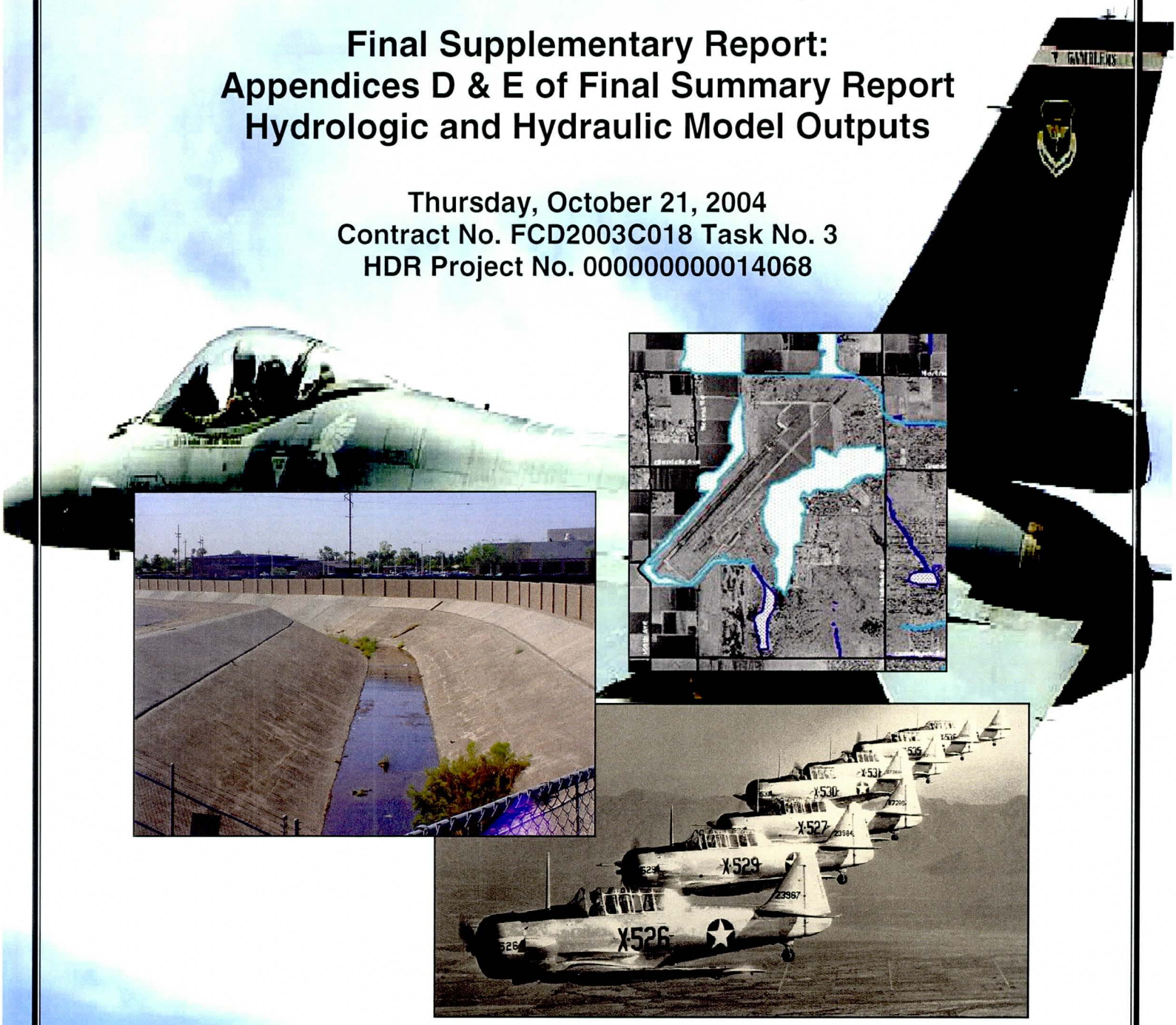
Luke Air Force Base Outfall Candidate Assessment Report

Final Supplementary Report: Appendices D & E of Final Summary Report Hydrologic and Hydraulic Model Outputs

Thursday, October 21, 2004
Contract No. FCD2003C018 Task No. 3
HDR Project No. 000000000014068



HDR

APPENDIX D

Hydrology

- Rational Method Excel Workbook Printout
- Existing Conditions HEC-1 Model Output (LABCAR.DAT)
- Diversion Scenario HEC-1 Model Output (LABCARD.DAT)
- Flow Routing Change HEC-1 Model Output (LABCARQ.DAT)

Rational Method Output

Job No. 9522

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	55				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	
Task	DRAINAGE AREA 100 acres				

Drainage Area 40.49 ha 100 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.65	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	0.88392 km	2900 ft	0.55 mi
Upstream Elevation	=	25.6032 m	84 ft	
Downstream Elevation	=	24.6888 m	81 ft	
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.028	0.028	
Watercourse slope (S)	=	1.03 m/km	5.46 ft/mi	
10-year rainfall intensity (i)	=	62.21 mm/hr	2.45 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	33 min	33 min	
Calculated Tc	=	33 min	33 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**79**	**117**	**159**	**228**	**291**	**353**	
C	0.650	0.650	0.650	0.715	0.780	0.813	
I in/hr	1.21	1.81	2.45	3.19	3.74	4.34	
Tc min	43.0	36.9	32.9	29.7	28.0	26.5	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	4.9	7.3	8.7	11.0	14.3	16.9
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						14.6
2 hr depth						2.7

Job No. 9522

Computation

Project	Luke AFB CAR	Computed	CAM	Date	8/17/2004
Sub-basin	50				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	

Task DRAINAGE AREA 191 acres

Drainage Area 77.33 ha 191 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.66	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	2.10312 km	6900 ft	1.31 mi
Upstream Elevation	=	26.8224 m	88 ft	
Downstream Elevation	=	24.6888 m	81 ft	
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.026	0.026	
Watercourse slope (S)	=	1.01 m/km	5.36 ft/mi	
10-year rainfall intensity (i)	=	41.52 mm/hr	1.63 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	58 min	58 min	
Calculated Tc	=	58 min	58 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**83**	**135**	**205**	**297**	**384**	**462**	
C	0.660	0.660	0.660	0.726	0.792	0.825	
I in/hr	0.66	1.07	1.63	2.14	2.54	2.93	
Tc min	80.8	67.3	57.5	51.8	48.6	46.0	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	9.5	14.2	16.8	21.4	27.7	32.8
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						28.4
2 hr depth						2.7

Job No. 9522

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	40				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	
Task	DRAINAGE AREA 200 acres				

Drainage Area 80.97 ha 200 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.6	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	1.64592 km	5400 ft	1.02 mi
Upstream Elevation	=	26.5176 m	87 ft	
Downstream Elevation	=	23.7744 m	78 ft	
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.026	0.026	
Watercourse slope (S)	=	1.67 m/km	8.80 ft/mi	
10-year rainfall intensity (i)	=	55.74 mm/hr	2.19 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	39 min	39 min	
Calculated Tc	=	39 min	39 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**125**	**189**	**263**	**379**	**485**	**587**	
C	0.600	0.600	0.600	0.660	0.720	0.750	
I in/hr	1.04	1.58	2.19	2.87	3.37	3.91	
Tc min	51.7	44.1	38.9	35.1	33.0	31.2	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	9.0	13.5	16.0	20.4	26.4	31.3
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						27.0
2 hr depth						2.7

Job No.	9522

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	30				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	

Task DRAINAGE AREA 111 acres

Drainage Area 44.94 ha 111 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.51	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	1.810512 km	5940 ft	1.13 mi
Upstream Elevation	=	28.6512 m	94 ft	
Downstream Elevation	=	24.9936 m	82 ft	
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.027	0.027	
Watercourse slope (S)	=	2.02 m/km	10.67 ft/mi	
10-year rainfall intensity (i)	=	54.75 mm/hr	2.16 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	40 min	40 min	
Calculated Tc	=	40 min	40 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**57**	**87**	**122**	**176**	**225**	**272**	
C	0.510	0.510	0.510	0.561	0.612	0.638	
I in/hr	1.01	1.54	2.15	2.82	3.31	3.84	
Tc min	53.2	45.3	39.9	36.0	33.9	32.0	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	4.2	6.4	7.5	9.6	12.5	14.7
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						12.7
2 hr depth						2.7

Job No.	9522

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	20				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	

Task	DRAINAGE AREA	161.41	acres

Drainage Area 65.35 ha 161.41 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.52	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	1.289304 km	4230 ft	0.80 mi
Upstream Elevation	=	31.6992 m	104 ft	
Downstream Elevation	=	25.908 m	85 ft	
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.026	0.026	
Watercourse slope (S)	=	4.49 m/km	23.72 ft/mi	
10-year rainfall intensity (i)	=	77.41 mm/hr	3.05 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	23 min	23 min	
Calculated Tc	=	23 min	23 min	

Discharge Calculation

Return Period		2	5	10	25	50	100	
English	CiA = cfs	**136**	**197**	**256**	**363**	**462**	**559**	
	C	0.520	0.520	0.520	0.572	0.624	0.650	
	I in/hr	1.62	2.35	3.05	3.93	4.58	5.33	
	Tc min	28.7	25.0	22.6	20.5	19.4	18.3	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	6.3	9.4	11.2	14.2	18.5	21.9
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						18.9
2 hr depth						2.7

Job No. 9522

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	10				
Subject	Hydrologic Analysis - Rational Method - Western Small Watersheds	Checked		Date	

Task DRAINAGE AREA 114.65 acres

Drainage Area 46.42 ha 114.65 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.37	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	1.09728 km	3600 ft	0.68 mi
Upstream Elevation	=	29.2608 m	96 ft	
Downstream Elevation	=	25.2984 m	83 ft	
Kb Type (use alpha **A,B,C,D**)	=	B	B	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.052	0.052	
Watercourse slope (S)	=	3.61 m/km	19.07 ft/mi	
10-year rainfall intensity (i)	=	59.71 mm/hr	2.35 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	35 min	35 min	
Calculated Tc	=	35 min	35 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**48**	**73**	**100**	**143**	**183**	**221**	
C	0.370	0.370	0.370	0.407	0.444	0.463	
I in/hr	1.14	1.72	2.35	3.07	3.59	4.18	
Tc min	46.1	39.5	35.1	31.7	29.8	28.2	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	3.2	4.8	5.7	7.2	9.3	11.0
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						9.5
2 hr depth						2.7

Job No.

Computation

Project	Luke AFB CAR	Computed	RH	Date	8/17/2004
Sub-basin	56				
Subject	Hydrologic Analysis - Rational Method	Checked		Date	
Task	DRAINAGE AREA 97 acres				

Drainage Area 39.27 ha 97 acre

Rational Equation Parameters

Time of Concentration

Tc=18.44*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38) Tc=11.4*(L^0.5)*(Kb^0.52)*(S^-0.31)*(i^-0.38)

10 -year return period		METRIC	ENGLISH	
C value for 10-year			0.62	From Figure 2-6
6-hour 10-year precip. Depth	=	52.578 mm	2.07 in	2.07 Phoenix Metro Area
Watercourse length (L)	=	1.194816 km	3920 ft	0.74 mi
Upstream Elevation	=	24.0792 m	79 ft	
Downstream Elevation	=	23.1648 m	76 ft	assumed wet well elev.
Kb Type (use alpha **A,B,C,D**)	=	A	A	Table 3.1 Type
Resistance Coefficient (Kb)	=	0.028	0.028	
Watercourse slope (S)	=	0.77 m/km	4.04 ft/mi	
10-year rainfall intensity (i)	=	49.65 mm/hr	1.95 in/hr	Phoenix Metro Area
Assumed Tc for rainfall intensity	=	46 min	46 min	
Calculated Tc	=	46 min	46 min	

Discharge Calculation

Return Period	2	5	10	25	50	100	
English CiA = cfs	**53**	**82**	**117**	**170**	**218**	**263**	
C	0.620	0.620	0.620	0.682	0.744	0.775	
I in/hr	0.88	1.36	1.95	2.56	3.02	3.50	
Tc min	62.0	52.5	45.8	41.3	38.8	36.7	Valid 10 min to 120 min

Volume Calculation

V=C(P/12)A acre ft

1 hr acre ft	4.5	6.8	8.0	10.2	13.2	15.7
1 hr depth	0.9	1.4	1.6	1.9	2.2	2.5
2 hr acre ft						13.5
2 hr depth						2.7

HEC-1 Output

HEC-1 Output

Existing Conditions Model

(LABCAR.DAT)

```
*****************************************                                    LABCAR
*                                       *                                      *************************************
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                                      *                                   *
*             JUN   1998                *                                      *   U.S. ARMY CORPS OF ENGINEERS    *
*           VERSION 4.1                 *                                      *   HYDROLOGIC ENGINEERING CENTER   *
*                                       *                                      *          609 SECOND STREET        *
*  RUN DATE   14JUN04  TIME  14:36:41   *                                      *       DAVIS, CALIFORNIA 95616     *
*                                       *                                      *           (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

                                  This output is from a model modified by HDR June 2004: Existing Conditions Model

1                                                   HEC-1 INPUT                                                    PAGE  1

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

          1           ID     LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
          2           ID     EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'
          3           ID
          4           ID     PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE
          5           ID     PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY
          6           ID     TURNED OFF) AT DI189.
          7           ID
          8           ID     THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS
          9           ID     AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY
         10           ID     HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL
         11           ID
         12           ID
         13           ID                                          REVISED BY URS     DATE: 01-14-04
         14           ID                                                             FILE: L303M1L.DAT
         15           ID        NOTES:
         16           ID        1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3,
         17           ID           2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
         18           ID        2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
         19           ID        3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC
         20           ID           GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN
         21           ID           THE WLB MODEL.
         22           ID        4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION
         23           ID           WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION
         24           ID           CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO
         25           ID           DRAINAGE REPORTS.
         26           ID        5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY.
         27           ID           GRAND.  COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115.
         28           ID           ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
         29           ID        6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
         30           ID        7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL
         31           ID           STORM.
         32           ID        8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
         33           ID        9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO
         34           ID           THE DATA FILE BY THE FCDMC.
         35           ID       10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS
         36           ID           AREAS #3 & #4) WERE ESTIMATED BY EEC.
                      *DIAGRAM
         37           IT       5                    600
         38           IO       5
         39           IN      15
         40           JD    4.03    .001
         41           PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
         42           PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
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```
                                                                                LABCAR
 43          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 44          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 45          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 46          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 47          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 48          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 49          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 50          PC    .983    .986    .989    .992    .995    .998    1.00   1.000   1.000   1.000
 51          JD    3.79      10
 52          JD    3.51      50
 53          JD    3.39     100
 54          JD    3.29     200
             * ************************************************************************
             * *************THE FOLLOWING SECTION IS WHITE TANKS 3*********************
             * ************************************************************************
             * ******TRANSMISSION LOSSES REMOVED - 4/25/00 - ERE************************
             * ************************************************************************
             *
             * SUB BASIN LG AND UI RECORDS UPDATED PER SLOPE CHANGE TO SUB BASIN 1
             * AT REQUEST OF FCDMC ON 11-17-03
             *
1                                          HEC-1 INPUT                                          PAGE  2

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

 55          KK       1
 56          KM   SUB BASIN 1
 57          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 58          KM    L=      3.5  Lca=      1.5   S=  527.2  Kn= .050  LAG=  40.7
 59          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 60          BA    1.94
 61          LG     .20     .35    4.00     .52   10.00
 62          UI    160.    207.    585.    790.    939.   1135.   1427.   1996.   1720.   1386.
 63          UI   1159.    946.    776.    535.    307.    267.    194.    160.     72.     49.
 64          UI     49.     49.     49.     49.      0.      0.      0.      0.      0.      0.
 65          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 66          KK    RCP1
 67          KM        ROUTE FLOW FROM CP1 TO CP2.
 68          RS       5              -1       0
 69          RC     .06     .04     .06   17800   .0469
 70          RX    1000    1125    1300    1390    1405    1490    1590    1750
 71          RY    1440    1439    1437    1428    1428    1439    1442    1444
             *

 72          KK       2
 73          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 2.
 74          BA    1.82
 75          LG     .18     .35    4.55     .37   12.00    .
 76          UI    115.    115.    259.    443.    557.    643.    728.    849.   1014.   1348.
 77          UI   1418.   1145.    985.    864.    735.    634.    545.    404.    268.    202.
 78          UI    189.    143.    115.    102.     35.     35.     35.     35.     35.     35.
 79          UI     35.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 80          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 81          KK     CP2
 82          KM        ADD HYDROGRAPHS AT CP2.
 83          HC       2    3.76

 84          KK    RCP2
 85          KM        ROUTE COMBINED HYDROGRAPHS AT CP2 TO CP3.
 86          RS       2              -1       0
 87          RC     .06    .035     .06    4500   .0111
 88          RX    1000    1100    1350    1705    1735    1780    1850    2000
 89          RY    1304    1302    1302    1298    1298    1303    1302    1305
             *

 90          KK      3A
 91          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3A
 92          BA     .29
 93          LG     .15     .35    4.30     .42     .00
 94          UI     34.     90.    165.    213.    289.    411.    312.    240.    181.    121.
 95          UI     60.     47.     32.     10.     10.     10.     10.      0.      0.      0.
 96          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

 97          KK   RCP3A
 98          KM        ROUTE FLOW FROM CP3A TO CP3
```

```
 99          RS       2              -1       0
100          RC     .03     .03     .05    5300   .0060
101          RX    1000    1023    1032    1046    1058    1067    1250    1540
102          RY    1289    1288    1286    1284    1284    1286    1288    1291
             *

103          KK       3
104          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3.
105          BA     .81
106          LG     .15     .35    4.45     .38     .00
107          UI     90.    226.    427.    550.    718.   1081.    912.    702.    537.    401.
108          UI    208.    151.     97.     59.     28.     28.     28.     28.      0.      0.
109          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

110          KK   I1CP3
111          KM        ADD HYDROGRAPHS AT I1CP3
112          HC       2     1.1

113          KK     CP3
114          KM        ADD HYDROGRAPHS AT CP3.
115          HC       2    4.86
             * PER URS FLOODPLAIN ANALYSIS BY MIKE R.
             * TURN OFF DIVERT PER CULVERT IMPROVEMENT BY 'SONORAN RIDGE REALESTATE'
             * ALSO BY DIRECTION OF MIKE DUNCAN AT FCDMC PER HIS PHONE CONVERSATION
             * WITH SONORAN RIDGE ON 2-14-02.
             *
             * PER PHONE CONVERSATION WITH FCDMC - PROPOSED 2-10'X6' BOX CULVERTS WERE
             * BACKFILLED ON 11-01-02.  THERE IS ALSO AN EXISTING 7' CMP AND AN 8' CMP
             * AT THIS LOCATION
             *

116          KK      D3
117          KM   DIVERT FLOWS THAT WILL OVERTOP THE BEARDSLEY CANAL AT OLIVE AVENUE.  THE
118          KM   HEC-2 DIVERSION RATING CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS
119          KM   INCORPORATED HERE.
             * FOLLOWING DIVERT DATA PROVIDED BY FCDMC ON 5-14-03
             * THIS INFORMATION IS BASED ON THE CULVERT STRUCTURE CONSTRUCTED PER THE
             * SONORAN RIDGE DEVELOPMENT, SEE 'S02001035' AND 'S02002033'
120          DT   DI189
121          DI       0    1432    2823    3000    4000
122          DQ       0       0     622     728    1728

123          KK    RCP3
124          KM        ROUTE FLOW FROM CP3 TO CP10.
125          RS       2              -1       0
126          RC     .05     .03     .05    5280   .0083
127          RX    1010    1015    1020    1050    1100    1275    1580    1750
128          RY    1251    1249    1249    1245    1245    1250    1250    1254
             *
```



