.0   467.0
              *

1106          KK  W38W37ROUTE
1107          KM        Cross section based from 1990 topo, Manning's N Value: clean earth
1108          RS       1    FLOW
1109          RC   0.022   0.022   0.022    2849  0.0053    0.00
1110          RX  100.00  204.00  440.00  608.00  687.00  700.00  736.00  759.00
1111          RY  1083.0 1082.00 1080.00 1078.00 1078.00 1080.00 1082.00 1083.00
              *

1112          KK     W33BASIN
1113          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1114          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1115          BA   0.839
1116          LG    0.30    0.25    4.00    0.49       7
1117          UI       0     100     281     502     641     929    1185     890     684     506
1118          UI     295     173     120      73      31      30      31       0       0       0
1119          UI       0       0       0       0       0       0       0       0       0       0
1120          UI       0       0       0       0       0       0       0       0       0       0
1121          UI       0       0       0       0       0       0       0       0       0       0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1122          KK  DW33REDIVERT
1123          KM        Additional Retention based on 100yr 2hr retention.
1124          KM        C value is based on future land use, P=2.7, A=acres
1125          DT    RW33    13.2     0.0
1126          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1127          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1128          KK  W33W35ROUTE
1129          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on aer
1130          KM        Manning's N Value: clean straight earth
1131          RS       1    FLOW
1132          RC   0.032   0.022   0.032    2658  0.0034    0.00
1133          RX  100.00  112.00  124.00  154.00  174.00  210.00  230.00  240.00
1134          RY  1162.5 1162.25 1162.00 1158.00 1158.50 1162.00 1162.25 1162.50
              *

1135          KK     W34BASIN
1136          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1137          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1138          BA   0.228
1139          LG    0.18    0.26    3.74    0.46      41
1140          UI       0     104     320     579     420     215      78      27      17       0
1141          UI       0       0       0       0       0       0       0       0       0       0
1142          UI       0       0       0       0       0       0       0       0       0       0
1143          UI       0       0       0       0       0       0       0       0       0       0
1144          UI       0       0       0       0       0       0       0       0       0       0
              *

1145          KK  DW34REDIVERT
1146          KM        Additional Retention based on 100yr 2hr retention.
1147          KM        C value is based on future land use, P=2.7, A=acres
1148          DT    RW34    17.5     0.0
1149          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1150          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1151          KK   SRW34STORAGE
1152          KM        Master Drainage Plan for the Caterpillar Property (Basin #29)
1153          KO
1154          RS       1    STOR
1155          SV             0.99   12.73   23.45   36.25   50.68   54.76   59.33   83.20
1156          SQ                                                            88.00 6226.00
1157          SE  1164.5 1166.00 1170.00 1172.00 1174.00 1176.00 1177.50 1178.00 1180.00
1158          ST
              *

1159          KK  W34W35ROUTE
1160          KM        Cross-section: Estimated 3' deep and 4:1 side slopes, width based on aer
1161          KM        Manning's N Value: clean straight earth
1162          RS       1    FLOW
1163          RC   0.022   0.022   0.022     813  0.0111    0.00
1164          RX  100.00  104.00  108.00  120.00  132.00  144.00  152.00  160.00
1165          RY  1166.2 1166.10 1166.00 1160.00 1160.10 1162.00 1162.10 1162.20
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1166          KK     W35BASIN
1167          KM        BASIN BOUNDARY FROM VERRADO DEVELOPED CONDITIONS DRAINAGE PLAN
1168          KM        WOOD/PATEL (2006) MODIFIED SLIGHTLY TO MATCH 1990 2' CI TOPO
1169          BA   0.283
1170          LG    0.28    0.26    3.71    0.47      16
1171          UI       0      50     195     289     467     467     315     203      92      56
1172          UI      24      14      14       0       0       0       0       0       0       0
1173          UI       0       0       0       0       0       0       0       0       0       0
1174          UI       0       0       0       0       0       0       0       0       0       0
```

```
1175          UI       0       0       0       0       0       0       0       0       0       0
              *

1176          KK  DW35REDIVERT
1177          KM        Additional Retention based on 100yr 2hr retention.
1178          KM        C value is based on future land use, P=2.7, A=acres
1179          DT    RW35    18.7     0.0
1180          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1181          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1182          KK   CPW35COMBINE
1183          HC       3    1.35
              *

1184          KK   SRW35STORAGE
1185          KM        Storage behind Indian School Road
1186          KO
1187          RS       1    STOR
1188          SV            1.46    7.31   19.76   47.29
1189          SQ                          735.39 2080.00
1190          SE  1154.0 1156.00 1158.00 1160.00 1162.00
1191          ST
              *

1192          KK  W35W36ROUTE
1193          KM        Cross-section: Assumed 25' bottom width,
1194          KM        4:1 sideslopes, 6' depth; Mannings N Value: 0.035
1195          RS       3    FLOW
1196          RC   0.035   0.035   0.035    6051  0.0076    0.00
1197          RX   25.00   50.00   75.00   99.00  124.00  148.00  173.00  198.00
1198          RY  1000.0  999.50  999.00  993.00  993.05  999.00  999.50 1000.00
              *

1199          KK     W36BASIN
1200          KM
1201          BA   0.720
1202          LG    0.29    0.25    4.00    0.50       9
1203          UI       0      74     163     330     426     540     753     883     667     524
1204          UI     405     297     157     124      78      53      22      24      22      23
1205          UI       0       0       0       0       0       0       0       0       0       0
1206          UI       0       0       0       0       0       0       0       0       0       0
1207          UI       0       0       0       0       0       0       0       0       0       0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1208          KK  DW36REDIVERT
1209          KM        Additional Retention based on 100yr 2hr retention.
1210          KM        C value is based on future land use, P=2.7, A=acres
1211          DT    RW36    29.9     0.0
1212          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1213          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1214          KK   CPW36COMBINE
1215          HC       2    2.07
              *

1216          KK  W36W37ROUTE
1217          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based on aer
1218          KM        Manning's N Value: earth w/ sparse trees and brush
1219          RS       2    FLOW
1220          RC   0.032   0.032   0.032    4527  0.0084    0.00
1221          RX  100.00  112.00  118.00  130.00  154.00  184.00  196.00  208.00
1222          RY  1094.2 1094.10 1094.00 1090.00 1090.10 1094.00 1094.10 1094.20
              *

1223          KK     W37BASIN
1224          KM        WESTERN LIMIT DEFINED BY JACKRABBIT WASH
1225          KM        CAPACITY APPROX 12,000 CFS, VALENCIA HEIGHTS
1226          BA   1.210
1227          LG    0.28    0.25    4.20    0.48      19
1228          UI       0     125     279     557     726     914    1297    1490    1109     868
1229          UI     679     490     253     208     127      81      38      39      38      39
1230          UI       0       0       0       0       0       0       0       0       0       0
1231          UI       0       0       0       0       0       0       0       0       0       0
1232          UI       0       0       0       0       0       0       0       0       0       0
              *

1233          KK  DW37REDIVERT
1234          KM        Additional Retention based on 100yr 2hr retention.
1235          KM        C value is based on future land use, P=2.7, A=acres
1236          DT    RW37    53.9     0.0
1237          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1238          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1239          KK   CPW37COMBINE
1240          HC       2    3.28
              *

1241          KK    DW37DIVERT
1242          KM        Overtopping of Jackrabbit due to unimproved channel
1243          DT   DW37E     0.0     0.0
1244          DI     0.0  1484.0  2484.0  3484.0     0.0     0.0     0.0     0.0     0.0     0.0
1245          DQ     0.0     0.0  1000.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1246          KK  CPW37BCOMBINE
1247          HC       2  18.448
              *

1248          KK  W37S60ROUTE
1249          KM        As-Built plans for WT FRS#4 Inlet Improvments
1250          KM        FCD Contract No 94-09, Sta 19-31.29 to 28-00 Cross Section
1251          RS       5    FLOW
1252          RC   0.013   0.013   0.013    8927  0.0015    0.00
1253          RX  100.00  104.60  108.60  112.60  148.60  152.60  156.60  162.40
1254          RY  1051.8 1048.50 1046.50 1045.50 1044.90 1046.90 1048.90 1051.80
              *

1255          KK  DW58SERETRIEVE
1256          KM        Diverted flow from flow overtopping berm east of 4-10x8 boxes under I-10
```

```
1257          DR   DW58S
              *

1258          KK  W58S60ROUTE
1259          KM        Cross-section: Side slopes and width based on aerial and topo
1260          KM        Manning's N Value: earth w/ sparse trees and shrubs
1261          RS       1    FLOW
1262          RC   0.022   0.022   0.022    4164  0.0067    0.00
1263          RX  100.00  115.50  121.80  142.00  179.30  191.30  199.60  207.80
1264          RY  1072.0 1070.00 1064.00 1062.00 1061.90 1064.00 1065.00 1066.00
              *

1265          KK  DW38SERETRIEVE
1266          KM        Flow that did not go south thru culverts under I-10 continues east
1267          DR   DW38S
              *

1268          KK  W38S60ROUTE
1269          KM        Cross-section: Estimated 4' deep and 4:1 side slopes, width based
1270          KM        on aerial / Manning's N Value: concrete channel
1271          RS      12    FLOW
1272          RC   0.038   0.035   0.038    6303  0.0057    0.00
1273          RX  100.00  200.00  400.00  500.00  550.00  600.00  800.00  900.00
1274          RY  1000.0  999.50  998.50  998.00  998.25  998.50  999.50 1000.00
              *

1275          KK     S60BASIN
1276          KM        WHITE TANKS #3 FRS. S-S-D CURVE FROM JAN 2009 FCDMC CURVES
1277          BA   1.014
1278          LG    0.10    0.25    4.15    0.61      84
1279          UI       0     698    2129    2962    1435     429     120       0       0       0
1280          UI       0       0       0       0       0       0       0       0       0       0
1281          UI       0       0       0       0       0       0       0       0       0       0
1282          UI       0       0       0       0       0       0       0       0       0       0
1283          UI       0       0       0       0       0       0       0       0       0       0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1284          KK  DS60REDIVERT
1285          KM        Retention volume estimated based on aerial
1286          KM        Additional Retention based on 100yr 2hr retention.
1287          KM        C value is based on future land use, P=2.7, A=acres
1288          DT    RS60   123.2     0.0
1289          DI     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
1290          DQ     0.0   500.0  5000.0 50000.0     0.0     0.0     0.0     0.0     0.0     0.0
              *

1291          KK   CPS60COMBINE
1292          HC       4  19.462
              *

1293          KK   SRS60STORAGE
1294          KM        White Tanks #4 from FCDMC 1/8/2009
1295          KO
1296          RS       1    STOR
1297          SV          573.00  573.00  627.00  760.00 1239.00 1263.00 1275.00 1524.00 1787.00
1298          SQ                                                   40.00   50.00 2305.00 7450.00
1299          SE  1039.0 1039.10 1041.80 1042.80 1044.80 1049.60 1049.80 1049.90 1051.80 1053.80
1300          ST
              *
1301          ZZ
```

1

```
        SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW
  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   31        L21
             .
             .
   44        .------->    RL21
   40    DL21RE
             V
             V
   47    L21L22
             .
             .
   54        .         L22
             .           .
             .           .
   67        .           .------->    RL22
   63        .      DL22RE
             .           .
             .           .
   70     CPL22............
             V
             V
   72    L22W01
             .
             .
   79        .         W01
             .           .
             .           .
   88     CPW01............
             V
             V
   90    W01W02
             .
             .
   97        .         W02
             .           .
             .           .
  110        .           .------->    RW02
  107        .      DW02RE
             .           .
             .           .
  113     CPW02............
             V
             V
  115    W02W05
             .
             .
  121        .         W03
             .           V
             .           V
  130        .      W03W04
```