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

129          KK       4
130          KM        RUNOFF HYDROGRAPH FORM SUB-BASIN 4.
131          BA     .30
132          LG     .20     .35    4.35     .44    9.00
133          UI     47.    191.    286.    443.    513.    346.    237.    115.     67.     36.
134          UI     14.     14.      0.      0.      0.      0.      0.      0.      0.      0.
135          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             *

136          KK       5
137          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 5.
138          BA     .72
139          LG     .20     .35    4.30     .45    9.00
140          UI    109.    433.    653.    981.   1241.    852.    594.    323.    177.    104.
141          UI     33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
142          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

143          KK     CP5
144          KM        ADD HYDROGRAPHS AT CP5.
145          HC       2    1.02

146          KK    RCP5
147          KM        ROUTE COMBINED HYDROGRAPHS AT CP5 TO CP6.
148          RS       1              -1       0
149          RC     .08     .05     .08    2400   .0833
150          RX     955     970     985    1000    1020    1035    1050    1065
151          RY    2815    2810    2805    2800    2800    2805    2810    2815
             *
```

```
152          KK       6
153          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 6.
154          BA     .45
155          LG     .20      .35    3.95      .53   10.00
156          UI    206.     627.   1145.     834.    421.    154.     53.     33.      0.      0.
157          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

158          KK     CP6
159          KM         ADD HYDROGRAPHS AT CP6.
160          HC       2    1.47

161          KK    RCP6
162          KM         ROUTE COMBINED HYDROGRAPHS AT CP6 TO CP7.
163          RS       1              -1       0
164          RC     .08      .05     .08    2400   .0833
165          RX     955      970     985    1000    1020    1035    1050    1065
166          RY    2815     2810    2805    2800    2800    2805    2810    2815
             *

167          KK       7
168          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 7.
169          BA     .31
             *     LG    0.35    0.15   7.976   0.082      20
170          LG     .20      .35    3.95      .53   10.00
171          UI    124.     383.    708.     610.    347.    132.     54.     21.      0.      0.
```



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

172          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

173          KK     CP7
174          KM         ADD HYDROGRAPHS AT CP7.
175          HC       2    1.78

176          KK    RCP7
177          KM         ROUTE COMBINED HYDROGRAPHS AT CP7 TO CP9.
178          RS       3              -1       0
179          RC     .08      .05     .08   10200  .07745
180          RX    1000     1045    1120    1195    1230    1300    1350    1450
181          RY    1910     1880    1850    1838    1838    1850    1880    1910
             *

182          KK       9
183          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 9.
184          BA    1.40
             *     LG    0.35    0.15   7.909   0.084  19.572
185          LG     .20      .35    4.00      .52   10.00
186          UI    155.     380.    725.     933.   1213.   1828.   1593.   1225.    939.    707.
187          UI    389.     261.    178.     116.     47.     47.     47.     47.      0.      0.
188          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

189          KK   I1CP9
190          KM         ADD HYDROGRAPHS AT CP9.
191          HC       2    3.18
             *

192          KK       8
193          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 8.
194          BA     .81
             *     LG    0.35    0.15   7.976   0.082      20
195          LG     .20      .35    3.95      .53   10.00
196          UI    103.     314.    536.     704.   1058.   1138.    821.    608.    420.    207.
197          UI    147.      95.     31.      31.     31.      0.      0.      0.      0.      0.
198          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

199          KK     CP9
200          KM         ADD HYDROGRAPHS AT CP9.
201          HC       2    3.99

202          KK    RCP9
203          KM         ROUTE COMBINED HYDROGRAPHS AT CP9 TO CP10.
204          RS       8              -1       0
205          RC     .06     .035     .06   19200   .0232
206          RX    1000     1085    1310    1395    1415    1450    1630    1665
207          RY    1317     1314    1311    1308    1308    1314    1314    1317
             *

208          KK      10
209          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 10.
210          BA    2.02
```

```
                 *     LG   0.347   0.248   5.124   0.254    4.52
 211             LG     .16     .35    4.55     .36    4.00
 212             UI    119.    119.    219.    428.    547.    632.    709.    813.    930.   1153.
```



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

 213             UI   1500.   1391.   1155.   1006.    893.    765.    668.    577.    473.    323.
 214             UI    210.    201.    191.    119.    119.     84.     36.     36.     36.     36.
 215             UI     36.     36.     36.     36.      0.      0.      0.      0.      0.      0.
 216             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 217             KK  I1CP10
 218             KM        ADD HYDROGRAPHS AT I1CP10
 219             HC       2    6.01

 220             KK    CP10
 221             KM        ADD HYDROGRAPHS AT CP10
 222             HC       2   10.87

 223             KK    1D10
 224             KM    PER URS FLOODPLAIN STUDY BY MIKE R. AND BOB D. ON 2-14-02
 225             DT  1DI188
 226             DI       0    6483    9725
 227             DQ       0     951    1475

 228             KK    2D10
 229             KM        FLOW TO WHITE TANKS #3 UNDER NORTHERN AVE.  THE HEC-2 DIVERSION RATING
 230             KM        CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS INCORPORATED HERE.
 231             DT  2DI188
 232             DI       0    1000    3000    4497    5000    6000    8000   10000
 233             DQ       0       0     770    1277    1450    1710    2470    3240

 234             KK   RCP10
 235             KM        ROUTE FLOW AT CP10 TO CP12.
 236             RS       1      -1       0
 237             RC     .03     .03     .05    3500   .0057
 238             RX     995    1000    1020    1055    1085    1165    1250    1330
 239             RY    1221    1220    1220    1211    1211    1218    1220    1222
                 *

 240             KK      12
 241             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 12.
 242             BA    1.38
 243             LG     .16     .35    4.80     .31    3.00
 244             UI    111.    129.    394.    536.    636.    759.    932.   1314.   1276.   1007.
 245             UI    850.    696.    573.    444.    263.    191.    169.    111.     91.     34.
 246             UI     34.     34.     34.     34.     34.      0.      0.      0.      0.      0.
 247             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 248             KK    CP12
 249             KM        ADD HYDROGRAPHS AT CP12.
 250             HC       2   12.25

 251             KK   RCP12
 252             KM        ROUTE COMBINED HYDROGRAPHS AT CP12 TO CPWT3
 253             RS       2      -1       0
 254             RC     .03     .03     .04    4800   .0031
 255             RX     995    1000    1020    1080    1200    1530    1665    1760
 256             RY    1211    1211    1210    1196    1196    1200    1204    1204
                 *
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 257             KK      11
 258             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 11.
 259             BA    1.56
                 *     LG    0.35    0.15    7.25   0.107  13.299
 260             LG     .18     .37    5.20     .27    7.00
 261             UI    143.    245.    572.    756.    914.   1143.   1651.   1622.   1253.   1025.
 262             UI    821.    642.    392.    248.    210.    143.     85.     44.     44.     44.
 263             UI     44.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 264             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 265             KK   RCP11
 266             KM        ROUTE HYROGRAPH FROM CP11 TO CP13.
 267             RS       3      -1       0
 268             RC     .06    .035     .06   10200   .0098
 269             RX    1000    1070    1300    1480    1510    1525    1555    1600
 270             RY    1233    1232    1230    1222    1222    1230    1232    1233
```

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*

KK      13
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 13.
BA    1.30
LG     .15      .35     4.55      .35      .00
UI    120.     210.     484.     639.     774.     972.    1415.    1334.    1039.     847.
UI    674.     527.     304.     206.     167.     120.      60.      37.      37.      37.
UI     37.       0.       0.       0.       0.       0.       0.       0.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

KK    CP13
KM        ADD HYDROGRAPHS AT CP13.
HC       2    2.86

KK   RCP13
KM        ROUTE COMBINED HYDROGRAPHS AT CP13 TO CP17
RS       2               -1       0
RC     .03      .03      .04     2400    .0042
RX    1000     1025     1040     1065     1085     1110     1175     1200
RY    1206     1198     1196     1194     1194     1198     1198     1201
*

KK      14
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 14.
BA    1.47
*     LG    0.35     0.15    7.974    0.082   18.195
LG     .20      .35     4.30      .45     9.00
UI    166.     421.     789.    1018.    1340.    1997.    1636.    1264.     961.     700.
UI    363.     275.     166.      93.      51.      51.      51.       0.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

KK   RCP14
KM        ROUTE FLOW FROM CP14 TO CP15.
RS       4               -1       0
RC     .06     .035      .06     8800   .02556
RX    1000     1030     1075     1200     1220     1280     1415     1480
RY    1296     1295     1294     1288     1288     1294     1296     1300
*
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK      15
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 15.
BA    1.26
*     LG    0.35    0.194    6.561    0.142   15.67
LG     .18      .35     4.40      .41     7.00
UI    130.     282.     577.     747.     939.    1325.    1550.    1154.     918.     712.
UI    517.     276.     216.     137.      92.      40.      40.      40.      40.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

KK  I1CP15
KM        ADD HYDROGRAPHS AT I1CP15
HC       2    2.73
*

KK      16
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 16.
BA    1.13
LG     .17      .35     4.65      .34    11.00
UI    115.     239.     502.     650.     811.    1121.    1392.    1050.     840.     656.
UI    500.     270.     194.     138.     102.      35.      35.      35.      35.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

KK    SR16
KM        STORAGE ROUTE THROUGH THE CATERPILLAR DETENTION BASIN IN SUBWATERSHED 16
RS       1    STOR       0       0
SV       0       1      31     114     270     502     807    1319    1388    1460
SQ       0       0       0       0       0       0       0       0       0     135
SE    1198    1200    1210    1220    1230    1240    1250    1260    1261    1262
*

KK    CP15
KM        ADD HYDROGRAPHS AT CP15.
HC       2    3.90

KK   RCP15
KM        ROUTE COMBINED HYDROGRAPHS AT CP15 TO CP17.
```

```
                                                                                LABCAR
 331          RS       3              -1       0
 332          RC     .06     .035     .06    6800   .0079
 333          RX    1000     1310    1380    1540    1640    1670    1700    1910
 334          RY    1234     1232    1228    1226    1226    1228    1232    1235
              *

 335          KK      17
 336          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 17
 337          BA    1.07
 338          LG     .19      .35    4.10     .46     .00
 339          UI    115.     273.    532.    685.    876.   1316.   1252.    953.    740.    568.
 340          UI    348.     199.    154.    112.     35.     35.     35.     35.      0.      0.
 341          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

 342          KK  I1CP17
 343          KM       ADD HYDROGRAPHS AT I1CP17.
 344          HC       2    4.97

 345          KK    CP17
 346          KM        ADD HYDROGRAPHS AT CP17.
 347          HC       2    7.83

 348          KK   RCP17
 349          KM        ROUTE FLOW FROM CP17 TO CPWT3
 350          RS       2              -1       0
 351          RC     .06     .04     .04    1600   .0022
 352          RX    1000     1220    1280    1470    1530    1660    1680    1685
 353          RY    1196     1194    1190    1182    1182    1210    1211    1212
              *

 354          KK     WT3
 355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN WT3
 356          BA     .44
 357          LG     .35      .35    4.65     .30     .00
 358          UI     36.      43.    128.    174.    206.    247.    305.    432.    401.    318.
 359          UI    268.     220.    180.    135.     79.     61.     51.     36.     25.     11.
 360          UI     11.      11.     11.     11.      0.      0.      0.      0.      0.      0.
 361          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

 362          KK  I1CWT3
 363          KM        ADD HYDROGRAPHS AT I1CPWT3
 364          HC       2    8.27

 365          KK   CPWT3
              * KO     1                                  21
 366          KM        ADD HYDROGRAPHS AT CPWT3
 367          HC       2   20.52

 368          KK   SRWT3
 369          KM        STORAGE ROUTE THROUGH WHITE TANKS STRUCTURE #3.
 370          RS       1    STOR       0       0
 371          SV       0       1      14      42      91     203     466     958    1704    2716
 372          SV    3012    3325    3657    4006
 373          SQ       0       0       0       0       0       0       0       0       0       0
 374          SQ       0    3550    9000   17600
 375          SE    1174    1176    1180    1184    1188    1192    1196    1200    1204    1208
 376          SE    1209    1210    1211    1212
 377          SS    1209       0       0       0
 378          ST  1212.1    7667     2.2     1.5
 379          SW    1000    1995    3000    4000    4988    6008    7007
 380          SE  1212.1  1212.4 1212.63 1213.32 1214.72 1214.94  1214.8
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2C WITH NEW SOILS*****
              * ***********************************************************************
              *
1                                          HEC-1 INPUT                                                    PAGE 10

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

 381          KK     116
 382          KM   BASIN 116
 383          KM    L=      1.4  Lca=       .8   S=   14.1  Kn= .030  LAG=  27.8
 384          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 385          BA     .66
 386          LG     .28      .25    4.90     .33   28.00
 387          UI     80.     227.    406.    527.    750.    948.    693.    525.    387.    215.
```

```
                                                                                                  LABCAR
388          UI    135.     88.     49.     25.     25.     25.      0.      0.      0.      0.
389          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

390          KK  116OUT
391          KM    Divert Retention in Subbasin 116
392          DT  116RET    49.4
393          DI       0   10000
394          DQ       0   10000

395          KK    R116
396          KM         ROUTE FLOW FROM CP116 TO CP117
397          RS       4              -1       0
398          RC     .05    .022    .022    4300   .0037
399          RX    1000    1001    1002    1155    1185    1200    1240    1295
400          RY    1220    1220    1220    1218    1218  1218.5    1218    1221

401          KK     117
             *
402          KM   BASIN 117
403          KM    L=      2.0  Lca=      1.0   S=   20.6  Kn= .043  LAG=  45.2
404          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
405          BA     .92
406          LG     .31     .25    5.60     .23   26.00
407          UI     68.     68.    223.    307.    373.    433.    516.    675.    861.    722.
408          UI    596.    509.    423.    353.    283.    174.    120.    112.     74.     68.
409          UI     31.     21.     21.     21.     21.     21.      0.      0.      0.      0.
410          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

411          KK  117OUT
412          KM    Divert Retention in Subbasin 117
413          DT  117RET    68.9
414          DI       0   10000
415          DQ       0   10000

416          KK   CP117
417          KM         Add Hydrographs at CP117
418          HC       2    1.65

419          KK    R117
420          KM         ROUTE FLOW FROM CP117 TO CP125
421          RS       5              -1       0
422          RC    .022    .022    .025    5450   .0033
423          RX    1000    1001    1002    1025    1060    1355    1765    1910
424          RY    1197    1197    1197    1196    1196    1198    1200    1201
             *
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1 HEC-1 INPUT PAGE 11

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

425          KK     123
426          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 123
427          BA     .44
428          LG     .50     .00    5.76     .32     .00
429          UI     20.     20.     20.     51.     74.     90.    103.    114.    124.    138.
430          UI    155.    175.    222.    259.    243.    208.    184.    167.    152.    134.
431          UI    121.    107.     97.     81.     60.     41.     36.     34.     33.     23.
432          UI     20.     20.     13.      6.      6.      6.      6.      6.      6.      6.
433          UI      6.      6.      6.      0.      0.      0.      0.      0.      0.      0.
434          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

435          KK    D123
436          KM         DIVERT TO CP134 FROM CP123
437          KM         Revised DQ record, old record "* DQ" is for divert to 124
438          DT   DI134
439          DI       0      94     177     293     448     683    1014    1440    1964    2593
             * DQ     0      94     177     293     448     448     448     448     448       4
440          DQ       0       0       0       0       0     235     566     992    1516    2145

441          KK    R123
442          KM         ROUTE REMAINDER FROM CP123 TO CP124
443          RS       4              -1       0
444          RC    .075    .035    .035    2640   .0038
445          RX    1000    1350    1690    2040    2130    2148    2149    2150
446          RY    1216    1214    1212    1210    1210    1211    1211    1211
             *

447          KK     124
448          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 124
449          BA     .57
450          LG     .50     .00    5.76     .32     .00
451          UI     20.     20.     20.     20.     50.     70.     80.     94.    102.    111.
```

```
                                                                                LABCAR
452          UI    118.    128.    138.    152.    163.    188.    228.    254.    257.    223.
453          UI    201.    183.    170.    159.    146.    133.    122.    112.    102.     95.
454          UI     82.     66.     57.     36.     36.     34.     33.     33.     21.     20.
455          UI     20.     20.     12.      6.      6.      6.      6.      6.      6.      6.
456          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
457          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

458          KK   CP124
459          KM        ADD HYDROGRAPHS AT CP124
460          HC       2    1.65

461          KK   1D124
462          KM        DIVERT TO CP136 FROM CP124
463          DT   DI136
464          DI       0      42      84     232     605    1435    2923
465          DQ       0      25      51     128     292     519     798
1                                          HEC-1 INPUT                                                          PAGE 12

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

466          KK   2D124
467          KM        DIVERT TO CP135 FROM CP124
468          KM        Revised DQ record, old record "* DQ" is for divert to 125
469          DT   DI135
470          DI       0      17      33     104     313     916    2125
             * DQ     0      17      33      82     189     341     534
471          DQ       0       0       0      22     124     575    1591

472          KK    R124
473          KM        ROUTE FLOW FROM CP124 TO CP125
474          RS       7              -1       0
475          RC    .025    .022    .022    5280   .0034
476          RX    1000    1220    1400    1660    1680    1708    1709    1710
477          RY    1200    1198    1196    1194    1194    1195    1195    1195
             *

478          KK     125
479          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 125
480          BA    1.00
481          LG     .35    0.33    5.00     .27     .00
482          UI     86.     123     322     430     515     626     837    1062     852     701
483          UI     572     465     369     217     148     129     86.      62      26     26.
484          UI     26.     26.     26.      0.      0.      0.      0.      0.      0.      0.
485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

486          KK   1I125
487          KM        ADD HYDROGRAPHS AT 1I125
488          HC       2    2.01

489          KK   CP125
490          KM        ADD HYDROGRAPHS AT CP125
491          HC       2    3.66

492          KK   1D125
493          KM        DIVERT TO CP137 FROM CP125
494          DT   DI137
495          DI       0      29     228     748    1285    2526    4403    6923   10115
496          DQ       0      10      76     249     428     842    1468    2308    3372

497          KK   2D125
498          KM        DIVERT TO CP138 FROM CP125
499          DT   DI138
500          DI       0      19     152     499     857    1684    2935    4615    6743
501          DQ       0      10      76     249     428     842    1468    2308    3372

502          KK    R125
503          KM        ROUTE REMAINDER FLOW FROM CP125 TO CP126
504          RS       4              -1       0
505          RC     .05     .03     .03    5280   .0038
506          RX    1000    1350    1570    1590    1630    1645    1650    1670
507          RY    1184    1182    1180    1176    1176    1180    1182    1183
             *
1                                          HEC-1 INPUT                                                          PAGE 13

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

508          KK     118
509          KM   BASIN 118
510          KM    L=      1.0  Lca=       .4   S=   20.6  Kn= .027  LAG=  16.0
511          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
```

```
BA     .16
LG     .10     .25    4.90     .41   80.00
UI     55.    174.    304.    339.    202.     93.     43.     14.     10.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  118OUT
KM    Divert Retention in Subbasin 118
DT  118RET    14.7
DI       0   10000
DQ       0   10000

KK    R118
KM        ROUTE FLOW FROM CP118 TO CP126
RS      21              -1       0
RC    .035    .035    .075    7500   .0045
RX    1000    1001    1030    1140    1260    1660    2349    2350
RY  1192.5  1192.5    1192    1190    1190    1191    1192    1192
*

KK     126
KM   BASIN 126
KM    L=      1.8  Lca=      1.0   S=   19.3  Kn= .038  LAG=  38.5
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .95
LG     .30     .25    5.10     .27   25.00
UI     83.    127.    319.    424.    507.    623.    846.   1029.    793.    655.
UI    529.    428.    317.    181.    140.    107.     83.     38.     25.     25.
UI     25.     25.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  126OUT
KM    Divert Retention in Subbasin 126
DT  126RET    63.9
DI       0   10000
DQ       0   10000

KK   1I126
KM        ADD HYDROGRAPHS AT CP126 (R118+126)
HC       2    1.11

KK   CP126
KM        ADD HYDROGRAPHS AT CP126 (R118+R125+126)
HC       2    4.75
* MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
```