```
                .          .
                .          .
137             .          .        W04
                .          .          .
                .          .          .
149             .          .          .-------->    RW04
146             .          .     DW04RE
                .          .          .
                .          .          .
152             .      CPW04............
                .          V
                .          V
154             .     W04W05
                .          .
                .          .
161             .          .        W05
                .          .          .
                .          .          .
173             .          .          .-------->    RW05
170             .          .     DW05RE
                .          .          .
                .          .          .
176          CPW05........................
                .
                .
180             .-------->   DW05S
178         DW05SE
                V
                V
183         W0512A
                .
                .
190             .        W06
                .          .
                .          .
199             .          .        W07
                .          .          .
                .          .          .
211             .          .          .-------->    RW07
208             .          .     DW07RE
                .          .          .
                .          .          .
214             .      CPW07............
                .          V
                .          V
216             .     W07W08
                .          .
                .          .
223             .          .        W08
                .          .          .
                .          .          .
232             .      CPW08............
                .          .
                .          .
234             .          .        W09
                .          .          .
                .          .          .
246             .          .          .-------->    RW09
243             .          .     DW09RE
                .          .          .
                .          .          .
249             .      CPW09............
                .          V
                .          V
251             .     W09W10
                .          .
                .          .
258             .          .        W10
                .          .          .
                .          .          .
267             .      CPW10............
                .          .
                .          .
269             .          .        W11
                .          .          .
                .          .          .
278             .      CPW11............
                .          V
                .          V
280             .     W11W12
                .          .
                .          .
287             .          .        W12
                .          .          .
                .          .          .
299             .          .          .-------->    RW12
296             .          .     DW12RE
                .          .          .
                .          .          .
304             .          .          .          .<-------   DW05S
302             .          .          .     DW05SE
                .          .          .          V
                .          .          .          V
305             .          .          .     W0512B
                .          .          .          .
                .          .          .          .
311          CPW12.................................
                V
                V
313         W12W13
                .
                .
319             .        W13
                .          .
                .          .
331             .          .-------->    RW13
328             .     DW13RE
                .          .
                .          .
334          CPW13............
                V
                V
336         W13W16
                .
                .
344             .        W15
                .          .
                .          .
356             .          .-------->    RW15
353             .     DW15RE
```

```
                .          .
                .          .
359             .          .        W14
                .          .          .
                .          .          .
371             .          .          .-------->   RW14
368             .          .     DW14RE
                .          .          V
                .          .          V
374             .          .     W14W15
                .          .          .
                .          .          .
381             .      CPW15............
                .          V
                .          V
383             .     W15W16
                .          .
                .          .
390             .          .        W16
                .          .          .
                .          .          .
402             .          .          .-------->   RW16
399             .          .     DW16RE
                .          .          .
                .          .          .
405         CPW16........................
                V
                V
407        W16W20
                .
                .
414             .        W18
                .          .
                .          .
426             .          .-------->   RW18
423             .     DW18RE
                .          .
                .          .
429             .          .        W17
                .          .          .
                .          .          .
441             .          .          .-------->   RW17
438             .          .     DW17RE
                .          .          V
                .          .          V
444             .          .     W17W18
                .          .          .
                .          .          .
451             .      CPW18............
                .          V
                .          V
453             .     W18W20
                .          .
                .          .
460             .          .        W19
                .          .          .
                .          .          .
473             .          .          .-------->   RW19
470             .          .     DW19RE
                .          .          V
                .          .          V
476             .          .      SRW19
                .          .          V
                .          .          V
484             .          .     W19W20
                .          .          .
                .          .          .
491             .          .          .        W20
                .          .          .          .
                .          .          .          .
504             .          .          .          .-------->   RW20
501             .          .          .     DW20RE
                .          .          .          .
                .          .          .          .
507         CPW20.................................
                V
                V
509         SRW20
                .
                .
517             .        W22
                .          .
                .          .
530             .          .-------->   RW22
527             .     DW22RE
                .          V
                .          V
533             .     W22W23
                .          .
                .          .
540             .          .        W23
                .          .          .
                .          .          .
553             .          .          .-------->   RW23
550             .          .     DW23RE
                .          .          .
                .          .          .
556             .      CPW23............
                .          V
                .          V
558             .     W23W24
                .          .
                .          .
565             .          .        W24
                .          .          .
                .          .          .
578             .          .          .-------->   RW24
575             .          .     DW24RE
                .          .          .
                .          .          .
581             .      CPW24............
                .          V
                .          V
583             .     W24W27
                .          .
                .          .
590             .          .        W25
                .          .          .
                .          .          .
603             .          .          .-------->   RW25
```

```
600          .          .      DW25RE
             .          .          V
             .          .          V
606          .          .       SRW25
             .          .          V
             .          .          V
614          .          .      W25W26
             .          .          .
             .          .          .
621          .          .          .        W26
             .          .          .          .
             .          .          .          .
634          .          .          .          .-------->    RW26
631          .          .          .     DW26RE
             .          .          .          .
             .          .          .          .
637          .          .       CPW26............
             .          .          V
             .          .          V
639          .          .       SRW26
             .          .          V
             .          .          V
647          .          .      W26W27
             .          .          .
             .          .          .
654          .          .          .        W27
             .          .          .          .
             .          .          .          .
667          .          .          .          .-------->    RW27
664          .          .          .     DW27RE
             .          .          .          .
             .          .          .          .
670          .      CPW27........................
             .          V
             .          V
672          .      W27W44
             .          .
             .          .
679          .          .        W43
             .          .          .
             .          .          .
692          .          .          .-------->    RW43
689          .          .      DW43RE
             .          .          V
             .          .          V
695          .          .       SRW43
             .          .          V
             .          .          V
703          .          .      W43W44
             .          .          .
             .          .          .
710          .          .          .        W44
             .          .          .          .
             .          .          .          .
723          .          .          .          .-------->    RW44
720          .          .          .     DW44RE
             .          .          .          .
             .          .          .          .
726          .      CPW44........................
             .          V
             .          V
728          .      W44W46
             .          .
             .          .
735          .          .        W45
             .          .          .
             .          .          .
748          .          .          .-------->    RW45
745          .          .      DW45RE
             .          .          V
             .          .          V
751          .          .      W45W46
             .          .          .
             .          .          .
758          .          .          .        W46
             .          .          .          .
             .          .          .          .
771          .          .          .          .-------->    RW46
768          .          .          .     DW46RB
             .          .          .          .
             .          .          .          .
774          .          .      CPW46A............
             .          .          .
             .          .          .
778          .          .          .-------->   RW46R
776          .          .      DW46RE
             .          .          .
             .          .          .
781          .      CPW46B............
             .          V
             .          V
783          .      W46W54
             .          .
             .          .
790          .          .        W47
             .          .          .
             .          .          .
803          .          .          .-------->    RW47
800          .          .      DW47RE
             .          .          .
             .          .          .
806          .          .          .        W48
             .          .          .          .
             .          .          .          .
816          .          .       CPW47............
             .          .          V
             .          .          V
818          .          .      W47W49
             .          .          .
             .          .          .
825          .          .          .        W50
             .          .          .          .
             .          .          .          .
838          .          .          .          .-------->    RW50
835          .          .          .     DW50RE
             .          .          .          .
             .          .          .          .
841          .          .          .          .         W49
             .          .          .          .           .
             .          .          .          .           .
```

```
854                                                  .------->   RW49
851                                          DW49RE
                                                     .
                                                     .
857                  CPW49.......................
                        V
                        V
859                 W49W51
                        .
                        .
866                     .        W51
                        .          .
                        .          .
879                     .          .------->   RW51
876                     .     DW51RE
                        .          .
                        .          .
882                  CPW51............
                        .
                        .
884                     .        W52
                        .          .
                        .          .
897                     .          .------->   RW52
894                     .     DW52RE
                        .          .
                        .          .
900                  CPW52............
                        V
                        V
902                 W52W53
                        .
                        .
909                     .        W53
                        .          .
                        .          .
922                     .          .------->   RW53B
919                     .     DW53RB
                        .          .
                        .          .
925                  CPW53............
                        .
                        .
930                     .------->   RW53
927                 DW53RE
                        V
                        V
933                 W53W54
                        .
                        .
940                     .        W54
                        .          .
                        .          .
953                     .          .------->   RW54
950                     .     DW54RE
                        .          .
                        .          .
956            CPW54.......................
                  V
                  V
958            W54W57
                  .
                  .
965                  W56
                        .
                        .
979                     .------->   RW56
975                 DW56RE
                        V
                        V
982                 W56W57
                        .
                        .
989                     .        W55
                        .          .
                        .          .
1002                    .          .------->   RW55
999                     .     DW55RB
                        .          .
                        .          .
1007                    .          .------->   DW55S
1005                    .     DW55RE
                        .          V
                        .          V
1010                    .     W55W57
                        .          .
                        .          .
1017                    .          .        W57
                        .          .          .
                        .          .          .
1031                    .          .          .------->   RW57
1027                    .          .     DW57RE
                        .          .          .
                        .          .          .
1034           CPW57.....................................
                  V
                  V
1036           SRW57
                  V
                  V
1044           W57W58
                  .
                  .
1052                 W58
                        .
                        .
1065                    .------->   RW58
1062                DW58RE
                        .
                        .
1068           CPW58............
                  V
                  V
1070           SRW58
                  .
                  .
1080                 .------->   DW58S
1078           DW58SE
                  .
                  .
```

```
1083          .          .        W38
              .          .          .
              .          .          .
1096          .          .          .-------->   RW38
1093          .          .     DW38RE
              .          .          .
              .          .          .
1099          .      CPW38............
              .          .
              .          .
1103          .          .-------->  DW38S
1101          .      DW38SE
              .          V
              .          V
1106          .      W38W37
              .          .
              .          .
1112          .          .        W33
              .          .          .
              .          .          .
1125          .          .          .-------->   RW33
1122          .          .     DW33RE
              .          .          V
              .          .          V
1128          .          .     W33W35
              .          .          .
              .          .          .
1135          .          .          .        W34
              .          .          .          .
              .          .          .          .
1148          .          .          .          .-------->   RW34
1145          .          .          .     DW34RE
              .          .          .          V
              .          .          .          V
1151          .          .          .      SRW34
              .          .          .          V
              .          .          .          V
1159          .          .          .     W34W35
              .          .          .          .
              .          .          .          .
1166          .          .          .          .        W35
              .          .          .          .          .
              .          .          .          .          .
1179          .          .          .          .          .-------->   RW35
1176          .          .          .          .     DW35RE
              .          .          .          .          .
              .          .          .          .          .
1182          .          .      CPW35........................
              .          .          V
              .          .          V
1184          .          .      SRW35
              .          .          V
              .          .          V
1192          .          .     W35W36
              .          .          .
              .          .          .
1199          .          .          .        W36
              .          .          .          .
              .          .          .          .
1211          .          .          .          .-------->   RW36
1208          .          .          .     DW36RE
              .          .          .          .
              .          .          .          .
1214          .          .      CPW36............
              .          .          V
              .          .          V
1216          .          .     W36W37
              .          .          .
              .          .          .
1223          .          .          .        W37
              .          .          .          .
              .          .          .          .
1236          .          .          .          .-------->   RW37
1233          .          .          .     DW37RE
              .          .          .          .
              .          .          .          .
1239          .          .      CPW37............
              .          .          .
              .          .          .
1243          .          .          .-------->  DW37E
1241          .          .       DW37
              .          .          .
              .          .          .
1246          .      CPW37B............
              .          V
              .          V
1248          .      W37S60
              .          .
              .          .
1257          .          .          .<--------  DW58S
1255          .          .     DW58SE
              .          .          V
              .          .          V
1258          .          .     W58S60
              .          .          .
              .          .          .
1267          .          .          .          .<--------  DW38S
1265          .          .          .     DW38SE
              .          .          .          V
              .          .          .          V
1268          .          .          .     W38S60
              .          .          .          .
              .          .          .          .
1275          .          .          .          .        S60
              .          .          .          .          .
              .          .          .          .          .
1288          .          .          .          .          .-------->   RS60
1284          .          .          .          .     DS60RE
              .          .          .          .          .
              .          .          .          .          .
1291          .      CPS60.................................
              .          V
              .          V
1293          .      SRS60
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES.