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

KK    D126
KM        DIVERT TO CP139 FROM CP126
KM        based on a 80/20 split from WLB model
DT   DI139
DI       0     100     200     400     800    1200    1600    2000    2400    2800
DQ       0     100     200     400     800    1200    1600    2000    2400    2800

KK    R126
KM        ROUTE FLOW FROM CP126 TO CP138
RS       8              -1       0
RC    .035    .035    .075    5280   .0030
RX    1000    1001    1002    1010    1180    1560    2020    2200
RY    1161    1161    1161    1160    1160    1162    1164    1165
*
* ***************************************************************************
* ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2A WITH NEW SOILS*****
* ***************************************************************************
*

KK    100A
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 100A
BA     .18
LG     .50     .00    4.32    0.62     .00
UI     15.     18.     53.     72.     85.    102.    127.    179.    163.    130.
UI    109.     90.     73.     54.     31.     25.     20.     15.      9.      5.
UI      5.      5.      5.      5.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   R100A
KM        ROUTE FLOW FROM CP100A TO CP102A
RS      10              -1       0
RC    0.04   0.035    0.04    4500  0.0036
```

```
                                                                                LABCAR
 573          RX    1000    1270    1500    1530    1570    1600    1606    1612
 574          RY    1318    1316    1315  1314.5  1314.5    1315    1316    1318
              *

 575          KK    102A
 576          KM        RUNOFF HYDROGRAPH FROM SUB-SUBIN 102A.
 577          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 578          KM    L=      1.0  Lca=       .4   S=   20.0  Kn= .071  LAG=  40.9
 579          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 580          BA     .51
 581          LG     .40     .25    5.00     .31     .00
 582          UI     42.     53.    152.    205.    244.    294.    368.    517.    453.    364.
 583          UI    305.    249.    204.    144.     83.     70.     53.     42.     21.     13.
 584          UI     13.     13.     13.     13.      0.      0.      0.      0.      0.      0.
 585          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 586          KK  1I102A
 587          KM        ADD HYDROGRAPHS AT 1I102A
 588          HC       2    0.69
              *
1                                          HEC-1 INPUT                                          PAGE 15

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


 589          KK     101
 590          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 101.
 591          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 592          KM    L=       .7  Lca=       .4   S=   21.6  Kn= .050  LAG=  24.5
 593          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 594          BA     .16
 595          LG     .35     .37    5.20     .23     .00
 596          UI     22.     76.    122.    166.    259.    205.    150.    106.     54.     34.
 597          UI     21.      7.      7.      7.      0.      0.      0.      0.      0.      0.
 598          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 599          KK    R101
 600          KM        ROUTE FLOW FROM CP101 TO CP102A
 601          RS       1              -1       0
 602          RC    0.04   0.035    0.04     600  0.0067
 603          RX    1000    1240    1290    1310    1340    1350    1410    1500
 604          RY    1326    1324    1322    1320    1320    1322    1322    1322

 605          KK  CP102A
 606          KM        ADD HYDROGRAPHS AT CP102A
 607          HC       2    0.75

 608          KK  102AOT
 609          KM        DIVERT OUT TEMPORARY RETENTION
 610          KM        RUNOFF FROM 101,102A AND 100A APPEAR TO CONCENTRATE
 611          KM        IN TEMPORARY RETENTION BASIN.
 612          DT  102ART    30.4
 613          DI       0   10000
 614          DQ       0   10000

 615          KK   R102A
 616          KM        ROUTE FLOW FROM CP102A TO CP106
 617          RS       7              -1       0
 618          RC    0.04   0.035    0.04    5280  0.0042
 619          RX    1000    1400    1730    1750    1790    1810    1816    1822
 620          RY    1308    1306    1304    1303    1303    1304    1306    1308
              *

 621          KK     106
 622          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 106.
 623          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 624          KM    L=      1.3  Lca=       .8   S=   18.9  Kn= .050  LAG=  41.8
 625          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 626          BA     .77
 627          LG     .35     .38    5.60     .20     .00
 628          UI     62.     73.    220.    300.    357.    426.    524.    739.    709.    561.
 629          UI    473.    388.    318.    245.    145.    107.     93.     62.     49.     19.
 630          UI     19.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 631          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


 632          KK  106OUT
 633          KM        DIVERT OUT TEMPORARY RETENTION
 634          DT  106RET    32.8
```

```
635          DI       0   10000
636          DQ       0   10000
             *

637          KK   CP106
638          KM        ADD HYDROGRAPHS AT CP106
639          HC       2    1.70

640          KK    R106
641          KM   ***********************************************************************
642          KM            RUNOFF ROUTED FROM CP106 TO CP114 AS DIRECTED BY FCDMC PER APPROVED
643          KM    STANELY ENG. LOMR FOR FOR SUN CITY GRAND.
644          KM
645          KM            ** RX AND RY CARDS IN SCI R106 USED TEN FIELDS INSTEAD OF EIGHT (HEC-1
646          KM    MAX),THEREFORE THE RIGHT OVERBANK AREA WAS ASSUMED
647          KM   ***********************************************************************
648          KM
649          RS       8              -1       0
650          RC    0.05   0.050    0.05    6800  0.0031
651          RX    1000    1032    1040    1085    1093    1108    1240    1390
652          RY    1293    1291    1289    1288    1290    1292    1291    1295
             *

653          KK     105
654          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 105
655          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
656          KM    L=       .8  Lca=       .3   S=   30.8  Kn= .050  LAG=  21.8
657          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
658          BA     .21
659          LG     .35     .38    5.60     .20     .00
660          UI     33.    132.    198.    303.    363.    246.    169.     85.     49.     27.
661          UI     10.     10.     10.      0.      0.      0.      0.      0.      0.      0.
662          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

663          KK    R105
664          KM        ROUTE FLOW FROM CP105 TO CP112
665          RS       3              -1       0
666          RC    .022    .022     .03    5220   .0044
667          RX    1000    1001    1010    1020    1040    1050    1099    1100
668          RY    1303    1303    1303    1302    1302    1304    1305    1305
             *

669          KK     112
670          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 112
671          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
672          KM    L=      1.6  Lca=       .8   S=   22.0  Kn= .030  LAG=  26.4
673          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
674          BA     .63
675          LG     .32     .25    5.10     .30   21.00
676          UI     80.    249.    422.    557.    846.    879.    635.    468.    319.    156.
677          UI    111.     70.     25.     25.     25.      0.      0.      0.      0.      0.
```



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

678          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

679          KK  112OUT
680          KM        DIVERSION-RETENTION AT 112
681          DT  112RET   43.68
682          DI       0   10000
683          DQ       0   10000

684          KK   CP112
685          KM        ADD HYDROGRAPHS AT CP112.
686          HC       2    0.82
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL HAPPY TRAILS DEAD STORAGE RETENTION IN
             *       SUB-BASIN 112
             *

687          KK   1D112
688          KM        DIVERT TO CP120  FROM CP112
689          DT   DI120
690          DI       0      48     165     355     625     981    1434    1990
691          DQ       0      16      55     118     208     327     478     663

692          KK   2D112
693          KM        DIVERT TO CP121A FROM CP112
694          DT  1D121A
695          DI       0      32     110     237     417     654     956    1327
```

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                                                                                LABCAR
696          DQ       0      16      55     118     208     327     478     663

697          KK    R112
698          KM        ROUTE REMAINDER FROM CP112 TO CP113A
699          RS       6      -1       0
700          RC    .075    .035    .035    2640   .0023
701          RX    1000    1490    1830    2600    2770    2788    2789    2790
702          RY    1290    1288    1286    1284    1284    1285    1285    1285
             *

703          KK    113A
704          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 113A
705          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
706          KM    L=      1.4  Lca=       .8   S=   26.9  Kn= .030  LAG=  24.1
707          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
708          BA     .50
709          LG     .25     .25    5.80     .21   30.00
710          UI     70.    248.    391.    540.    829.    632.    460.    319.    152.    100.
711          UI     59.     21.     21.     21.      0.      0.      0.      0.      0.      0.
712          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL BELL WEST RANCH DEAD STORAGE RETENTION IN
             *       SUB-BASIN 113A
             *
1                                        HEC-1 INPUT                                                    PAGE 18

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

713          KK  113AOT
714          KM        DIVERSION-RETENTION AT 113A
715          DT  113ART   18.71
716          DI       0   10000
717          DQ       0   10000

718          KK  CP113A
719          KM        ADD HYDROGRAPHS AT CP113A (R106+R112+113A)
720          HC       2    1.34

721          KK   D113A
722          KM        DIVERT TO CP121A FROM CP113A
723          DT  2D121A
724          DI       0     185     545     642     893    1913
725          DQ       0       0       0      12      74     467

726          KK   R113A
727          KM        ROUTE REMAINDER FROM CP113A TO CP114
             * RY stations were increased by 2' at the ends to contain flow
728          RS       4      -1       0
729          RC    .035    .035    .035    2500   .0032
730          RX    1000    1020    1199    1200    1300    1301    1320    1340
731          RY    1282    1279    1280    1279    1279    1280    1279    1282
             *

732          KK     114
733          KM   BASIN 114 (revised)
734          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
735          KM    L=      3.5  Lca=      1.9   S=   19.3  Kn= .033  LAG=  55.4
736          BA    2.47
737          LG     .29     .25    5.70     .23   26.00
738          UI    150.    150.    305.    550.    710.    817.    921.   1063.   1228.   1601.
739          UI   1921.   1626.   1371.   1209.   1047.    907.    774.    660.    482.    304.
740          UI    259.    247.    172.    150.    127.     46.     46.     46.     46.     46.
741          UI     46.     46.     46.      0.      0.      0.      0.      0.      0.      0.
742          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE IN SUN CITY GRAND SUB-BASIN 114

743          KK  114OUT
744          KM        DIVERSION-RETENTION AT 114
745          DT  114RET  192.94
746          DI       0   10000
747          DQ       0   10000

748          KK   CP114
749          KM        ADD HYDROGRAPHS AT CP114.
750          HC       3    5.26
             * DIVERT AT 114 USING DIVERT FROM ORIGINAL WLB STUDY, WHICH COMPARES TO STUDY
             * FOR MOUNTAIN VISTA RANCH PREPARED BY AMERICAN ENGINEERING
1                                        HEC-1 INPUT                                                    PAGE 19
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 751          KK    D114
 752          KM        DIVERT FLOW FROM CP114 TO CP122B
 753          DT  DI122B
 754          DI       0     105     354     622    1153    1882
 755          DQ       0       0     195     395     845    1480

 756          KK    R114
 757          KM        ROUTE REMAINER FROM CP114 TO CP115
 758          RS       6              -1       0
 759          RC    .075     .04     .04    2100   .0038
 760          RX    1000    1020    1100    1850    2030    2048    2049    2050
 761          RY    1266    1264    1262    1260    1260    1261    1261    1261
              *

 762          KK     115
 763          KM   BASIN 115  (revised)
 764          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 765          KM    L=      3.2  Lca=      1.5   S=   13.9  Kn= .033  LAG=  51.8
 766          BA    2.40
 767          LG     .28     .25    5.40     .26   27.00
 768          UI    156.    156.    375.    620.    769.    884.   1016.   1182.   1464.   1956.
 769          UI   1788.   1466.   1273.   1098.    940.    795.    661.    468.    275.    262.
 770          UI    234.    156.    156.     66.     48.     48.     48.     48.     48.     48.
 771          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 772          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN SUN CITY GRAND SUB-BASIN 115

 773          KK  115OUT
 774          KM        DIVERSION-RETENTION AT 115
 775          DT  115RET  195.39
 776          DI       0   10000
 777          DQ       0   10000

 778          KK   CP115
 779          KM        ADD HYDROGRAPHS AT CP115
 780          HC       2    7.59

 781          KK    R115
 782          KM        CHANNEL ROUTE FROM CP115 TO CP122A
 783          RS       5              -1       0
 784          RC    .021    .021    .021    5180   .0028
 785          RX    1000    1055    1110    1122    1128    1140    1145  1145.1
 786          RY    1249  1248.5    1249    1246    1246    1249    1249    1252
              *

 787          KK    122A
 788          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 122A
 789          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 790          KM    L=      1.6  Lca=       .8   S=   23.5  Kn= .030  LAG=  25.9
 791          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 792          BA   0.382
 793          LG     .24    0.21    5.30    0.19   35.00
 794          UI     50.    159.    264.    351.    546.    519.    378.    277.    180.     86.
```



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

 795          UI     62.     35.     15.     15.     15.      0.      0.      0.      0.      0.
 796          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN MOUNTAIN VISTA RANCH SUBDIVISION.
              *       SUB-BASIN 122

 797          KK  122AOT
 798          KM        DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
 799          KM        57% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
 800          DT  122ART   30.54
 801          DI       0   10000
 802          DQ       0   10000

 803          KK  1I122A
 804          KM        ADD HYDROGRAPHS AT INTERMEDIATE POINT TO CP122A
 805          HC       2    8.33
              * move to CP114 at divert 1D122

 806          KK    D114
 807          KM        RETRIEVE DIVERT DI122B AT CP114
```

```
808          DR  DI122B

809          KK    R114
810          KM        ROUTE DIVERTED FLOW FROM CP114 TO CP122B
             * end stations raised by 1.5' to contain flow
811          RS       5            -1       0
812          RC     .03      .03     .03    6200   .0033
813          RX     980     1000    1004    1008    1040    1044    1048    1060
814          RY  1261.0     1258    1257    1256    1256    1257    1258  1261.0
             *

815          KK    122B
816          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 122B
817          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
818          KM    L=       1.6  Lca=       .8   S=   23.2  Kn= .029  LAG=  25.2
819          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
820          BA    0.51
821          LG     .24     0.25    6.40    0.29   35.00
822          UI     68.     227.    369.    496.    781.    672.    492.    356.    202.    115.
823          UI     73.      34.     21.     21.     21.      0.      0.      0.      0.      0.
824          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

825          KK  122BOT
826          KM        DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
827          KM        43% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
828          DT  122BRT   23.04
829          DI       0   10000
830          DQ       0   10000

831          KK  CP122B
832          KM        ADD HYDROGRAPHS AT CP122B
833          HC       2    5.66
```



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

834          KK   R122B
835          KM        ROUTE FLOW FROM CP122B TO CP122A
836          RS       1            -1       0
837          RC    .035     .018    .035    1580   .0038
838          RX    1000     1010    1020  1020.1  1079.9    1080    1090    1100
839          RY    1232     1230  1229.5    1229    1229  1229.5    1230    1232

840          KK  CP122A
841          KM        ADD HYDROGRAPHS AT CP122A       (CP122A+122BOT+R115)
842          HC       2    8.49

843          KK  1R122A
844          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (new)
845          KM        This channel continues along Reemes from Green field for 1/2 mile
846          RS       2            -1       0
847          RC    .018     .035    .035    2640   .0042
848          RX    1000     1030    1060    1076    1101    1117    1118    1119
849          RY    1222     1222    1222    1218    1218    1222    1223    1224

850          KK  2R122A
851          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (WLB - original modified for
852          KM                                                 length)
853          RS       7            -1       0
854          RC     .05      .05    .075    2640   .0038
855          RX    1000     1001    1002    1015    1235    1600    2030    2220
856          RY    1219     1219    1219    1218    1218    1220    1222    1224
             *
             * ************************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2B WITH NEW SOILS*****
             * ************************************************************************
             *

857          KK     111
858          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111.
859          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
860          KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
861          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
862          BA     .26
863          LG     .25      .25    5.40     .26   25.00
864          UI     87.     280.    482.    563.    338.    161.     73.     26.     17.      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.
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL ARIZONA TRADITIONS RETENTION IN
             *       SUB-BASIN 111
```