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	L21	273.	13.25	70.	20.	7.	0.52		
+	DIVERSION TO	RL21	273.	13.25	70.	20.	7.	0.52		
+	HYDROGRAPH AT	DL21RE	0.	0.00	0.	0.	0.	0.52		
+	ROUTED TO	L21L22	0.	0.00	0.	0.	0.	0.52		
+	HYDROGRAPH AT	L22	87.	13.67	32.	8.	3.	0.36		
+	DIVERSION TO	RL22	87.	13.67	32.	8.	3.	0.36		
+	HYDROGRAPH AT	DL22RE	0.	0.00	0.	0.	0.	0.36		
+	2 COMBINED AT	CPL22	0.	0.00	0.	0.	0.	0.89		
+	ROUTED TO	L22W01	0.	0.00	0.	0.	0.	0.89		
+	HYDROGRAPH AT	W01	151.	12.50	21.	5.	2.	0.19		
+	2 COMBINED AT	CPW01	150.	12.50	21.	5.	2.	1.08		
+	ROUTED TO	W01W02	141.	12.67	21.	5.	2.	1.08		
+	HYDROGRAPH AT	W02	544.	12.33	55.	16.	5.	0.39		
+	DIVERSION TO	RW02	544.	12.33	39.	10.	3.	0.39		
+	HYDROGRAPH AT	DW02RE	335.	12.50	20.	6.	2.	0.39		
+	2 COMBINED AT	CPW02	454.	12.50	41.	11.	4.	1.47		
+	ROUTED TO	W02W05	343.	12.58	40.	11.	4.	1.47		
+	HYDROGRAPH AT	W03	1998.	12.33	273.	83.	28.	1.97		
+	ROUTED TO	W03W04	1629.	12.58	272.	83.	28.	1.97		
+	HYDROGRAPH AT	W04	2200.	12.33	312.	94.	31.	2.03		
+	DIVERSION TO	RW04	71.	11.08	33.	11.	4.	2.03		
+	HYDROGRAPH AT	DW04RE	2200.	12.33	307.	83.	28.	2.03		
+	2 COMBINED AT	CPW04	3313.	12.42	577.	165.	55.	4.01		
+	ROUTED TO	W04W05	3091.	12.58	576.	165.	55.	4.01		
+	HYDROGRAPH AT	W05	422.	12.33	42.	12.	4.	0.32		
+	DIVERSION TO	RW05	422.	12.33	37.	10.	3.	0.32		
+	HYDROGRAPH AT	DW05RE	108.	12.67	7.	2.	1.	0.32		
+	3 COMBINED AT	CPW05	3395.	12.58	616.	176.	59.	5.79		
+	DIVERSION TO	DW05S	1805.	12.58	320.	102.	34.	5.79		
+	HYDROGRAPH AT	DW05SE	1590.	12.58	296.	74.	25.	5.79		
+	ROUTED TO	W0512A	1420.	12.75	296.	74.	25.	5.79		
+	HYDROGRAPH AT	W06	1115.	12.17	99.	30.	10.	0.71		
+	HYDROGRAPH AT	W07	751.	12.08	75.	26.	9.	0.31		
+	DIVERSION TO	RW07	399.	12.00	36.	11.	4.	0.31		
+	HYDROGRAPH AT	DW07RE	751.	12.08	52.	15.	5.	0.31		
+	2 COMBINED AT	CPW07	1797.	12.17	147.	44.	15.	1.02		
+	ROUTED TO	W07W08	1520.	12.25	147.	44.	15.	1.02		
+	HYDROGRAPH AT	W08	915.	12.08	72.	21.	7.	0.44		
+	2 COMBINED AT	CPW08	2323.	12.17	217.	65.	22.	1.46		