```
867          KK  111OUT
868          KM        DIVERSION-RETENTION
869          DT  111RET   12.46
870          DI       0   10000
871          DQ       0   10000
```



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

872          KK    R111
873          KM        ROUTE FROM CP111 TO CP111A
874          RS       3              -1       0
875          RC    .075    .035    .035    1800   .0039
876          RX    1000    1570    2040    2370    2440    2468    2469    2470
877          RY    1312    1310    1308    1306    1306    1307    1307    1307
             *

878          KK     104
879          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 104
880          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
881          KM    L=       .6  Lca=       .3   S=   16.2  Kn= .050  LAG=  22.1
882          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
883          BA     .15
884          LG     .35     .39    5.70     .19     .00
885          UI     23.     91.    137.    207.    259.    177.    123.     65.     36.     21.
886          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
887          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

888          KK    R104
889          KM        ROUTE FLOW FROM CP104 TO CP111A
890          RS      53              -1       0
891          RC    .075    .075    .075    6552   .0056
892          RX    1000    1001    1230    1270    1750    2000    2380    2650
893          RY    1321    1321    1320    1318    1318    1319    1318    1320
             *

894          KK    111A
895          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111A.
896          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
897          KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
898          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
899          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
900          KM    L=      1.5  Lca=       .9   S=   34.0  Kn= .030  LAG=  24.8
901          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
902          BA     .61
903          LG     .23     .26    5.30     .27   18.00
904          UI     83.    283.    455.    616.    968.    792.    580.    414.    220.    136.
905          UI     83.     31.     25.     25.      0.      0.      0.      0.      0.      0.
906          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

907          KK  111AOT
908          KM        DIVERSION-RETENTION AT 111A
909          DT  111ART   55.65
910          DI       0   10000
911          DQ       0   10000

912          KK  CP111A
913          KM        ADD HYDROGRAPHS AT CP111A
914          HC       3    0.97
             *     ADDED R111A, BASED ON WLB OVERLAND CHANNEL ROUTES
```



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

915          KK   R111A
916          KM        ROUTE FLOW FROM CP111A TO CP120
917          RS      25              -1       0
918          RC     .05     .05     .05    5700   .0028
919          RX    1000    1001    1002    1045    1150    1570    1960    2350
920          RY    1249    1249    1249    1248    1248    1250    1252    1254
             *

921          KK     119
922          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 119
923          BA     .86
924          LG     .50     .00    5.40     .38     .00
925          UI     36.     36.     36.     58.    120.    142.    168.    185.    202.    218.
926          UI    241.    267.    292.    350.    424.    469.    404.    355.    319.    293.
927          UI    270.    241.    219.    197.    178.    161.    131.    103.     68.     63.
```

```
                                                                                LABCAR
928          UI     60.     59.     47.     36.     36.     36.     16.     11.     11.     11.
929          UI     11.     11.     11.     11.     11.     11.     11.     11.      0.      0.
930          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

931          KK    D119
932          KM        DIVERT TO CP128 FROM CP119
933          DT   DI128
934          DI      0      42     139     286     485     739    1052    1425
935          DQ      0      25      81     167     283     429     607     819

936          KK    R119
937          KM        ROUTE REMAINDER FROM CP119 TO CP119A
938          RS      6              -1       0
939          RC   .075    .035    .035    2640   .0015
940          RX   1000    1001    1450    1800    1820    1838    1839    1840
941          RY   1292    1292    1290    1288    1288    1289    1289    1289
             *

942          KK    119A
943          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 119A
944          BA     .47
945          LG     .50     .00    5.40     .38     .00
946          UI     19.     19.     19.     29.     64.     75.     90.     98.    107.    116.
947          UI    128.    142.    154.    181.    219.    254.    226.    197.    177.    162.
948          UI    150.    134.    121.    111.     98.     91.     77.     59.     46.     34.
949          UI     33.     32.     31.     19.     19.     19.     16.      6.      6.      6.
950          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
951          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
952          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

953          KK  CP119A
954          KM        ADD HYDROGRAPHS AT CP119A
955          HC      2    1.26
```

1 HEC-1 INPUT PAGE 24

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

956          KK   D119A
957          KM        DIVERT TO CP130 FROM CP119A
958          DT   DI130
959          DI      0      13      46     100     177     281     413     577     774    1007
960          DI   1279    1600    1978
961          DQ      0       0       0       0       0       0       0       0       0       0
962          DQ      0       9      31

963          KK   R119A
964          KM        ROUTE REMAINDER FROM CP119A TO CP120
965          RS      2              -1       0
966          RC   .035    .035    .035    2300   .0096
967          RX   1000    1001    1002    1180    1200    1213    1214    1215
968          RY   1278    1278    1278    1276    1276    1277    1277    1277
             *

969          KK     120
970          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 120
971          BA     .54
972          LG     .50     .00    7.30     .17     .00
973          UI     21.     21.     21.     23.     69.     79.     94.    105.    115.    123.
974          UI    134.    148.    161.    179.    212.    257.    277.    239.    211.    191.
975          UI    176.    164.    147.    133.    124.    109.    101.     88.     70.     57.
976          UI     37.     37.     35.     35.     28.     21.     21.     21.     13.      6.
977          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
978          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
979          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

980          KK   1I120
981          KM        ADD HYDROGRAPHS AT 1I120
982          HC      3    2.88

983          KK   1D112
984          KM        RETURN DIVERT AT CP112
985          DR   DI120

986          KK    R112
987          KM        ROUTE FLOW FROM CP112 TO CP120
988          RS      8              -1       0
989          RC   .035    .035    .075    5270   .0044
990          RX   1000    1001    1002    1020    1040    1340    1820    2030
991          RY   1281    1281    1281    1280    1280    1282    1284    1286

992          KK   CP120
```

```
 993          KM        ADD HYDROGRAPHS AT CP120.
 994          HC       2    3.58

 995          KK    R120
 996          KM        ROUTE FLOWS FROM CP120 TO CP130
 997          RS       5             -1       0
 998          RC     .03     .03     .06    5280   .0032
 999          RX    1000    1001    1002    1020    1040    1090    1520    1830
1000          RY    1261    1261    1261    1260    1260    1262    1264    1266
1                                          HEC-1 INPUT                                                          PAGE 25

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


1001          KK    D119
1002          KM        RETURN DIVERT AT CP119
1003          DR   DI128

1004          KK    R119
1005          KM        ROUTE FLOW CP119 TO CP128
1006          RS       4             -1       0
1007          RC    .035    .035     .06    2640   .0015
1008          RX    1000    1001    1002    1010    1045    1085    1460    1710
1009          RY    1287    1287    1287    1286    1286    1288    1290    1292
              *

1010          KK     128
1011          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 128
1012          BA     .41
1013          LG     .50     .00    4.90     .47     .00
1014          UI     22.     22.     25.     73.     90.    106.    120.    133.    151.    170.
1015          UI    206.    264.    270.    223.    195.    175.    155.    136.    119.    105.
1016          UI     89.     64.     41.     38.     36.     29.     22.     22.     14.      7.
1017          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
1018          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1019          KK   CP128
1020          KM        ADD HYDROGRAPHS AT CP128
1021          HC       2    1.27

1022          KK    R128
1023          KM        ROUTE FLOW FROM CP128 TO CP130
1024          RS      38             -1       0
1025          RC    .075    .075    .075    6240   .0062
1026          RX    1000    1400    1770    2240    3260    3468    3469    3470
1027          RY    1272    1270    1268    1266    1266    1267    1267    1267       .

1028          KK   D119A
1029          KM        RETURN DIVERT AT CP119A
1030          DR   DI130

1031          KK   R119A
1032          KM        ROUTE FLOW FROM CP119A TO CP130
1033          RS       5             -1       0
1034          RC     .08     .08     .08    6318   .0062
1035          RX    1000    1400    1770    2240    3260    3468    3469    3470
1036          RY    1272    1270    1268    1266    1266    1267    1267    1267
              *

1037          KK     130
1038          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 130
1039          BA    1.00
1040          LG     .50     .00    5.40     .38     .00
1041          UI     37.     37.     37.     37.    108.    133.    156.    177.    194.    210.
1042          UI    225.    244.    269.    289.    327.    397.    453.    482.    418.    371.
1043          UI    338.    312.    291.    264.    241.    221.    202.    184.    170.    142.
1044          UI    108.     85.     66.     65.     61.     61.     46.     37.     37.     37.
1045          UI     25.     11.     11.     11.     11.     11.     11.     11.     11.     11.
1                                          HEC-1 INPUT                                                          PAGE 26

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

1046          UI     11.     11.     11.     11.      0.      0.      0.      0.      0.      0.
1047          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1048          KK   1I130
1049          KM        ADD HYDROGRAPHS AT 1I130
1050          HC       3    3.77
              *

1051          KK     129
1052          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 129
```

```
1053          BA     .43
1054          LG     .42     .05    4.32     .59    4.00
1055          UI     28.     28.     72.    116.    143.    164.    189.    222.    287.    360.
1056          UI    312.    259.    226.    192.    164.    139.    109.     71.     50.     47.
1057          UI     36.     28.     23.      9.      9.      9.      9.      9.      9.      9.
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          KK    R129
1061          KM        ROUTE FLOW FROM CP129 TO CP130
1062          RS       9       -1       0
1063          RC    .075     .04     .04    5280    .006
1064          RX    1000    1250    1450    2070    2080    2098    2099    2100
1065          RY    1270    1268    1266    1264    1264    1265    1265    1265

1066          KK   CP130
1067          KM        ADD HYDROGRAPHS AT CP130.
1068          HC       3    5.37

1069          KK    D130
1070          KM        DIVERT TO CP144 FROM CP130
1071          DT   DI144
1072          DI       0      37     124     257     440     743    1487    2233    3928    6436
1073          DQ       0       0       0       0       0     196     657    1133    2198    3747

1074          KK    R130
1075          KM        ROUTE REMAINDER FROM CP130 TO CP131A
1076          RS       8              -1
1077          RC    .075     .04     .04    2640   .0057
1078          RX    1000    1001    1640    2050    2290    2328    2329    2330
1079          RY    1234    1234    1232    1230    1230    1231    1231    1231
              *

1080          KK    131A
1081          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131A
1082          BA     .49
1083          LG     .50     .00    5.00     .45     .00
1084          UI     22.     22.     22.     48.     77.     93.    106.    119.    129.    142.
1085          UI    159.    175.    208.    256.    285.    243.    212.    191.    174.    158.
1086          UI    141.    128.    112.    103.     86.     64.     45.     39.     36.     36.
1087          UI     27.     22.     22.     19.      7.      7.      7.      7.      7.      7.
1088          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
1089          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

1090          KK  CP131A
1091          KM        ADD HYDROGRAPHS AT CP131A
1092          HC       2    5.87

1093          KK   R131A
1094          KM        ROUTE FLOW FROM CP131A TO R131
1095          RS       8              -1
1096          RC    .075     .04     .04    2640   .0051
1097          RX    1000    1001    1640    2050    2290    2328    2329    2330
1098          RY    1234    1234    1232    1230    1230    1231    1231    1231
              *

1099          KK     131
1100          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131
1101          BA     .49
1102          LG     .50     .00    5.00     .45     .00
1103          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
1104          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
1105          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
1106          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
1107          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
1108          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1109          KK   1I131
1110          KM        ADD HYDROGRAPHS AT CP131
1111          HC       2    9.57

1112          KK   2D112
1113          KM        RETURN DIVERT AT CP112
1114          DR  1D121A

1115          KK    R112
1116          KM        ROUTE FLOW FROM CP112 TO CP121A
1117          RS       6              -1       0
```

```
1118          RC     .05    .022     .05    6700   .0034
1119          RX    1000    1180    1205    1225    1295    1320    1345    1670
1120          RY    1265    1264    1262    1260    1260    1262    1264    1265
              *

1121          KK    121A
1122          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121A
1123          BA     .50
1124          LG     .46     .09    5.76     .28     .00
1125          UI     26.     26.     30.     89.    109.    129.    146.    161.    183.    205.
1126          UI    248.    317.    331.    274.    238.    214.    190.    166.    147.    129.
1127          UI    109.     80.     52.     46.     43.     37.     26.     26.     19.      8.
1128          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
1129          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1130          KK  1I121A
1131          KM        ADD HYDROGRAPHS AT 1I121A
1132          HC       2    1.34

1133          KK   D113A
1134          KM        RETURN DIVERT AT CP113A
1135          DR  2D121A

1136          KK   R113A
1137          KM        ROUTE FLOW FROM CP113A TO CP121A
1138          RS       6       -1       0
1139          RC     .05    .025     .05    5280   .0047
1140          RX    1000    1001    1002    1020    1170    1200    1290    1500
1141          RY    1278    1278    1278    1276    1276    1278    1279    1280

1142          KK  CP121A
1143          KM        ADD HYDROGRAPHS AT CP121A
1144          HC       2    3.54

1145          KK   R121A
1146          KM        ROUTE FLOW FROM CP121A TO CP121
1147          RS       2       -1       0
1148          RC    .035    .035    .035    2640   .0096
1149          RX    1000    1001    1002    1180    1200    1213    1214    1215
1150          RY    1278    1278    1278    1276    1276    1277    1277    1277
              *

1151          KK     121
1152          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121
1153          BA     .50
1154          LG     .46     .09    5.52     .31     .00
1155          UI     26.     26.     31.     90.    110.    130.    147.    163.    185.    209.
1156          UI    253.    325.    328.    272.    237.    213.    189.    165.    145.    127.
1157          UI    107.     77.     49.     46.     44.     35.     26.     26.     16.      8.
1158          UI      8.      8.      8.      8.      8.      8.      8.      0.      0.      0.
1159          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1160          KK   CP121
1161          KM        ADD HYDROGRAPHS AT CP121
1162          HC       2    4.03

1163          KK    R121
1164          KM        ROUTE FLOW FROM CP121 TO CP131
1165          RS       7       -1       0
1166          RC    .035    .035    .075    5280   .0055
1167          RX    1000    1001    1002    1050    1115    1450    1910    1570
1168          RY    1239    1239    1239    1238    1238    1239    1240    1242

1169          KK   CP131
1170          KM        ADD HYDROGRAPHS AT CP131.
1171          HC       2   10.47
```



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

1172          KK    D131
1173          KM        DIVERT TO CP145 FROM CP131
1174          DT   DI145
1175          DI       0      60     608    1900    3801    6042    9665
1176          DQ       0      39     491    1546    2353    4171    6841

1177          KK    R131
```

```
1178          KM        ROUTE REMAINDER FROM CP131 TO CP132
1179          RS       4       -1       0
1180          RC    .075    .035    .035    2150   .0028
1181          RX    1000    1370    1760    2150    2165    2173    2174    2175
1182          RY    1224    1222    1220    1218    1218    1219    1219    1219
              *

1183          KK     132
1184          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 132
1185          BA     .41
1186          LG     .50     .00    4.32     .62     .00
1187          UI      19      19      19      49      70      86      98     108     118     132
1188          UI     147     169     212     248     223     191     170     155     140     124
1189          UI     112      98      89      70      55      34      34      32      30      19
1190          UI      19      19       8       6       6       6       6       6       6       6
1191          UI       6       6       0       0       0       0       0       0       0       0
1192          UI       0       0       0       0       0       0       0       0       0       0

1193          KK   CP132
1194          KM        ADD HYDROGRAPHS AT CP132
1195          HC       2    9.97

1196          KK    R132
1197          KM        ROUTE FLOW FROM CP132 TO CP133
1198          RS       5       -1       0
1199          RC     .08     .04     .04    2640    .003
1200          RX    1000    1400    1670    2050    2230    2258    2259    2260
1201          RY    1218    1216    1214    1212    1212    1213    1213    1213
              *

1202          KK     133
1203          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 133
1204          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1205          KM    L=       1.1  Lca=       .6   S=   30.4  Kn= .097  LAG=  61.2
1206          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1207          BA     .50
1208          LG     .44     .25    4.65     .48    8.00
1209          UI     27.     27.     39.     95.    118.    139.    156.    174.    201.    229.
1210          UI    295.    352.    309.    261.    231.    207.    178.    158.    137.    116.
1211          UI     86.     56.     48.     45.     37.     27.     27.     15.      8.      8.
1212          UI      8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
1213          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1214          KK  133OUT
1215          KM        DIVERSION-RETENTION
1216          DT  133RET    9.36
1217          DI       0   10000
1218          DQ       0   10000

1219          KK   1I133
1220          KM        ADD HYDROGRAPHS AT 1I133
1221          HC       2   11.37

1222          KK   CP133
1223          KM        ADD HYDROGRAPHS AT CP133
1224          HC       2   15.93

1225          KK   1D133
1226          KM        DIVERT TO CP146 FROM CP133
1227          DT   DI146
1228          DI       0      80     341    1081    2600    4587    7337
1229          DQ       0      32     136     432    1040    1835    2935

1230          KK   2D133
1231          KM        DIVERT TO CP147 FROM CP133
1232          DT   1D147
1233          DI       0      48     205     649    1560    2752    4402
1234          DQ       0      16      68     216     520     917    1467

1235          KK    R133
1236          KM        ROUTE REMAINDER FROM CP133 TO CP134
1237          RS       4       -1       0
1238          RC     .06    .035    .035    2640   .0049
1239          RX    1000    1340    1600    1815    1860    1888    1889    1890
1240          RY    1206    1204    1202    1200    1200    1203    1203    1203
              *