+	HYDROGRAPH AT	W09	748.	12.08	54.	16.	5.	0.34
+	DIVERSION TO	RW09	86.	11.75	9.	3.	1.	0.34
+	HYDROGRAPH AT	DW09RE	748.	12.08	50.	13.	4.	0.34
+	2 COMBINED AT	CPW09	2999.	12.17	266.	79.	26.	1.80
+	ROUTED TO	W09W10	2483.	12.25	266.	79.	26.	1.80
+	HYDROGRAPH AT	W10	2114.	12.17	217.	64.	21.	1.34
+	2 COMBINED AT	CPW10	4444.	12.25	479.	142.	48.	3.14
+	HYDROGRAPH AT	W11	1334.	12.17	132.	39.	13.	0.81
+	2 COMBINED AT	CPW11	5672.	12.17	610.	181.	60.	3.95
+	ROUTED TO	W11W12	3719.	12.83	609.	181.	60.	3.95
+	HYDROGRAPH AT	W12	1812.	12.50	244.	68.	23.	1.87
+	DIVERSION TO	RW12	1342.	12.33	81.	22.	7.	1.87
+	HYDROGRAPH AT	DW12RE	1812.	12.50	175.	46.	15.	1.87
+	HYDROGRAPH AT	DW05SE	1805.	12.58	320.	102.	34.	5.79
+	ROUTED TO	W0512B	1784.	12.67	320.	102.	34.	5.79
+	4 COMBINED AT	CPW12	7608.	12.75	1331.	384.	128.	11.61
+	ROUTED TO	W12W13	7504.	12.83	1330.	384.	128.	11.61
+	HYDROGRAPH AT	W13	1790.	12.42	222.	62.	21.	1.58
+	DIVERSION TO	RW13	1762.	12.42	118.	31.	10.	1.58
+	HYDROGRAPH AT	DW13RE	1721.	12.50	116.	31.	10.	1.58
+	2 COMBINED AT	CPW13	8200.	12.75	1421.	409.	137.	13.19
+	ROUTED TO	W13W16	7699.	12.92	1419.	408.	137.	13.19
+	HYDROGRAPH AT	W15	1553.	12.42	189.	56.	19.	1.23
+	DIVERSION TO	RW15	1553.	12.42	153.	41.	14.	1.23
+	HYDROGRAPH AT	DW15RE	611.	12.67	50.	15.	5.	1.23
+	HYDROGRAPH AT	W14	2199.	12.25	235.	68.	23.	1.58
+	DIVERSION TO	RW14	193.	11.75	29.	9.	3.	1.58
+	HYDROGRAPH AT	DW14RE	2199.	12.25	223.	59.	20.	1.58
+	ROUTED TO	W14W15	1705.	12.33	220.	59.	20.	1.58
+	2 COMBINED AT	CPW15	1701.	12.33	268.	73.	24.	2.81
+	ROUTED TO	W15W16	1546.	12.50	266.	73.	24.	2.81
+	HYDROGRAPH AT	W16	829.	12.25	82.	23.	8.	0.53
+	DIVERSION TO	RW16	723.	12.17	43.	11.	4.	0.53
+	HYDROGRAPH AT	DW16RE	815.	12.33	43.	11.	4.	0.53
+	3 COMBINED AT	CPW16	8556.	12.83	1673.	478.	160.	16.53
+	ROUTED TO	W16W20	8554.	12.92	1672.	478.	160.	16.53
+	HYDROGRAPH AT	W18	683.	13.33	189.	56.	19.	1.26
+	DIVERSION TO	RW18	666.	13.33	103.	28.	9.	1.26
+	HYDROGRAPH AT	DW18RE	593.	13.50	102.	28.	9.	1.26
+	HYDROGRAPH AT	W17	2263.	12.25	228.	67.	22.	1.50

+ DIVERSION TO	RW17	2263.	12.25	156.	42.	14.	1.50
+ HYDROGRAPH AT	DW17RE	1637.	12.42	91.	26.	9.	1.50
+ ROUTED TO	W17W18	906.	12.67	89.	26.	9.	1.50
+ 2 COMBINED AT	CPW18	902.	12.67	188.	53.	18.	2.76
+ ROUTED TO	W18W20	627.	12.92	184.	53.	18.	2.76
+ HYDROGRAPH AT	W19	2136.	12.17	194.	58.	20.	1.16
+ DIVERSION TO	RW19	693.	11.92	48.	15.	5.	1.16
+ HYDROGRAPH AT	DW19RE	2136.	12.17	163.	44.	15.	1.16
+ ROUTED TO	SRW19	0.	0.00	0.	0.	0.	1.16
+ ROUTED TO	W19W20	0.	0.00	0.	0.	0.	1.16
+ HYDROGRAPH AT	W20	1422.	12.33	163.	47.	16.	1.14
+ DIVERSION TO	RW20	1422.	12.33	127.	34.	11.	1.14
+ HYDROGRAPH AT	DW20RE	596.	12.58	47.	14.	5.	1.14
+ 4 COMBINED AT	CPW20	8751.	12.92	1811.	521.	174.	21.58
+ ROUTED TO	SRW20	0.	0.00	0.	0.	0.	21.58
+ HYDROGRAPH AT	W22	1353.	12.17	114.	35.	12.	0.78
+ DIVERSION TO	RW22	363.	11.92	29.	9.	3.	0.78
+ HYDROGRAPH AT	DW22RE	1353.	12.17	97.	26.	9.	0.78
+ ROUTED TO	W22W23	1265.	12.25	96.	26.	9.	0.78
+ HYDROGRAPH AT	W23	1577.	12.17	135.	41.	14.	0.90
+ DIVERSION TO	RW23	772.	12.00	46.	13.	4.	0.90
+ HYDROGRAPH AT	DW23RE	1577.	12.17	101.	27.	9.	0.90
+ 2 COMBINED AT	CPW23	2738.	12.25	197.	53.	18.	1.68
+ ROUTED TO	W23W24	2371.	12.33	196.	53.	18.	1.68
+ HYDROGRAPH AT	W24	789.	12.25	73.	22.	7.	0.47
+ DIVERSION TO	RW24	370.	12.00	21.	6.	2.	0.47
+ HYDROGRAPH AT	DW24RE	789.	12.25	58.	15.	5.	0.47
+ 2 COMBINED AT	CPW24	3131.	12.25	253.	68.	23.	2.15
+ ROUTED TO	W24W27	2735.	12.33	251.	68.	23.	2.15
+ HYDROGRAPH AT	W25	1446.	12.33	160.	47.	16.	1.10
+ DIVERSION TO	RW25	11.	6.75	8.	2.	1.	1.10
+ HYDROGRAPH AT	DW25RE	1446.	12.33	160.	45.	15.	1.10
+ ROUTED TO	SRW25	0.	0.00	0.	0.	0.	1.10
+ ROUTED TO	W25W26	0.	0.00	0.	0.	0.	1.10
+ HYDROGRAPH AT	W26	1088.	12.25	111.	32.	11.	0.68
+ DIVERSION TO	RW26	695.	12.08	36.	10.	3.	0.68
+ HYDROGRAPH AT	DW26RE	1088.	12.25	81.	21.	7.	0.68
+ 2 COMBINED AT	CPW26	1084.	12.25	81.	21.	7.	1.78
+ ROUTED TO	SRW26	0.	0.00	0.	0.	0.	1.78
+ ROUTED TO	W26W27	0.	0.00	0.	0.	0.	1.78

+	HYDROGRAPH AT	W27	824.	12.17	65.	19.	6.	0.41
+	DIVERSION TO	RW27	720.	12.08	36.	10.	3.	0.41
+	HYDROGRAPH AT	DW27RE	708.	12.25	33.	9.	3.	0.41
+	3 COMBINED AT	CPW27	3128.	12.33	282.	77.	26.	4.34
+	ROUTED TO	W27W44	2526.	12.50	279.	77.	26.	4.34
+	HYDROGRAPH AT	W43	485.	12.08	34.	10.	3.	0.21
+	DIVERSION TO	RW43	111.	11.75	9.	3.	1.	0.21
+	HYDROGRAPH AT	DW43RE	485.	12.08	28.	8.	3.	0.21
+	ROUTED TO	SRW43	0.	0.00	0.	0.	0.	0.21
+	ROUTED TO	W43W44	0.	0.00	0.	0.	0.	0.21
+	HYDROGRAPH AT	W44	839.	12.33	88.	25.	8.	0.60
+	DIVERSION TO	RW44	839.	12.33	88.	25.	8.	0.60
+	HYDROGRAPH AT	DW44RE	0.	0.00	0.	0.	0.	0.60
+	3 COMBINED AT	CPW44	2526.	12.50	279.	77.	26.	5.15
+	ROUTED TO	W44W46	2440.	12.58	277.	77.	26.	5.15
+	HYDROGRAPH AT	W45	1795.	12.25	187.	52.	17.	1.03
+	DIVERSION TO	RW45	1191.	12.08	71.	19.	6.	1.03
+	HYDROGRAPH AT	DW45RE	1795.	12.25	125.	33.	11.	1.03
+	ROUTED TO	W45W46	1265.	12.58	124.	33.	11.	1.03
+	HYDROGRAPH AT	W46	1280.	12.42	160.	46.	15.	0.93
+	DIVERSION TO	RW46	1280.	12.42	113.	30.	10.	0.93
+	HYDROGRAPH AT	DW46RB	824.	12.58	58.	16.	5.	0.93
+	2 COMBINED AT	CPW46A	2074.	12.58	181.	49.	16.	1.96
+	DIVERSION TO	RW46R	1239.	12.58	67.	17.	6.	1.96
+	HYDROGRAPH AT	DW46RE	835.	12.58	115.	32.	11.	1.96
+	2 COMBINED AT	CPW46B	3150.	12.58	382.	106.	35.	7.11
+	ROUTED TO	W46W54	3002.	12.67	380.	106.	35.	7.11
+	HYDROGRAPH AT	W47	871.	12.25	108.	32.	11.	0.67
+	DIVERSION TO	RW47	7.	6.33	5.	1.	0.	0.67
+	HYDROGRAPH AT	DW47RE	871.	12.25	108.	31.	10.	0.67
+	HYDROGRAPH AT	W48	480.	12.25	57.	17.	6.	0.35
+	2 COMBINED AT	CPW47	1348.	12.25	165.	48.	16.	1.02
+	ROUTED TO	W47W49	1260.	12.33	165.	48.	16.	1.02
+	HYDROGRAPH AT	W50	1302.	12.50	190.	57.	19.	1.35
+	DIVERSION TO	RW50	14.	6.67	11.	3.	1.	1.35
+	HYDROGRAPH AT	DW50RE	1302.	12.50	190.	54.	18.	1.35
+	HYDROGRAPH AT	W49	639.	12.25	64.	19.	6.	0.38
+	DIVERSION TO	RW49	22.	11.50	8.	3.	1.	0.38
+	HYDROGRAPH AT	DW49RE	639.	12.25	61.	16.	5.	0.38
+	3 COMBINED AT	CPW49	2813.	12.33	413.	118.	39.	2.75

+	ROUTED TO	W49W51	2671.	12.42	413.	118.	39.	2.75
+	HYDROGRAPH AT	W51	256.	12.17	21.	6.	2.	0.15
+	DIVERSION TO	RW51	198.	12.17	11.	3.	1.	0.15
+	HYDROGRAPH AT	DW51RE	249.	12.25	11.	3.	1.	0.15
+	2 COMBINED AT	CPW51	2768.	12.42	423.	121.	40.	2.90
+	HYDROGRAPH AT	W52	1199.	12.50	160.	48.	16.	1.12
+	DIVERSION TO	RW52	24.	10.58	14.	5.	2.	1.12
+	HYDROGRAPH AT	DW52RE	1199.	12.50	158.	43.	14.	1.12
+	2 COMBINED AT	CPW52	3956.	12.42	580.	163.	54.	4.02
+	ROUTED TO	W52W53	3764.	12.50	579.	163.	54.	4.02
+	HYDROGRAPH AT	W53	1088.	12.17	78.	23.	8.	0.57
+	DIVERSION TO	RW53B	659.	12.00	35.	10.	3.	0.57
+	HYDROGRAPH AT	DW53RB	1088.	12.17	48.	13.	4.	0.57
+	2 COMBINED AT	CPW53	3815.	12.50	625.	176.	59.	4.59
+	DIVERSION TO	RW53	1056.	12.50	106.	27.	9.	4.59
+	HYDROGRAPH AT	DW53RE	2759.	12.50	519.	149.	50.	4.59
+	ROUTED TO	W53W54	2600.	12.67	518.	149.	50.	4.59
+	HYDROGRAPH AT	W54	1146.	12.42	134.	38.	13.	0.98
+	DIVERSION TO	RW54	1146.	12.42	88.	23.	8.	0.98
+	HYDROGRAPH AT	DW54RE	798.	12.58	54.	15.	5.	0.98
+	3 COMBINED AT	CPW54	5874.	12.67	899.	257.	86.	12.68
+	ROUTED TO	W54W57	5581.	12.75	899.	257.	86.	12.68
+	HYDROGRAPH AT	W56	797.	12.17	77.	24.	8.	0.45
+	DIVERSION TO	RW56	797.	12.17	77.	24.	8.	0.45
+	HYDROGRAPH AT	DW56RE	0.	0.00	0.	0.	0.	0.45
+	ROUTED TO	W56W57	0.	0.00	0.	0.	0.	0.45
+	HYDROGRAPH AT	W55	762.	12.25	74.	22.	7.	0.50
+	DIVERSION TO	RW55	710.	12.17	38.	11.	4.	0.50
+	HYDROGRAPH AT	DW55RB	682.	12.33	43.	12.	4.	0.50
+	DIVERSION TO	DW55S	515.	12.33	20.	5.	2.	0.50
+	HYDROGRAPH AT	DW55RE	167.	12.33	23.	7.	2.	0.50
+	ROUTED TO	W55W57	118.	12.75	22.	7.	2.	0.50
+	HYDROGRAPH AT	W57	1741.	12.25	198.	61.	20.	1.16
+	DIVERSION TO	RW57	1464.	12.17	87.	25.	8.	1.16
+	HYDROGRAPH AT	DW57RE	1737.	12.33	132.	36.	12.	1.16
+	4 COMBINED AT	CPW57	5875.	12.75	1029.	294.	98.	14.79
+	ROUTED TO	SRW57	5611.	12.83	982.	276.	92.	14.79
+	ROUTED TO	W57W58	5640.	12.83	980.	276.	92.	14.79
+	HYDROGRAPH AT	W58	323.	12.08	32.	11.	4.	0.13
+	DIVERSION TO	RW58	275.	12.08	20.	6.	2.	0.13