1241          KK     134
```

```
1242          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 134
1243          BA     .50
1244          LG     .50     .00    4.74     .51     .00
1245          UI     22.     22.     22.     49.     79.     95.    108.    122.    132.    145.
1246          UI    162.    178.    213.    261.    291.    248.    216.    195.    178.    161.
1247          UI    143.    131.    114.    105.     88.     65.     46.     39.     37.     37.
1248          UI     27.     22.     22.     20.      7.      7.      7.      7.      7.      7.
1249          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
1250          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1251          KK    D123
1252          KM        RETURN DIVERT AT CP123
1253          DR   DI134
```



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

1254          KK    R123
1255          KM        ROUTE DIVERT FROM CP123 TO CP134
1256          RS       6              -1       0
1257          RC     .04     .04    .075    5280   .0038
1258          RX    1000    1001    1002    1045    1150    1570    1960    2350
1259          RY    1209    1209    1209    1208    1208    1210    1212    1214

1260          KK   CP134
1261          KM        ADD HYDROGRAPHS AT CP134
1262          HC       3   16.87

1263          KK    D134
1264          KM        DIVERT TO CP147 FROM CP134
1265          DT   2D147
1266          DI       0      26     162     614    1050    2192    3494    6483   10967
1267          DQ       0       0      62     352     697    1575    2539    4742    8027

1268          KK    R134
1269          KM        ROUTE REMAINDER FROM CP134 TO CP135
1270          RS       2              -1       0
1271          RC     .06     .03     .03    2640   .0045
1272          RX    1000    1490    1950    2015    2040    2048    2049    2050
1273          RY    1194    1192    1190    1188    1188    1189    1189    1189

1274          KK   1D124
1275          KM        RETURN DIVERT AT CP124
1276          DR   DI135

1277          KK    R124
1278          KM        ROUTE RUNOFF FROM CP124 TO CP135
1279          RS      10              -1       0
1280          RC    .035    .035    .075    5280   .0042
1281          RX    1000    1001    1002    1020    1070    1360    1800    2190
1282          RY    1195    1195    1195    1194    1194    1196    1198    1200
              *

1283          KK     135
1284          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 135
1285          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1286          KM    L=      1.2  Lca=       .6   S=   27.1  Kn= .076  LAG=  50.9
1287          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1288          BA     .49
1289          LG     .38     .25    4.65     .45   15.00
1290          UI     32.     32.     81.    132.    162.    187.    215.    252.    324.    410.
1291          UI    356.    296.    258.    219.    187.    159.    126.     81.     57.     53.
1292          UI     41.     32.     27.     10.     10.     10.     10.     10.     10.     10.
1293          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1294          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1295          KK  135OUT
1296          KM        DIVERSION-RETENTION
1297          DT  135RET   18.00
1298          DI       0   10000
1299          DQ       0   10000

1300          KK   CP135
1301          KM        ADD HYDROGRAPHS AT CP135
1302          HC       3   17.92

1303          KK    D135
```

```
1304          KM        DIVERT TO CP148 FROM CP135
1305          DT    DI148
1306          DI        0       24      136      323      849     1809     2524     4155     6589     8820
1307          DQ        0        0        0       21      135      427      747     1477     2566     3013

1308          KK     R135
1309          KM        ROUTE REMAINDER FROM CP135 TO CP136
1310          RS        4               -1        0
1311          RC     .075     .035     .035     2640    .0038
1312          RX     1000     1430     1790     2250     2275     2298     2299     2300
1313          RY     1182     1180     1178     1176     1176     1177     1177     1177

1314          KK    2D124
1315          KM        RETURN DIVERT AT CP124
1316          DR    DI136

1317          KK     R124
1318          KM        ROUTE FLOW FROM CP124 TO CP136
1319          RS       50               -1        0
1320          RC      .07      .07      .07     6084    .0053
1321          RX     1000     1001     1002     1260     2160     2448     2449     2450
1322          RY     1193     1193     1193     1192     1192     1193     1193     1193
              *

1323          KK      136
1324          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 136
1325          BA      .46
1326          LG      .50      .00     4.82      .49      .00
1327          UI      21.      21.      21.      45.      73.      88.     100.     112.     122.     134.
1328          UI     150.     165.     198.     243.     268.     227.     198.     179.     164.     147.
1329          UI     131.     120.     105.      96.      79.      59.      40.      36.      34.      34.
1330          UI      24.      21.      21.      17.       6.       6.       6.       6.       6.       6.
1331          UI       6.       6.       6.       6.       6.       0.       0.       0.       0.       0.
1332          UI       0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1333          KK    1I136
1334          KM        ADD HYDROGRAPHS AT 1I136
1335          HC        2    1.03
```



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

1336          KK    CP136
1337          KM        ADD HYDROGRAPHS AT CP136
1338          HC        2   18.33

1339          KK     R136
1340          KM        ROUTE FLOW FROM CP136 TO CP137
1341          RS        5               -1        0
1342          RC      .08     .035     .035     2640    .0042
1343          RX     1000     1370     1790     3210     3270     3298     3299     3300
1344          RY     1170     1168     1166     1164     1164     1165     1165     1165

1345          KK    1D125
1346          KM        RETURN DIVERT AT CP125
1347          DR    DI137

1348          KK     R125
1349          KM        ROUTE FLOW FROM CP125 TO CP137
1350          RS        8               -1        0
1351          RC     .035     .035     .075     5280    .0047
1352          RX     1000     1001     1002     1030     1175     1640     2135     2600
1353          RY     1171     1171     1171   1169.5     1170     1172     1174     1176
              *

1354          KK      137
1355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 137
1356          BA      .54
1357          LG      .50      .00     5.10      .43      .00
1358          UI      18.      18.      18.      18.      37.      61.      70.      82.      89.      98.
1359          UI     104.     111.     120.     131.     141.     153.     179.     210.     240.     227.
1360          UI     200.     180.     166.     154.     145.     134.     121.     113.     104.      94.
1361          UI      88.      79.      67.      53.      41.      32.      32.      30.      30.      27.
1362          UI      18.      18.      18.      18.      10.       6.       6.       6.       6.       6.
1363          UI       6.       6.       6.       6.       6.       6.       6.       6.       6.       0.
1364          UI       0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
1365          UI       0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1366          KK    CP137
1367          KM        ADD HYDROGRAPHS AT CP137 (137 + DR137 FROM 125 + 136)
1368          HC        3    21.6
```

```
1369          KK   1D137
1370          KM          DIVERT FROM CP137 TO CP149
1371          DT   DI149
1372          DI       0       6     169     684    1659    3199    5400    8353   12141
1373          DQ       0       2      56     228     553    1066    1800    2784    4047

1374          KK   2D137
1375          KM          DIVERT FROM CP137 TO CP153
1376          DT   DI153
1377          DI       0       4     113     456    1106    2133    3600    6553    8094
1378          DQ       0       2      56     228     553    1066    1800    2784    4047
```



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

1379          KK    R137
1380          KM         ROUTE FLOW FROM CP137 TO CP138
1381          RS      22              -1       0
1382          RC     .08     .03     .03    2640   .0021
1383          RX    1000    2200    2310    2320    2340    2368    2369    2370
1384          RY    1162    1156  1156.5    1156    1156    1157    1157    1157

1385          KK   2D125
1386          KM         RETURN DIVERT AT CP125
1387          DR   DI138

1388          KK    R125
1389          KM         ROUTE FLOW FROM CP125 TO CP138
1390          RS      50              -1       0
1391          RC    .075    .075    .075    7500   .0048
1392          RX    1000    1050    1100    1200    2020    2198    2250    2300
1393          RY    1171  1170.5  1170.5    1170    1170  1170.5  1170.5    1171
              *

1394          KK     138
1395          KM   BASIN 138
1396          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1397          KM    L=      1.0  Lca=       .5   S=   28.0  Kn= .120  LAG=  70.5
1398          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1399          BA     .54
1400          LG     .50     .25    5.00     .43     .00
1401          UI     26.     26.     26.     70.     96.    119.    133.    147.    162.    182.
1402          UI    201.    239.    298.    336.    285.    247.    221.    202.    178.    159.
1403          UI    142.    126.    109.     83.     59.     46.     43.     42.     31.     26.
1404          UI     26.     17.      8.      8.      8.      8.      8.      8.      8.      8.
1405          UI      8.      8.      0.      0.      0.      0.      0.      0.      0.      0.
1406          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1407          KK   1I138
1408          KM        ADD HYDROGRAPHS AT CP138
1409          HC       2   22.08

1410          KK   CP138
1411          KM        ADD HYDROGRAPHS AT CP138 (137 + 138)
1412          HC       2   22.08

1413          KK    R138
1414          KM         ROUTE REMAINDER FROM CP138 TO CP138A
1415          RS      22              -1       0
1416          RC     .08     .03     .03    2640   .0021
1417          RX    1000    2200    2310    2320    2340    2368    2369    2370
1418          RY    1162    1156  1156.5    1156    1156    1157    1157    1157
              *
```



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

1419          KK    138A
1420          KM   BASIN 138A
1421          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1422          KM    L=      1.3  Lca=       .6   S=   24.0  Kn= .030  LAG=  21.4
1423          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1424          BA     .46
1425          LG     .25     .25    4.90     .32   30.00
1426          UI     75.    299.    448.    701.    781.    527.    357.    169.    100.     51.
1427          UI     22.     22.      0.      0.      0.      0.      0.      0.      0.      0.
1428          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1429          KK  138AOT
```

```
1430          KM        DIVERSION-RETENTION
1431          DT  138ART   34.44
1432          DI       0   10000
1433          DQ       0   10000

1434          KK  1I138A
1435          KM        ADD HYDROGRAPHS AT CP138 (138 + 138A)
1436          HC       2   23.70

1437          KK  2I138A
1438          KM        ADD HYDROGRAPHS AT CP138 (138 + 126)
1439          HC       2   24.81
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2D WITH NEW SOILS*****
              * ************************************************************************
              *

1440          KK   2D137
1441          KM        RETURN DIVERT AT CP137
1442          DR   DI153

1443          KK    R137
1444          KM        ROUTE FLOW FROM CP137 TO CP153
1445          RS      51              -1       0
1446          RC    .075    .075    .075    5600   .0018
1447          RX     900    1000    1200    1450    1800    2000    2300    2450
1448          RY  1156.5    1156    1155  1154.7  1154.7    1155    1156  1156.5
              *

1449          KK     153
1450          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 153
1451          BA     .20
1452          LG     .50     .00    5.76    0.32     .00
1453          UI      7.      7.      7.      7.     17.     24.     28.     33.     35.     39.
1454          UI     41.     44.     48.     53.     56.     65.     79.     87.     91.     79.
1455          UI     71.     65.     60.     56.     52.     47.     43.     40.     36.     33.
1456          UI     29.     24.     20.     13.     12.     12.     12.     12.      8.      7.
1457          UI      7.      7.      5.      2.      2.      2.      2.      2.      2.      2.
1458          UI      2.      2.      2.      2.      2.      2.      0.      0.      0.      0.
1459          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

1460          KK   CP153
1461          KM        ADD HYDROGRAPHS AT CP153
1462          HC       2   21.92

1463          KK  CP138A
1464          KM        ADD HYDROGRAPHS AT CP138A
1465          HC       2   23.68

1466          KK   D138A
1467          KM        DIVERT TO CP154 FROM CP138A
1468          DT   DI154
1469          DI       0      44     392    1366    3326    6347   10546   16046
1470          DQ       0      30     268     874    1974    3682    6100    9324

1471          KK   R138A
1472          KM        ROUTE REMAINDER FROM CP138A TO CP157
1473          RS      15              -1       0
1474          RC    .075     .04    .075    6708   .0051
1475          RX    1000    1001    1580    2290    2450    2710    2799    2800
1476          RY    1140    1140    1138    1136    1136    1138    1140    1140

1477          KK   D138A
1478          KM        RETURN DIVERT AT CP138A
1479          DR   DI154
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1480          KK    RLLE
1481          KM    ROUTE REMAINDER FROM CP138A TO CP157
1482          RS       1              -1       0
1483          RC    0.03    0.03    0.03    2020   0.004
1484          RX       0       4       8      12      20    41.5    51.1    82.3
1485          RY      10       8       6       4       0       0     4.8      10
              * KK R138A
              * KM      ROUTE FLOW FROM CP138A TO CP154
              * RS    15              -1       0
              * RC   .08     .08     .08    2640   .0026
```

```
                                                                                LABCAR
                 * RX  1000    1001    1002    1025    1160    1840    2099    2100
                 * RY  1145    1145    1145    1144    1144    1146    1148    1148
                 *

1486             KK     154
1487             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 154
1488             BA     .17
1489             LG     .50     .00    5.88     .30     .00
1490             UI     12.     12.     36.     53.     64.     74.     87.    106.    146.    142.
1491             UI    114.     98.     82.     69.     58.     43.     27.     21.     19.     12.
1492             UI     12.      5.      4.      4.      4.      4.      4.      4.      0.      0.
1493             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                 * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
                 * KK CP154
                 * KM      ADD HYDROGRAPHS AT CP154
                 * HC      2   24.19
1                                          HEC-1 INPUT                                                    PAGE 37

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

1494             KK    LLE1
1495             KM        ADD HYDROGRAPHS AT CP154
1496             HC       2    0.33
                 * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1497             KK   RLLE1
1498             KM        ROUTE FLOW FROM CP154 TO CP157
1499             RS     4.7              -1       0
1500             RC    0.03    0.03    0.03    4950  0.0039
1501             RX       0      30      38      54    76.5     104     139     154
1502             RY      10       4       4       0       0       0       7      10
                 *

1503             KK     157
1504             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 157
1505             KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1506             KM    L=      1.3  Lca=       .6   S=   26.8  Kn= .084  LAG=  59.9
1507             KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1508             BA     .89
1509             LG     .40     .25    5.20     .36   12.00
1510             UI     50.     50.     78.    175.    219.    257.    289.    326.    373.    435.
1511             UI    560.    646.    535.    458.    407.    359.    312.    272.    238.    189.
1512             UI    133.     89.     84.     82.     51.     50.     43.     15.     15.     15.
1513             UI     15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
1514             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1515             KK  157OUT
1516             KM    Divert Retention in Subbasin 157
1517             DT  157RET   26.96
1518             DI       0   10000
1519             DQ       0   10000

1520             KK   1I157
1521             KM        ADD HYDROGRAPHS AT 1I157
1522             HC       2   25.08

1523             KK   2I157
1524             KM        ADD HYDROGRAPHS AT 2I157
1525             HC       2   25.08
                 *

1526             KK     127
1527             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 127
1528             BA     .22
1529             LG     .12     .18    7.00     .14   20.00
1530             UI     90.    276.    510.    430.    243.     91.     37.     15.      0.      0.
1531             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1532             KK    R127
1533             KM        ROUTE FLOW FROM CP127 TO CP139
1534             RS     29              -1       0
1535             RC    .08     .08     .08    3744   .0032
1536             RX   1000    1001    1002    1410    1820    2410    2860    3000
1537             RY   1155    1155    1155    1154    1154    1156    1158    1159
                 *
1                                          HEC-1 INPUT                                                    PAGE 38

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

1538             KK     139
```

```
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 139
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=      1.0  Lca=        .5    S=    17.0  Kn= .039  LAG=  24.5
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .47
LG     .27      .24     6.20      .19    26.00
UI     65.     224.     357.     488.     760.     602.     440.     311.     158.     100.
UI     63.      20.      20.      20.      0.       0.       0.       0.       0.       0.
UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

KK  139OUT
KM    Divert Retention in Subbasin 139
DT  139RET   29.95
DI       0   10000
DQ       0   10000

KK   1I139
KM        ADD HYDROGRAPHS AT 1I139
HC       2     .69

KK    D126
KM        RETURN DIVERT AT CP126
DR   DI139

KK     RLE
KM        ROUTE FLOW FROM CP126 TO CP139
RS     5.1            -1       0
RC    0.03    0.03    0.03    3852  0.0047
RX       0      48      56      64      73      85      98     146
RY      12       0       0       0       0       0       0      12

KK   2I139
KM        ADD HYDROGRAPHS AT 2I139
HC       2    7.04
*

KK     140
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 140
BA     .18
LG     .50      .00     5.64      .34       8
UI     13.      13.      35.      53.      65.      75.      88.     104.     142.     155.
UI    123.     105.      90.      76.      64.      52.      33.      22.      21.      16.
UI     13.       9.       4.       4.       4.       4.       4.       4.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
* MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

KK     LE1
KM        ADD HYDROGRAPHS AT CP139
HC       2    0.88
*
* MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
```



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

KK    RLE1
KM        ROUTE FLOW FROM CP139 TO CP156
RS     1.3            -1       0
RC    0.03    0.03    0.03    1743  0.0028
RX       0      48      56      64      73      85      98     146
RY      12       0       0       0       0       0       0      12
*

KK     156
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156
BA     .30
LG     .35      .09     5.00      .41     8.00
UI     18.      18.      33.      64.      82.      94.     106.     121.     139.     173.
UI    223.     206.     171.     149.     132.     113.      99.      85.      69.      47.
UI     31.      30.      28.      18.      18.      12.       5.       5.       5.       5.
UI      5.       5.       5.       5.       0.       0.       0.       0.       0.       0.
UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
* MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

KK     LE2
KM        ADD HYDROGRAPHS AT CP156
HC       2    1.18
* MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

KK    RLE2
KM        ROUTE FLOW FROM CP156 TO CP157
```

```
1599    RS     4.3                -1       0
1600    RC    0.03    0.03    0.03    6848  0.0038
1601    RX       0      48      56      64      73      85      98     146
1602    RY      12       0       0       0       0       0       0      12
        * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1603    KK     LE3
1604    KM        ADD HYDROGRAPHS AT CP157
1605    HC       2    1.65
        * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1606    KK   1RLE3
1607    KM        ROUTE FLOW FROM CP157 TO CP172
1608    RS       1                -1       0
1609    RC    0.03    0.03    0.03     750  0.0044
1610    RX       0      48      56      64      73      85      98     146
1611    RY      12       0       0       0       0       0       0      12

1612    KK   2RLE3
1613    KM        ROUTE FLOW FROM CP157 TO CP172
1614    RS       1                -1       0
1615    RC    0.03    0.03    0.03     100  0.0044
1616    RX       0      48      56      64      73      85      98     146
1617    RY      12       0       0       0       0       0       0      12
        *
```



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

1618    KK     172
1619    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 172
1620    BA     .12
1621    LG     .50     .00    4.58     .55     .00
1622    UI      9.      9.     28.     39.     47.     55.     66.     82.    112.     96.
1623    UI     79.     68.     56.     47.     39.     26.     16.     15.     11.      9.
1624    UI      6.      3.      3.      3.      3.      3.      3.      0.      0.      0.
1625    UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
        * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1626    KK     LE4
1627    KM        ADD HYDROGRAPHS AT CP172
1628    HC       2    1.77

1629    KK    R172
1630    KM        ROUTE FLOW FROM CP172 TO CP173
1631    RS       4                -1       0
1632    RC    .075     .03    .075    4500   .0042
1633    RX    1000    1200    1360    1380    1430    1470    1639    1640
1634    RY    1111    1110    1108    1106    1106    1108    1110    1110
        *

1635    KK     173
1636    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173
1637    BA     .31
1638    LG     .50     .00    4.00     .74     6.3
1639    UI     15.     15.     15.     43.     57.     71.     79.     87.     96.    109.
1640    UI    121.    146.    184.    191.    160.    139.    125.    114.    100.     90.
1641    UI     79.     71.     57.     43.     27.     26.     25.     22.     15.     15.
1642    UI     14.      5.      5.      5.      5.      5.      5.      5.      5.      5.
1643    UI      5.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1644    UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1645    KK   CP173
1646    KM        ADD HYDROGRAPHS AT CP173
1647    HC       2    2.08
        *
        * ************************************************************************
        * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2E WITH NEW SOILS*****
        * ************************************************************************
        *

1648    KK    156A
1649    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156A
1650    BA     .31
1651    LG     .12     .25    4.38     .46   20.00
1652    UI     82.    276.    434.    664.    443.    275.    114.     65.     18.     18.
1653    UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1654    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
```

```
1655          KK   R156A
1656          KM       ROUTE FLOW FROM CP156A TO CP158
1657          RS      34        -1       0
1658          RC     .07      .07      .07     5400    .0030
1659          RX    1000     1001     1002     1380     2200     2838     2839     2840
1660          RY    1117     1117     1117     1116     1116     1118     1118     1118
              *

1661          KK     158
1662          KM       RUNOFF HYDROGRAPH FROM SUB-BASIN 158
1663          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1664          KM    L=      1.4  Lca=        .7   S=    20.7  Kn= .034  LAG=  27.3
1665          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1666          BA     .97
1667          LG     .27      .26     4.20      .48    25.00
1668          UI    120.     350.     615.     802.    1158.    1393.    1004.     753.     547.     280.
1669          UI    196.     120.      54.      37.      37.      37.      0.       0.       0.       0.
1670          UI      0.       0.       0.       0.       0.       0.      0.       0.       0.       0.