+	HYDROGRAPH AT	DW58RE	287.	12.17	16.	5.	2.	0.13
+	2 COMBINED AT	CPW58	5657.	12.83	988.	280.	93.	14.92
+	ROUTED TO	SRW58	4297.	13.08	988.	280.	93.	14.92
+	DIVERSION TO	DW58S	4245.	13.08	986.	280.	93.	14.92
+	HYDROGRAPH AT	DW58SE	51.	13.08	2.	0.	0.	14.92
+	HYDROGRAPH AT	W38	415.	12.25	44.	14.	5.	0.25
+	DIVERSION TO	RW38	380.	12.17	25.	7.	2.	0.25
+	HYDROGRAPH AT	DW38RE	387.	12.33	23.	7.	2.	0.25
+	2 COMBINED AT	CPW38	345.	12.33	22.	6.	2.	15.17
+	DIVERSION TO	DW38S	345.	12.33	22.	6.	2.	15.17
+	HYDROGRAPH AT	DW38SE	0.	0.00	0.	0.	0.	15.17
+	ROUTED TO	W38W37	0.	0.00	0.	0.	0.	15.17
+	HYDROGRAPH AT	W33	943.	12.42	99.	27.	9.	0.84
+	DIVERSION TO	RW33	572.	12.17	25.	7.	2.	0.84
+	HYDROGRAPH AT	DW33RE	943.	12.42	78.	20.	7.	0.84
+	ROUTED TO	W33W35	836.	12.50	77.	20.	7.	0.84
+	HYDROGRAPH AT	W34	448.	12.17	43.	13.	4.	0.23
+	DIVERSION TO	RW34	448.	12.17	32.	9.	3.	0.23
+	HYDROGRAPH AT	DW34RE	247.	12.33	15.	5.	2.	0.23
+	ROUTED TO	SRW34	0.	0.00	0.	0.	0.	0.23
+	ROUTED TO	W34W35	0.	0.00	0.	0.	0.	0.23
+	HYDROGRAPH AT	W35	406.	12.25	39.	11.	4.	0.28
+	DIVERSION TO	RW35	406.	12.25	36.	9.	3.	0.28
+	HYDROGRAPH AT	DW35RE	43.	12.75	6.	2.	1.	0.28
+	3 COMBINED AT	CPW35	836.	12.50	83.	22.	7.	1.35
+	ROUTED TO	SRW35	547.	12.75	68.	18.	6.	1.35
+	ROUTED TO	W35W36	474.	13.00	67.	18.	6.	1.35
+	HYDROGRAPH AT	W36	734.	12.50	88.	24.	8.	0.72
+	DIVERSION TO	RW36	734.	12.50	58.	15.	5.	0.72
+	HYDROGRAPH AT	DW36RE	503.	12.67	33.	9.	3.	0.72
+	2 COMBINED AT	CPW36	627.	12.92	99.	27.	9.	2.07
+	ROUTED TO	W36W37	590.	13.08	98.	27.	9.	2.07
+	HYDROGRAPH AT	W37	1308.	12.50	171.	50.	17.	1.21
+	DIVERSION TO	RW37	1284.	12.42	101.	27.	9.	1.21
+	HYDROGRAPH AT	DW37RE	1154.	12.58	82.	23.	8.	1.21
+	2 COMBINED AT	CPW37	1153.	12.58	179.	49.	16.	3.28
+	DIVERSION TO	DW37E	0.	0.00	0.	0.	0.	3.28
+	HYDROGRAPH AT	DW37	1153.	12.58	179.	49.	16.	3.28
+	2 COMBINED AT	CPW37B	840.	12.67	148.	41.	14.	18.45
+	ROUTED TO	W37S60	708.	13.00	145.	41.	14.	18.45

+	HYDROGRAPH AT	DW58SE	4245.	13.08	986.	280.	93.	14.92
+	ROUTED TO	W58S60	4225.	13.08	984.	280.	93.	14.92
+	HYDROGRAPH AT	DW38SE	345.	12.33	22.	6.	2.	15.17
+	ROUTED TO	W38S60	97.	13.33	21.	6.	2.	15.17
+	HYDROGRAPH AT	S60	2323.	12.17	264.	91.	30.	1.01
+	DIVERSION TO	RS60	2323.	12.17	220.	62.	21.	1.01
+	HYDROGRAPH AT	DS60RE	518.	12.42	90.	29.	10.	1.01
+	4 COMBINED AT	CPS60	5052.	13.17	1200.	345.	115.	19.46
+	ROUTED TO	SRS60	0.	0.00	0.	0.	0.	19.46

*** NORMAL END OF HEC-1 ***