1671          KK  158OUT
1672          KM    Divert Retention in Subbasin 158
1673          DT  158RET   61.74
1674          DI       0   10000
1675          DQ       0   10000

1676          KK   CP158
1677          KM       ADD HYDROGRAPHS AT CP158
1678          HC       2    1.28

1679          KK    R158
1680          KM       ROUTE FLOW FROM CP158 TO CP173B
1681          RS       6        -1       0
1682          RC     .07      .04      .07     4524    .0035
1683          RX    1000     1001     1240     1360     1440     1500     1650     1750
1684          RY    1113     1113     1112     1110     1110     1112     1114     1115
              *

1685          KK    173B
1686          KM       RUNOFF HYDROGRAPH FROM SUB-BASIN 173B
1687          BA     .20
1688          LG     .46      .11     3.50     0.89      .00
1689          UI     12.      12.      21.      42.      53.      61.      69.      78.      90.     109.
1690          UI    143.     141.     116.     101.      89.      77.      67.      58.      49.      35.
1691          UI     22.      20.      19.      13.      12.      11.      4.       4.       4.       4.
1692          UI      4.       4.       4.       4.       0.       0.      0.       0.       0.       0.
1693          UI      0.       0.       0.       0.       0.       0.      0.       0.       0.       0.

1694          KK  CP173B
1695          KM       ADD HYDROGRAPHS AT CP173B
1696          HC       2    1.48
```



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

1697          KK   AFR2E
1698          KM       ADD HYDROGRAPHS AT RCP173
1699          HC       2   30.12

1700          KK   RR173
1701          KM       RIVER ROUTE FLOW FROM RCP173 TO RCP173A
1702          RS       1        -1       0
1703          RC    .035     .035     .035     1650    .0050
1704          RX    1000     1001     1002     1042     2042     2082     2083     2084
1705          RY    1101     1101     1101     1091     1091     1101     1101     1101
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2F WITH NEW SOILS*****
              * ***********************************************************************
              *

1706          KK     171
1707          KM       RUNOFF HYDROGRAPH FROM SUB-BASIN 171
1708          BA     .70
1709          LG     .50      .00     5.40      .38      8.5
1710          UI     24.      24.      24.      24.      47.      78.      91.     106.     115.     126.
1711          UI    135.     143.     154.     169.     181.     197.     229.     271.     307.     296.
1712          UI    260.     235.     215.     200.     188.     174.     157.     147.     137.     122.
1713          UI    114.     105.      90.      68.      56.      42.      42.      39.      39.      38.
1714          UI     24.      24.      24.      24.      15.       7.       7.       7.       7.       7.
```

```
                                                                                LABCAR
1715        UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      0.
1716        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1717        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1718        KK    R171
1719        KM        ROUTE FLOW FROM CP171 TO CP173A
1720        RS       3              -1       0
1721        RC    .075     .04     .04    2100   .0076
1722        RX    1000    1001    1170    1940    2005    2048    2049    2050
1723        RY    1105    1105    1104    1102    1102    1103    1103    1103
            *

1724        KK    173A
1725        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173A
1726        BA     .20
1727        LG     .50     .00    4.32     .62     9.4
1728        UI     12.     12.     26.     46.     58.     67.     76.     88.    102.    133.
1729        UI    158.    130.    110.     97.     83.     73.     62.     52.     37.     22.
1730        UI     21.     20.     12.     12.      8.      4.      4.      4.      4.      4.
1731        UI      4.      4.      0.      0.      0.      0.      0.      0.      0.      0.
1732        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1733        KK  CP173A
1734        KM        ADD HYDROGRAPHS AT CP173A
1735        HC       2     .90
1                                   HEC-1 INPUT                                          PAGE 43

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

1736        KK  AFR2F1
1737        KM        ADD HYDROGRAPHS AT RCP173A
1738        HC       2   31.02

1739        KK  RR173A
1740        KM        RIVER ROUTE FLOW FROM RCP173A TO RCP187
1741        RS       3              -1       0
1742        RC    .035    .035    .035    5600   .0050
1743        RX    1000    1001    1002    1042    2042    2082    2083    2084
1744        RY    1092    1092    1092    1082    1082    1092    1092    1092
            *

1745        KK     186
1746        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 186
1747        BA     .33
1748        LG     .50     .00    4.90     .47     .00
1749        UI     12.     12.     12.     12.     35.     44.     51.     58.     64.     69.
1750        UI     74.     80.     88.     95.    108.    131.    149.    159.    138.    123.
1751        UI    112.    103.     96.     87.     80.     73.     67.     61.     56.     47.
1752        UI     36.     29.     22.     21.     20.     20.     15.     12.     12.     12.
1753        UI      9.      4.      4.      4.      4.      4.      4.      4.      4.      4.
1754        UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
1755        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1756        KK    R186
1757        KM        ROUTE FLOW FROM CP186 TO CP187
1758        RS       5              -1       0
1759        RC     .08     .04     .04    1950   .0035
1760        RX    1000    1001    1200    1320    1690    1828    1829    1830
1761        RY    1097    1097    1096  1094.5  1094.5    1095    1095    1095
            *

1762        KK     187
1763        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 187
1764        BA     .35
1765        LG     .46    0.10    4.58     .48     .00
1766        UI     66.    147.     37.      5.      0.      0.      0.      0.      0.      0.
1767        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1768        KK   CP187
1769        KM        ADD HYDROGRAPHS AT CP187
1770        HC       2     .68

1771        KK  AFR2F2
1772        KM        ADD HYDROGRAPHS AT RCP187
1773        HC       2   31.70

1774        KK   RR187
1775        KM        RIVER ROUTE FLOW FROM RCP187 TO RCP200
1776        RS       3              -1       0
1777        RC    .035    .035    .035    5460   .0050
1778        RX    1000    1001    1002    1042    2042    2082    2083    2084
```

```
                                                                                                  LABCAR
1779          RY    1080    1080    1080    1070    1070    1080    1080    1080
              *
1                                                HEC-1 INPUT                                                          PAGE 44

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

1780          KK     199
1781          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 199
1782          BA     .11
1783          LG     .50     .00    4.90     .47     .00
1784          UI      5.      5.      5.     11.     17.     21.     24.     27.     29.     32.
1785          UI     36.     40.     48.     59.     64.     54.     47.     43.     39.     35.
1786          UI     31.     28.     25.     23.     18.     14.      9.      9.      8.      8.
1787          UI      5.      5.      5.      4.      2.      2.      2.      2.      2.      2.
1788          UI      2.      2.      2.      2.      0.      0.      0.      0.      0.      0.
1789          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1790          KK    R199
1791          KM        ROUTE FLOW FROM CP199 TO CP200
1792          RS       9              -1       0
1793          RC     .08     .08     .08    2180   .0138
1794          RX    1000    1001    1002    1150    1700    1948    1949    1950
1795          RY    1077    1077    1077    1076    1076    1077    1077    1077
              *

1796          KK     200
1797          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 200
1798          BA     .29
1799          LG     .43     .18    4.90     .38     .00
1800          UI     19.     19.     44.     74.     92.    105.    121.    140.    172.    230.
1801          UI    220.    179.    155.    135.    115.     98.     82.     59.     36.     32.
1802          UI     30.     19.     19.     11.      6.      6.      6.      6.      6.      6.
1803          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1804          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1805          KK   CP200
1806          KM        ADD HYDROGRAPHS AT CP200
1807          HC       2     .40

1808          KK  AFR2F3
1809          KM        ADD HYDROGRAPHS AT RCP200
1810          HC       2   32.10

1811          KK   RR200
1812          KM        RIVER ROUTE FLOW FROM RCP200 TO RCP206
1813          RS       2              -1       0
1814          RC    .035    .035    .035    2960   .0050
1815          RX    1000    1001    1002    1042    2042    2082    2083    2084
1816          RY    1070    1070    1070    1060    1060    1070    1070    1070
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2G WITH NEW SOILS*****
              * ***********************************************************************
              *
1                                                HEC-1 INPUT                                                          PAGE 45

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

1817          KK     141
1818          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141
1819          BA     .47
1820          LG     .35     .34    4.20     .39     .00
1821          UI     52.    126.    241.    310.    403.    607.    538.    413.    317.    239.
1822          UI    135.     88.     61.     41.     16.     16.     16.     16.      0.      0.
1823          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1824          KK    R141
1825          KM        ROUTE FLOW FROM CP141 TO CP141A
1826          RS       1              -1       0
1827          RC    .025    .022    .022    1650   .0091
1828          RX    1000    1580    2170    2200    2230    2248    2249    2250
1829          RY    1194    1192    1190    1188    1188    1189    1189    1189
              *

1830          KK    141A
1831          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141A
1832          BA     .15
1833          LG     .35     .35    4.32     .37     .00
1834          UI     35.    122.    188.    302.    213.    138.     62.     34.     13.      8.
1835          UI      8.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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                                                                                LABCAR
1836        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1837        KK  CP141A
1838        KM        ADD HYDROGRAPHS AT CP141A
1839        HC       2     .62

1840        KK   R141A
1841        KM        ROUTE FLOW FROM CP141A TO CP142
1842        RS       2              -1       0
1843        RC     .06    .035    .035    2640   .0079
1844        RX    1000    1620    2100    2220    2250    2268    2269    2270
1845        RY    1276    1274    1272    1270    1270    1271    1271    1271
            *

1846        KK     142
1847        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 142
1848        BA     .51
1849        LG     .50     .00    4.20     .66     .00
1850        UI     24.     24.     24.     59.     86.    105.    119.    132.    144.    161.
1851        UI    180.    203.    258.    300.    281.    241.    213.    194.    176.    155.
1852        UI    140.    124.    112.     94.     70.     48.     42.     39.     39.     26.
1853        UI     24.     24.     16.      7.      7.      7.      7.      7.      7.      7.
1854        UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1855        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1856        KK   CP142
1857        KM        ADD HYDROGRAPHS AT CP142
1858        HC       2    1.13
1                                        HEC-1 INPUT                                          PAGE 46

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

1859        KK    R142
1860        KM        ROUTE FLOW FROM CP142 TO CP143
1861        RS       8              -1       0
1862        RC     .07    .022    .022    2640   .0075
1863        RX    1000    1800    2235    2250    2275    2288    2289    2290
1864        RY    1250    1245    1247    1246    1246    1247    1247    1247
            *

1865        KK     143
1866        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 143
1867        BA     .50
1868        LG     .50     .00    4.28     .64     .00
1869        UI     23.     23.     23.     57.     83.    101.    116.    128.    140.    155.
1870        UI    174.    196.    248.    289.    279.    237.    210.    190.    174.    153.
1871        UI    138.    123.    110.     94.     71.     50.     41.     39.     38.     28.
1872        UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
1873        UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1874        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1875        KK   CP143
1876        KM        ADD HYDROGRAPHS AT CP143
1877        HC       2    1.63

1878        KK    R143
1879        KM        ROUTE FLOW FROM CP143 TO CP144
1880        RS       2              -1       0
1881        RC     .07     .03     .03    2640   .0072
1882        RX    1000    1490    2250    2370    2380    2394    2398    2400
1883        RY    1238    1236    1234    1232    1232    1233    1233    1233

1884        KK    D130
1885        KM        RETURN DIVERT AT CP130
1886        DR   DI144

1887        KK    R130
1888        KM        ROUTE FLOW FROM CP130 TO CP144
1889        RS       7              -1       0
1890        RC    .035    .035    .075    5280   .0049
1891        RX    1000    1001    1002    1020    1110    1570    2080    2370
1892        RY    1239    1239    1239    1238    1238    1240    1242    1244
            *

1893        KK     144
1894        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 144
1895        BA     .51
1896        LG     .50     .00    4.74     .51     .00
1897        UI     23.     23.     23.     58.     85.    103.    118.    130.    142.    159.
1898        UI    178.    200.    253.    294.    285.    242.    215.    194.    177.    156.
1899        UI    141.    125.    112.     96.     72.     51.     42.     39.     39.     28.
```

```
                                                                                LABCAR
1900          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
1901          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1902          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                                HEC-1 INPUT                                                    PAGE 47

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


1903          KK   1I144
1904          KM        ADD HYDROGRAPHS AT CP144
1905          HC       2    6.05

1906          KK   CP144
1907          KM        ADD HYDROGRAPHS AT CP144
1908          HC       2    7.68

1909          KK    D144
1910          KM        DIVERT TO CP164A FROM CP144
1911          DT  DI164A
1912          DI       0     407    1451    2130    3746    6248    9200   13452
1913          DQ       0       0     123     241     602    1278    1864    3217

1914          KK    R144
1915          KM        ROUTE FLOW FROM CP144 TO CP145A
1916          RS       7              -1       0
1917          RC    .075     .04     .04    2640   .0045
1918          RX    1000    1001    1630    2095    2150    2198    2199    2200
1919          RY    1220    1216    1216    1214    1214    1215    1215    1215
              *

1920          KK    145A
1921          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145A
1922          BA     .49
1923          LG     .50     .00    4.44     .59     .00
1924          UI     21.     21.     21.     41.     73.     87.    101.    113.    122.    134.
1925          UI    149.    163.    188.    234.    270.    255.    219.    195.    178.    163.
1926          UI    146.    131.    119.    106.     96.     78.     61.     39.     37.     35.
1927          UI     35.     25.     21.     21.     19.      6.      6.      6.      6.      6.
1928          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
1929          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1930          KK  CP145A
1931          KM        ADD HYDROGRAPHS AT CP145A
1932          HC       2    8.17

1933          KK   R145A
1934          KM        ROUTE REMAINDER FROM CP145A TO CP145
1935          RS       7              -1       0
1936          RC    .075     .04     .04    2640   .0045
1937          RX    1000    1001    1630    2095    2150    2198    2199    2200
1938          RY    1220    1216    1216    1214    1214    1215    1215    1215

1939          KK    D131
1940          KM        RETURN DIVERT AT CP131
1941          DR   DI145

1942          KK    R131
1943          KM        ROUTE FLOW FROM CP131 TO CP145
1944          RS       8              -1       0
1945          RC     .04     .04    .075    5280   .0043
1946          RX    1000    1001    1002    1020    1050    1820    2210    2230
1947          RY    1213    1213    1213    1212    1212    1214    1216    1218
              *
1                                                HEC-1 INPUT                                                    PAGE 48

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


1948          KK     145
1949          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145
1950          BA     .48
1951          LG     .50     .00    4.66     .53     .00
1952          UI     21.     21.     21.     47.     76.     91.    104.    117.    126.    139.
1953          UI    156.    171.    204.    251.    279.    238.    208.    187.    171.    155.
1954          UI    138.    125.    110.    101.     84.     63.     44.     38.     36.     35.
1955          UI     26.     21.     21.     19.      7.      7.      7.      7.      7.      7.
1956          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
1957          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1958          KK   1I145
1959          KM        ADD HYDROGRAPHS AT CP145
1960          HC       2     9.0
```

```
1961          KK   CP145
1962          KM        ADD HYDROGRAPHS AT CP145
1963          HC       2   11.63

1964          KK   1D145
1965          KM        DIVERT TO CP164 FROM CP145
1966          DT   DI164
1967          DI       0      37     218     475    1177    1902    3592    5561    8738
1968          DQ       0       0       0      34     193     517    1285    1864    3181

1969          KK   2D145
1970          KM        DIVERT TO CP165 FROM CP145
1971          DT   DI165
1972          DI       0      37     218     441     984    1385    2307    3697    5557
1973          DQ       0       0       0     111     383     584    1044    1740    2690
              *
              * THE FOLLOWING DATA WAS TAKEN FROM THE "OFF SITE FLOW ANALYSIS FOR
              * RANCHO GABRIELA PHASES 3 & 4" BY DAVID EVANS & ASSOCIATES, 7-2001
              *

1974          KK   R145B
              * KO     1
1975          KM   ROUTE FLOW FROM CP145 TO DIVERSION ALONG CACTUS
1976          RS       3                -1       0
1977          RC    0.75   0.035   0.035    2200  0.0056
1978          RX    1000    1420    1425    1430    1435    1469    1487    1507
1979          RY    1192    1191    1188    1188    1189    1191    1190    1191

1980          KK   3D145
1981          KM   DIVERT INTO FIELD SOUTH
1982          DT  DI165B
1983          DI       0     100     200     500     700     955
1984          DQ       0     2.3    66.3   347.4   545.1   792.8
```



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

1985          KK   R145C
1986          KM   ROUTE REMAINDER FROM CP145 TO 4D145
1987          RS       2                -1       0
1988          RC   0.035   0.035   0.035    1650   .0056
1989          RX    1000    1007    1012    1019    1029    1043    1056    1078
1990          RY    1180    1178    1175    1175    1177    1177    1177    1177

1991          KK   4D145
1992          KM   DIVERT INTO FIELD TO SOUTH
1993          DT  DI165C
1994          DI       0    97.7   133.7   152.6   154.9   162.2
1995          DQ       0    16.3    47.9    66.7    68.8    78.2

1996          KK   R145D
1997          KM   ROUTE REMAINDER FROM CP145 TO CP146
1998          RS       1                -1       0
1999          RC   0.035   0.035   0.035    1000  0.0056
2000          RX    1000    1007    1012    1019    1029    1043    1056    1078
2001          RY    1180    1178    1175    1175    1177    1177    1177    1177

2002          KK   1D133
2003          KM        RETURN DIVERT AT CP133
2004          DR   DI146

2005          KK    R133
2006          KM        ROUTE FLOW FROM CP133 TO CP146
2007          RS       8                -1       0
2008          RC    .035    .035    .075    5280   .0068
2009          RX    1000    1001    1002    1015    1080    1440    1740    2130
2010          RY    1187    1187    1187    1186    1186    1188    1190    1192
              *

2011          KK     146
2012          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 146
2013          BA     .90
2014          LG     .50     .00    4.90     .47     .00
2015          UI     36.     36.     36.     47.    119.    138.    166.    182.    199.    215.
2016          UI    233.    260.    281.    323.    399.    452.    449.    386.    344.    314.
2017          UI    290.    266.    238.    217.    197.    178.    161.    132.    104.     70.
2018          UI     64.     61.     59.     52.     36.     36.     36.     25.     11.     11.
2019          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
2020          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2021          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
2022          KK   1I146
2023          KM        ADD HYDROGRAPHS AT CP146
2024          HC       2   15.02

2025          KK   CP146
2026          KM        ADD HYDROGRAPHS AT CP146
2027          HC       2   18.49
              *
              * REPLACED PER DAVID EVANS AND ASSOCIATES "OFF-SITE FLOW ANALYSIS, RANCHO
              * GABRIELLA PHASES 3 &4", 7-2001
              *
1                                          HEC-1 INPUT                                          PAGE 50

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


2028          KK    D146
2029          KM        DIVERT TO CP166 FROM CP146
2030          DT   1D166
2031          DI       0     100     200     300     400     500     737
2032          DQ       0       0       0      38     161     182     252

2033          KK   R146A
2034          KM        ROUTE FLOW FROM CP146 TO CP165
2035          RS       1                -1       0
2036          RC   0.035    0.02   0.035    1300  0.0047
2037          RX    1000    1012    1012    1031    1050    1050    1056    1062
2038          RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2039          KK   4D145
2040          KM   RETURN DIVERT AT 4D145
2041          DR  DI165C

2042          KK   R145E
2043          KM   ROUTE FLOW FROM 4D145 TO 1D165
2044          RS       7                -1       0
2045          RC    0.08    0.08    0.08    1450  0.0069
2046          RX    1000    1001    1420    1730    2220    2470    2999    3000
2047          RY    1177    1177    1176    1175    1175    1176    1177    1177

2048          KK   1D165
2049          KM   ADD HYDROGRAPHS AT 1D165
2050          HC       2   18.49

2051          KK   D146B
2052          KM   DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABREILA PROJECT
2053          DT   DIRB1
2054          DI       0     517     600
2055          DQ     178     178     178

2056          KK   R146B
2057          KM   ROUTE FLOW FROM 1D165 TO 2D165
2058          RS       1                -1       0
2059          RC   0.035    0.02   0.035    1350  0.0047
2060          RX    1000    1012    1012    1031    1050    1050    1056    1062
2061          RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2062          KK   3D145
2063          KM   RETURN DIVERT AT 3D145
2064          DR  DI165B

2065          KK   R145F
2066          KM   ROUTE FLOW FROM 3D145 TO 2D165
2067          RS      11                -1       0
2068          RC    0.08    0.08    0.08    3850  0.0069
2069          RX    1000    1001    1420    1730    2220    2470    2999    3000
2070          RY    1177    1177    1176    1175    1175    1176    1177    1177
1                                          HEC-1 INPUT                                          PAGE 51

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


2071          KK   2D165
2072          KM   ADD HYDROGRAPHS AT 2D165
2073          HC       2   18.49

2074          KK   D146C
2075          KM   DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABRIELA PROJECT
2076          DT   DIRB2
2077          DI       0     983    1000
2078          DQ       0     496     505
```

```
2079        KK   R146C
2080        KM   ROUTE FLOW FROM 1D165 TO 2D165
2081        RS     1.4            -1       0
2082        RC   0.035    0.02   0.035    2600  0.0047
2083        RX    1000    1012    1012    1031    1050    1050    1056    1062
2084        RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1
            *
            * END DEA MODIFICATIONS
            *

2085        KK     159
2086        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 159
2087        BA     .58
2088        LG     .35     .34    4.15     .40     .00
2089        UI     66.    169.    316.    407.    539.    797.    641.    495.    375.    269.
2090        UI    139.    105.     66.     33.     20.     20.     20.      0.      0.      0.
2091        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2092        KK    R159
2093        KM        ROUTE FLOW FROM CP159 TO CP160
2094        RS       1            -1       0
2095        RC    .022    .022    .025     830   .0036
2096        RX    1000    1001    1002    1020    1060    1150    1320    1440
2097        RY    1265    1265    1265    1264    1264    1266    1268    1270
            *

2098        KK     160
2099        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 160
2100        BA     .39
2101        LG     .35     .33    4.58     .32     .00
2102        UI     41.     92.    184.    238.    301.    435.    474.    354.    279.    216.
2103        UI    150.     79.     64.     41.     22.     13.     13.     13.     13.      0.
2104        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2105        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2106        KK   CP160
2107        KM       ADD HYDROGRAPHS AT CP160
2108        HC       2     .97
```

1 HEC-1 INPUT PAGE 52

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

2109        KK    R160
2110        KM        ROUTE FLOW FROM CP160 TO CP161
2111        RS       3            -1       0
2112        RC    .075     .04     .04    2650   .0072
2113        RX    1000    1001    1210    1630    1670    1688    1689    1690
2114        RY    1259    1259    1258    1256    1256    1257    1257    1257
            *

2115        KK     161
2116        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 161
2117        BA     .50
2118        LG     .49     .03    4.44     .56     .00
2119        UI     24.     24.     24.     70.     92.    114.    127.    140.    155.    176.
2120        UI    195.    236.    297.    307.    258.    225.    202.    184.    161.    145.
2121        UI    127.    115.     93.     70.     43.     42.     40.     36.     24.     24.
2122        UI     23.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2123        UI      7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2124        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2125        KK   CP161
2126        KM       ADD HYDROGRAPHS AT CP161
2127        HC       2    1.47

2128        KK    R161
2129        KM        ROUTE FLOW FROM CP161 TO CP163
2130        RS       6            -1       0
2131        RC     .08     .04     .04    5280   .0074
2132        RX    1000    1500    1910    2455    2470    2488    2489    2490
2133        RY    1226    1224    1222    1220    1220    1221    1221    1221
            *

2134        KK     162
2135        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 162
2136        BA     .25
2137        LG     .50     .00    4.74     .51     .00
2138        UI     22.     35.     86.    114.    137.    169.    233.    270.    206.    170.
2139        UI    138.    110.     78.     44.     37.     26.     22.      7.      7.      7.
2140        UI      7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
                                                                                LABCAR
2141          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2142          KK    R162
2143          KM        ROUTE FLOW FROM CP162 TO CP163
2144          RS       8              -1       0
2145          RC     .08     .04     .04    5460   .0062
2146          RX    1000    1500    1910    2455    2470    2488    2489    2490
2147          RY    1226    1224    1222    1220    1220    1221    1221    1221
              *

2148          KK     163
2149          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 163
2150          BA     .75
2151          LG     .50     .00    4.58     .55     .00
2152          UI     37.     37.     37.    107.    140.    173.    193.    212.    235.    267.
2153          UI    296.    361.    456.    458.    383.    336.    303.    274.    240.    216.
1                                          HEC-1 INPUT                                                PAGE 53

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

2154          UI    187.    170.    133.    101.     65.     63.     60.     51.     37.     37.
2155          UI     30.     11.     11.     11.     11.     11.     11.     11.     11.     11.
2156          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2157          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2158          KK   1I163
2159          KM        ADD HYDROGRAPHS AT CP163
2160          HC       2     1.0

2161          KK   CP163
2162          KM        ADD HYDROGRAPHS AT CP163
2163          HC       2    2.47

2164          KK    D163
2165          KM        DIVERT TO CP176A FROM CP163
2166          DT  DI176A
2167          DI       0      72     427    1229    2615    4708    5777    6545    8336   11092
2168          DQ       0       0       0       0       0       0       9      95     329     762

2169          KK    R163
2170          KM        ROUTE REMAINDER FROM CP163 TO CP164A
2171          RS       2              -1       0
2172          RC     .06    .035    .035    2640   .0078
2173          RX    1000    1410    1900    2110    2150    2168    2169    2170
2174          RY    1188    1186    1184    1182    1182    1183    1183    1183

2175          KK    D144
2176          KM        RETURN DIVERT AT CP144
2177          DR  DI164A

2178          KK    R144
2179          KM        ROUTE FLOW FROM CP144 TO  CP164A
2180          RS      46              -1       0
2181          RC     .07     .07     .07    6400   .0058
2182          RX    1000    1001    1002    1400    1910    2610    2669    2670
2183          RY    1203    1203    1203    1202    1202    1204    1205    1205
              *

2184          KK    164A
2185          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164A
2186          BA     .49
2187          LG     .50     .00    4.74     .51     .00
2188          UI     22.     22.     22.     51.     79.     96.    110.    122.    133.    147.
2189          UI    164.    182.    220.    273.    282.    238.    209.    189.    174.    154.
2190          UI    138.    124.    111.     98.     78.     60.     39.     39.     36.     35.
2191          UI     22.     22.     22.     11.      7.      7.      7.      7.      7.      7.
2192          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2193          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2194          KK  1I164A
2195          KM        ADD HYDROGRAPHS AT CP164A
2196          HC       2    8.17
1                                          HEC-1 INPUT                                                PAGE 54

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

2197          KK  CP164A
2198          KM        ADD HYDROGRAPHS AT CP164A
2199          HC       2   10.64

2200          KK   R164A
```

```
2201          KM        ROUTE FLOW FROM CP164A TO CP164
2202          RS       2             -1       0
2203          RC     .06     .035     .035    2640    .0072
2204          RX    1000     1410     1900    2110     2150    2168    2169    2170
2205          RY    1188     1186     1184    1182     1182    1183    1183    1183
              *

2206          KK     164
2207          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164
2208          BA     .49
2209          LG     .50      .00     4.90     .47      .00
2210          UI     22.      22.      22.     49.      78.     94.    107.    120.    130.    143.
2211          UI    161.     177.     212.    261.     285.    241.    211.    190.    174.    157.
2212          UI    140.     127.     111.    103.      83.     63.     42.     39.     36.     36.
2213          UI     25.      22.      22.     17.       7.      7.      7.      7.      7.      7.
2214          UI      7.       7.       7.      7.       0.      0.      0.      0.      0.      0.
2215          UI      0.       0.       0.      0.       0.      0.      0.      0.      0.      0.

2216          KK   1I164
2217          KM        ADD HYDROGRAPHS AT CP164
2218          HC       2   11.13

2219          KK   1D145
2220          KM        RETURN DIVERT AT CP145
2221          DR   DI164

2222          KK    R145
2223          KM        ROUTE FLOW FROM CP145 TO CP164
2224          RS       7             -1       0
2225          RC    .035     .035     .075    5280    .0058
2226          RX    1000     1001     1002    1040     1170    1520    1910    2190
2227          RY    1185     1185     1185    1184     1184    1186    1188    1190

2228          KK   CP164
2229          KM        ADD HYDROGRAPHS AT CP164
2230          HC       2   15.08

2231          KK    D164
2232          KM        DIVERT TO CP177 FROM CP164
2233          DT   DI177
2234          DI       0      295     1091    2467     4521    7345   11030
2235          DQ       0       22      124     352      743    1329    2143

2236          KK    R164
2237          KM        ROUTE REMAINDER FROM CP164 TO CP165
2238          RS       7             -1       0
2239          RC     .04      .04     .075    4900    .0043
2240          RX    1000     1250     1730    2220     2320    2338    2339    2340
2241          RY    1164     1162     1160    1158     1158    1159    1159    1159
```



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

2242          KK   2D145
2243          KM        RETURN DIVERT AT CP145
2244          DR   DI165

2245          KK    R145
2246          KM        ROUTE FLOW FROM CP145 TO CP165
2247          RS      38             -1       0
2248          RC     .08      .08     .08     7500    .0069
2249          RX    1000     1001     1420    1730     2220    2470    2999    3000
2250          RY    1177     1177     1176    1175     1175    1176    1177    1177
              *

2251          KK     165
2252          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 165
2253          BA     .90
2254          LG     .50      .00     4.82     .49      .00
2255          UI     35.      35.      35.     38.     115.    131.    156.    173.    191.    204.
2256          UI    223.     244.     267.    295.     349.    422.    463.    401.    353.    320.
2257          UI    294.     274.     246.    223.     206.    184.    169.    149.    120.     99.
2258          UI     62.      62.      59.     58.      49.     35.     35.     35.     25.     11.
2259          UI     11.      11.      11.     11.      11.     11.     11.     11.     11.     11.
2260          UI     11.       0.       0.      0.       0.      0.      0.      0.      0.      0.
2261          UI      0.       0.       0.      0.       0.      0.      0.      0.      0.      0.

2262          KK   1I165
2263          KM        ADD HYDROGRAPHS AT CP165
2264          HC       2   12.53
```

```
2265          KK   2I165
2266          KM        ADD HYDROGRAPHS AT CP165
2267          HC       2   15.98

2268          KK   CP165
2269          KM        ADD HYDROGRAPHS AT CP165
2270          HC       2   22.84

2271          KK    D165
2272          KM        DIVERT TO CP180 FROM CP165
2273          DT   DI180
2274          DI       0    1000    5000
2275          DQ       0       0    4000

2276          KK    R165
2277          KM        ROUTE FLOW FROM CP165 TO CP179
2278          RS       7              -1       0
2279          RC    .022    .022     .04    5280   .0038
2280          RX    1000    1001    1002    1030    1075    1090    1250    2000
2281          RY    1135    1135    1135    1134    1134    1135    1133    1137
```



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


2282          KK    D163
2283          KM        RETURN DIVERT AT CP163
2284          DR  DI176A

2285          KK    R163
2286          KM        ROUTE FLOW FROM CP163 TO CP176A
2287          RS       6              -1       0
2288          RC    .035    .035    .075    5280   .0040
2289          RX    1000    1001    1002    1010    1025    1320    1620    1845
2290          RY    1197    1197    1197    1196    1196    1198    1200    1202
              *

2291          KK    176A
2292          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176A
2293          BA     .62
2294          LG     .50     .00    4.32     .62       1
2295          UI     24.     24.     24.     24.     79.     89.    106.    118.    131.    139.
2296          UI    151.    166.    182.    200.    236.    283.    318.    279.    245.    221.
2297          UI    203.    189.    171.    155.    142.    129.    117.    105.     87.     69.
2298          UI     46.     43.     41.     40.     37.     24.     24.     24.     21.      7.
2299          UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2300          UI      7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2301          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2302          KK  CP176A
2303          KM        ADD HYDROGRAPHS AT CP176A
2304          HC       2    3.09

2305          KK   D176A
2306          KM        DIVERT TO CP191 FROM CP176A
2307          DT   DI191
2308          DI       0      47     164     349     497    1107    2599    4968    8289
2309          DQ       0       0       0       0       0      60     278     719    1444

2310          KK   R176A
2311          KM        ROUTE REMAINDER FROM CP176A TO CP177A
2312          RS       4              -1       0
2313          RC    .075     .04     .04    2640   .0064
2314          RX    1000    1200    1545    2020    2145    2168    2169    2170
2315          RY    1173    1172    1170    1168    1168    1169    1169    1169
              *

2316          KK    177A
2317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177A
2318          BA     .49
2319          LG     .50     .00    4.38     .60     .00
2320          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
2321          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
2322          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
2323          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
2324          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2325          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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```
2326          KK  CP177A
2327          KM        ADD HYDROGRAPHS AT CP177A
2328          HC       2    3.58

2329          KK   R177A
2330          KM        ROUTE FLOW FROM CP177A TO CP177
2331          RS       8              -1       0
2332          RC    .075     .04     .04    2640   .0064
2333          RX    1000    1200    1545    2020    2145    2168    2169    2170
2334          RY    1173    1172    1170    1168    1168    1169    1169    1169
              *

2335          KK     177
2336          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177
2337          BA     .49
2338          LG     .50     .00    4.32     .62     .00
2339          UI     22.     22.     22.     51.     79.     96.    110.    122.    133.    147.
2340          UI    164.    182.    220.    273.    282.    238.    209.    189.    174.    154.
2341          UI    138.    124.    111.     98.     78.     60.     39.     39.     36.     35.
2342          UI     22.     22.     22.     11.      7.      7.      7.      7.      7.      7.
2343          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2344          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2345          KK   1I177
2346          KM        ADD HYDROGRAPHS AT CP177
2347          HC       2    4.07

2348          KK    D164
2349          KM        RETURN DIVERT AT CP164
2350          DR   DI177

2351          KK    R164
2352          KM        ROUTE FLOW FROM CP164 TO CP177
2353          RS      11              -1       0
2354          RC    .035    .035     .07    5280   .0032
2355          RX    1000    1001    1002    1020    1040    1290    1540    1810
2356          RY    1159    1159    1159    1158    1158    1160    1162    1164

2357          KK   CP177
2358          KM        ADD HYDROGRAPHS AT CP177
2359          HC       2   16.68

2360          KK    R177
2361          KM        ROUTE FLOW FROM CP177 TO CP178
2362          RS       3              -1       0
2363          RC     .07     .04     .04    2250   .0067
2364          RX    1000    1170    1550    2020    2060    2078    2079    2080
2365          RY    1149    1148    1146    1144    1144    1145    1145    1145
              *
```



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

2366          KK     178
2367          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 178
2368          BA     .44
2369          LG     .50     .00    4.66     .53     .00
2370          UI     20.     20.     20.     46.     71.     86.     98.    109.    119.    131.
2371          UI    147.    162.    196.    244.    253.    214.    188.    170.    156.    139.
2372          UI    124.    112.    100.     89.     71.     55.     35.     35.     33.     32.
2373          UI     20.     20.     20.     11.      6.      6.      6.      6.      6.      6.
2374          UI      6.      6.      6.      6.      0.      0.      0.      0.      0.      0.
2375          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2376          KK   CP178
2377          KM        ADD HYDROGRAPHS AT CP178
2378          HC       2   17.12

2379          KK    R178
2380          KM        ROUTE FLOW FROM CP178 TO CP179
2381          RS       5              -1       0
2382          RC    .075     .04     .04    2640   .0034
2383          RX    1000    1040    1560    2110    2320    2348    2349    2350
2384          RY    1137    1136    1134    1132    1132    1133    1133    1133
              *

2385          KK     179
2386          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 179
2387          BA     .46
2388          LG     .50     .00    5.00     .45     .00
2389          UI     20.     20.     20.     41.     70.     84.     97.    109.    117.    129.
```

```
                                                                                LABCAR
2390          UI    144.    158.    184.    225.    264.    234.    203.    181.    165.    152.
2391          UI    135.    122.    109.     98.     86.     68.     52.     36.     35.     33.
2392          UI     32.     20.     20.     20.     12.      6.      6.      6.      6.      6.
2393          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
2394          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2395          KK   1I179
2396          KM        ADD HYDROGRAPHS AT CP179
2397          HC       2   17.58

2398          KK   CP179
2399          KM        ADD HYDROGRAPHS AT CP179
2400          HC       2   25.34

2401          KK   1D179
2402          KM        DIVERT TO CP193 FROM CP179
2403          DT   DI193
2404          DI       0     480    2000    5000
2405          DQ       0       0    1000    1000

2406          KK   2D179
2407          KM        DIVERT TO CP194A FROM CP179
2408          DT  DI194A
2409          DI       0     240    1000    4000
2410          DQ       0       0     240     240
1                                   HEC-1 INPUT                                                    PAGE 59

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


2411          KK    R179
2412          KM        ROUTE REMAINDER FROM CP179 TO CP180
2413          RS       4      -1       0
2414          RC     .07    .022    .022    5280   .0025
2415          RX    1000    1320    1700    1820    1840    1868    1869    1870
2416          RY    1124    1122    1120    1118    1118    1119    1119    1119
              *
              * ***************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2H WITH NEW SOILS*****
              * ***************************************************************************
              *

2417          KK     180
2418          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 180
2419          BA     .99
2420          LG     .50     .00    4.90     .47     .00
2421          UI     35.     35.     35.     35.     84.    120.    138.    163.    176.    191.
2422          UI    203.    220.    238.    261.    280.    321.    391.    430.    449.    390.
2423          UI    350.    319.    296.    277.    255.    231.    214.    196.    178.    166.
2424          UI    146.    120.    101.     66.     62.     60.     57.     57.     41.     35.
2425          UI     35.     35.     26.     11.     11.     11.     11.     11.     11.     11.
2426          UI     11.     11.     11.     11.     11.     11.      0.      0.      0.      0.
2427          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2428          KK   1I180
2429          KM        ADD HYDROGRAPHS AT CP180
2430          HC       2   26.33

2431          KK   2D133
2432          KM        RETURN DIVERT AT CP133
2433          DR   1D147

2434          KK    R133
2435          KM        ROUTE FLOW FROM CP133 TO CP147
2436          RS      55      -1       0
2437          RC     .07     .07     .07    6552   .0063
2438          RX    1000    1001    1720    1900    2290    2460    2619    2620
2439          RY    1189    1189    1188  1187.5  1187.5    1188    1189    1189
              *

2440          KK     147
2441          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 147
2442          BA     .50
2443          LG     .50     .00    4.82     .49     .00
2444          UI     23.     23.     23.     57.     84.    102.    116.    128.    140.    156.
2445          UI    175.    197.    249.    289.    278.    237.    210.    190.    174.    153.
2446          UI    138.    123.    110.     94.     70.     50.     41.     39.     38.     27.
2447          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
2448          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
2449          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
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```

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

2450          KK   1I147
2451          KM        ADD HYDROGRAPHS AT CP147
2452          HC       2   14.62

2453          KK    D134
2454          KM        RETURN DIVERT AT CP134
2455          DR   2D147

2456          KK    R134
2457          KM        ROUTE FLOW FROM CP134 TO CP147
2458          RS       7             -1       0
2459          RC     .05      .05     .15    5280   .0053
2460          RX    1000     1001    1002    1020    1190    1580    2180    2700
2461          RY    1187     1187    1187    1186    1186    1188    1190    1192

2462          KK  CP147
2463          KM        ADD HYDROGRAPHS AT CP147
2464          HC       2   15.92

2465          KK    D147
2466          KM        DIVERT TO CP166 FROM CP147
2467          DT   2D166
2468          DI       0     108    1147    2026    4338    8063   13066
2469          DQ       0     108    1129    1961    3822    6531   10041

2470          KK    R147
2471          KM        ROUTE REMAINDER FROM CP147 TO CP148
2472          RS       4             -1       0
2473          RC    .075      .04     .04    2640   .0038
2474          RX    1000     1420    1800    2230    2340    2368    2369    2370
2475          RY    1164     1162    1160    1158    1158    1159    1159    1159
              *

2476          KK     148
2477          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 148
2478          BA     .48
2479          LG     .50      .00    4.82     .49     .00
2480          UI     22.      22.     22.     51.     78.     95.    109.    120.    131.    145.
2481          UI    162.     181.    222.    270.    274.    232.    204.    185.    169.    150.
2482          UI    135.     120.    108.     94.     74.     56.     39.     38.     36.     32.
2483          UI     22.      22.     22.      9.      7.      7.      7.      7.      7.      7.
2484          UI      7.       7.      7.      7.      0.      0.      0.      0.      0.      0.
2485          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

2486          KK   1I148
2487          KM        ADD HYDROGRAPHS AT CP148
2488          HC       2   16.40

2489          KK    D135
2490          KM        RETURN DIVERT AT CP135
2491          DR   DI148
```



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

2492          KK    R135
2493          KM        ROUTE FLOW FROM CP135 TO CP148
2494          RS      10             -1       0
2495          RC    .035     .035    .075    5280   .0049
2496          RX    1000     1001    1002    1070    1130    1400    1780    2250
2497          RY    1171     1171    1171    1170    1170    1172    1174    1176

2498          KK   CP148
2499          KM        ADD HYDROGRAPHS AT CP148
2500          HC       2   17.46

2501          KK    D148
2502          KM        DIVERT TO CP150 FROM CP148
2503          DT   DI150
2504          DI       0       3     104     399     807    1777    2687    5053    8363
2505          DQ       0       1      16      60     106     241     472    1000    1788

2506          KK    R148
2507          KM        ROUTE REMAINDER FROM CP148 TO CP166
2508          RS       6             -1       0
2509          RC     .04      .04    .075    5280   .0030
2510          RX    1000     1001    1002    1045    1330    2030    2380    2700
2511          RY    1153     1153    1153    1152    1152    1154    1156    1157
```

```
2512          KK    D147
2513          KM        RETURN DIVERT AT CP147
2514          DR   2D166

2515          KK    R147
2516          KM        ROUTE FLOW FROM CP147 TO CP166
2517          RS      29              -1       0
2518          RC     .08     .08     .08    6240   .0042
2519          RX    1000    1001    1220    1720    2460    2998    2999    3000
2520          RY    1155    1155    1154    1152    1152  1153.5  1153.5  1153.5
              *

2521          KK     166
2522          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 166
2523          BA     .98
2524          LG     .50     .00    4.74     .51     .00
2525          UI     34.     34.     34.     34.     81.    118.    135.    160.    172.    188.
2526          UI    199.    215.    233.    256.    273.    312.    378.    420.    447.    390.
2527          UI    348.    317.    294.    275.    255.    230.    213.    197.    177.    165.
2528          UI    148.    123.     99.     71.     61.     60.     57.     57.     44.     34.
2529          UI     34.     34.     31.     11.     11.     11.     11.     11.     11.     11.
2530          UI     11.     11.     11.     11.     11.     11.     11.      0.      0.      0.
2531          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2532          KK    D146
2533          KM        RETURN DIVERT AT CP146
2534          DR   1D166
```



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

2535          KK    R146
2536          KM        ROUTE FLOW FROM CP146 TO CP166
2537          RS       8              -1       0
2538          RC    0.07    0.07    0.07    7470  0.0041
2539          RX    1000    1001    1220    1720    2460    2998    2999    3000
2540          RY    1155    1155    1154    1152    1152  1153.5  1153.5  1153.5

2541          KK   1I166
2542          KM        ADD HYDROGRAPHS AT CP166
2543          HC       2   19.47

2544          KK   2I166
2545          KM        ADD HYDROGRAPHS AT CP166
2546          HC       2   21.45

2547          KK   CP166
2548          KM        ADD HYDROGRAPHS AT CP166
2549          HC       2   22.45

2550          KK    D166
2551          KM        DIVERT TO CP167 FROM CP166
2552          DT   DI167
2553          DI       0      67     296     813    1921    3730    6346    9869
2554          DQ       0      67     296     765    1709    3184    5250    7966

2555          KK    R166
2556          KM        ROUTE REMAINDER FROM CP166 TO CP180
2557          RS      11              -1       0
2558          RC    .035    .035    .075    5280   .0051
2559          RX    1000    1001    1002    1020    1060    1420    2010    2320
2560          RY    1125    1125    1125    1124    1124    1126    1128    1130

2561          KK    D165
2562          KM        RETURN DIVERT AT CP165
2563          DR   DI180

2564          KK    R165
2565          KM        ROUTE FLOW FROM CP165 TO CP180
2566          RS       8              -1       0
2567          RC    0.07    0.07    0.07    7470  0.0043
2568          RX    1000    1001    1470    1820    2510    2910    3299    3300
2569          RY    1133    1133    1132    1131    1131    1132    1133    1133

2570          KK   1I180
2571          KM        ADD HYDROGRAPHS AT CP180
2572          HC       2   30.29

2573          KK   CP180
2574          KM        ADD HYDROGRAPHS AT CP180
```

```
2575          HC       2   30.29
1                                        HEC-1 INPUT                                                    PAGE 63

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

2576          KK    D180
2577          KM        DIVERT TO CP195 FROM CP180
2578          DT   1D195
2579          DI       0       6     234     802    1724    3040    4789
2580          DQ       0       6     206     687    1448    2510    3899

2581          KK    R180
2582          KM        ROUTE REMAINDER FROM CP180 TO CP181
2583          RS       7              -1       0
2584          RC    .075     .04     .04    1350   .0007
2585          RX    1000    1001    1410    2240    2270    2298    2299    2300
2586          RY    1116    1116    1114    1112    1112    1113    1113    1113
              *

2587          KK     181
2588          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 181
2589          BA     .37
2590          LG     .50     .00    4.58     .55     .00
2591          UI     19.     19.     20.     65.     79.     93.    106.    117.    132.    148.
2592          UI    177.    224.    248.    206.    178.    159.    143.    124.    111.     97.
2593          UI     83.     63.     44.     34.     32.     31.     19.     19.     18.      6.
2594          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
2595          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2596          KK   CP181
2597          KM        ADD HYDROGRAPHS AT CP181
2598          HC       2   30.66

2599          KK    D181
2600          KM        DIVERT TO CP195 FROM CP181
2601          DT   2D195
2602          DI       0     100     200     328     500    1251    3000    6011
2603          DQ       0     100     200     328     500    1026    2250    4208

2604          KK    R181
2605          KM        ROUTE REMAINDER FROM CP181 TO CP182
2606          RS       7              -1       0
2607          RC    .075     .04     .04    2900   .0024
2608          RX    1000    1190    1640    2305    2340    2358    2359    2360
2609          RY    1111    1110    1108    1106    1106    1107    1107    1107
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2I WITH NEW SOILS*****
              * ************************************************************************
              *

2610          KK     182
2611          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 182
2612          BA     .24
2613          LG     .50     .00    4.44     .58     .00
2614          UI     15.     15.     32.     56.     71.     83.     93.    108.    127.    167.
2615          UI    190.    154.    131.    116.     99.     85.     73.     60.     40.     26.
2616          UI     25.     22.     15.     15.      7.      5.      5.      5.      5.      5.
2617          UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2618          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2619          KK   1I182
2620          KM        ADD HYDROGRAPHS AT CP182
2621          HC       2    30.9

2622          KK    D148
2623          KM        RETURN DIVERT AT CP148
2624          DR   DI150

2625          KK    R148
2626          KM        ROUTE FLOW FROM CP148 TO CP150
2627          RS       7              -1       0
2628          RC    .075    .035    .035    2640   .0026
2629          RX    1000    1350    1830    2240    2340    2368    2369    2370
2630          RY    1158    1156    1154    1152    1152    1153    1153    1153
              *
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```
KK     150
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 150
BA     .23
LG     .50     .00    4.90     .47     .00
UI     14.     14.     27.     50.     65.     74.     84.     96.    110.    144.
UI    175.    154.    129.    113.     99.     85.     74.     64.     47.     32.
UI     24.     23.     18.     14.     14.      5.      4.      4.      4.      4.
UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   CP150
KM        ADD HYDROGRAPHS AT CP150
HC       2   17.69

KK    R150
KM        ROUTE FLOW FROM CP150 TO CP151
RS       6              -1       0
RC    .075    .035    .035    2640   .0030
RX    1000    1250    1720    2110    2300    2348    2349    2350
RY    1149    1148    1146    1144    1144    1145    1145    1145
*

KK     151
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 151
BA     .25
LG     .50     .00    4.90     .47     .00
UI     15.     15.     27.     53.     67.     78.     87.    100.    114.    140.
UI    184.    173.    143.    125.    111.     95.     83.     72.     60.     41.
UI     26.     25.     24.     15.     15.     11.      4.      4.      4.      4.
UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

KK   1I151
KM        ADD HYDROGRAPHS AT CP151
HC       2   17.94

KK   1D137
KM        RETURN DIVERT AT CP137
DR   DI149

KK    R137
KM        ROUTE FLOW FROM CP137 TO CP149
RS       4              -1       0
RC    .035    .035     .08    2640   .0038
RX    1000    1001    1002    1015    1070    1470    1830    2350
RY    1157    1157    1157    1156    1156    1158    1160    1162
*

KK     149
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 149
BA     .48
LG     .50     .00    4.66     .53     .00
UI     21.     21.     21.     43.     73.     88.    101.    114.    122.    134.
UI    150.    164.    192.    235.    275.    245.    211.    189.    173.    158.
UI    140.    127.    114.    102.     90.     71.     54.     37.     36.     34.
UI     33.     21.     21.     21.     13.      6.      6.      6.      6.      6.
UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   CP149
KM        ADD HYDROGRAPHS AT CP149
HC       2   22.20

KK    R149
KM        ROUTE FLOW FROM CP149 TO CP151
RS       5              -1       0
RC    .035    .035     .07    2640   .0038
RX    1000    1001    1002    1030    1200    2050    2315    2350
RY    1143    1143    1143    1142    1142    1144    1146    1147

KK   CP151
KM        ADD HYDROGRAPHS AT CP151
HC       2   23.66

KK   1D151
KM        DIVERT TO CP168 FROM CP151
DT   1D168
DI       0      22      73     360     833    1579    2881    4702    7044
```

```
                                                                                  LABCAR
2696          DQ       0       0      17     113     270     519     953    1560    2341

2697          KK   2D151
2698          KM        DIVERT TO CP152 FROM CP151
2699          DT   DI152
2700          DI       0      22      56     247     563    1060    1928    3142    4703
2701          DQ       0       0      17     113     270     519     953    1560    2341
1                                          HEC-1 INPUT                                                    PAGE 66

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


2702          KK    R151
2703          KM        ROUTE REMAINDER FROM CP151 TO CP167
2704          RS      11              -1       0
2705          RC    .035    .035     .07    5280   .0030
2706          RX    1000    1001    1002    1015    1085    1500    1770    2400
2707          RY    1129    1129    1129    1128    1128    1130    1132    1134
              *

2708          KK     167
2709          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 167
2710          BA     .97
2711          LG     .50     .00    4.90     .47     .00
2712          UI     34.     34.     34.     34.     80.    117.    133.    158.    170.    186.
2713          UI    197.    213.    231.    253.    270.    309.    374.    415.    443.    386.
2714          UI    344.    314.    291.    272.    252.    227.    211.    195.    175.    163.
2715          UI    146.    122.     98.     71.     60.     59.     56.     56.     44.     34.
2716          UI     34.     34.     31.     10.     10.     10.     10.     10.     10.     10.
2717          UI     10.     10.     10.     10.     10.     10.     10.      0.      0.      0.
2718          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2719          KK   1I167
2720          KM        ADD HYDROGRAPHS AT CP167
2721          HC       2   24.63

2722          KK    D166
2723          KM        RETURN DIVERT AT CP166
2724          DR   DI167

2725          KK    R166
2726          KM        ROUTE FLOW FROM CP166 TO CP167
2727          RS       5              -1       0
2728          RC     .08    .025    .025    5280   .0028
2729          RX    1000    1510    2000    2250    2290    2318    2319    2320
2730          RY    1136    1134    1132    1130    1130    1131    1131    1131

2731          KK   CP167
2732          KM        ADD HYDROGRAPHS AT CP167
2733          HC       2   25.61

2734          KK   1D167
2735          KM        DIVERT TO CP183 FROM CP167
2736          DT   1D183
2737          DI       0     274    1281    3337    6703   11624   18322
2738          DQ       0       0     335    1021    2143    3783    6016

2739          KK   2D167
2740          KM        DIVERT TO CP168 FROM CP167
2741          DT   2D168
2742          DI       0     274     946    2316    4560    7841   12306
2743          DQ       0       0      64     250     587    1107    1838
1                                          HEC-1 INPUT                                                    PAGE 67

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


2744          KK    R167
2745          KM        ROUTE REMAINDER FROM CP167 TO CP181A
2746          RS       4              -1       0
2747          RC    .035    .035     .08    2400   .0046
2748          RX    1000    1001    1002    1020    1080    1740    2169    2170
2749          RY    1119    1119    1119    1118    1118    1120    1119    1119
              *

2750          KK    181A
2751          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 181A
2752          BA     .39
2753          LG     .50     .00    4.58     .55     .00
2754          UI     16.     16.     16.     28.     55.     65.     77.     85.     93.    100.
2755          UI    111.    123.    136.    162.    199.    212.    181.    159.    144.    133.
2756          UI    121.    108.     98.     89.     80.     71.     57.     45.     29.     29.
```

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                                                                                LABCAR
2757          UI     27.     27.     19.     16.     16.     16.      5.      5.      5.
2758          UI      5.      5.      5.      5.      5.      5.      5.      5.      0.      0.
2759          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2760          KK  CP181A
2761          KM        ADD HYDROGRAPHS AT CP181A
2762          HC       2    26.0

2763          KK   D181A
2764          KM        DIVERT TO CP183 FROM CP181A
2765          DT   2D183
2766          DI       0     133     491    1117    1637    2812    4542    6810    9620
2767          DQ       0      12      77     241     451     927    1631    2557    3709

2768          KK   R181A
2769          KM        ROUTE REMAINDER FROM CP181A TO CP182
2770          RS       5              -1       0
2771          RC     .04     .04     .08    2870   .0031
2772          RX    1000    1001    1002    1015    1075    1570    1880    2100
2773          RY    1109    1109    1109    1108    1108    1110    1112    1113

2774          KK   CP182
2775          KM        ADD HYDROGRAPHS AT CP182
2776          HC       2   38.46

2777          KK    D182
2778          KM        DIVERT TO CP196 FROM CP182
2779          DT   DI196
2780          DI       0     173     611    1337    2388    3802
2781          DQ       0      88     310     659    1212    1929

2782          KK    R182
2783          KM        ROUTE REMAINDER FROM CP182 TO CP184
2784          RS      14              -1       0
2785          RC    .075     .04     .04    5280   .0023
2786          RX    1000    1001    1700    2340    2450    2463    2464    2465
2787          RY    1104    1104    1102    1100    1100    1101    1101    1101
```



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

2788          KK   2D151
2789          KM        RETURN DIVERT AT CP151
2790          DR   DI152

2791          KK    R151
2792          KM        ROUTE FLOW FROM CP151 TO CP152
2793          RS       6              -1       0
2794          RC     .08    .035    .035    2600   .0027
2795          RX    1000    1090    1710    2160    2240    2268    2269    2270
2796          RY    1141    1140    1138    1136    1136    1137    1137    1137
              *

2797          KK     152
2798          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 152
2799          BA     .35
2800          LG     .50     .00    5.10     .43     .00
2801          UI     17.     17.     17.     54.     69.     83.     94.    103.    114.    129.
2802          UI    147.    187.    221.    206.    175.    155.    140.    124.    110.     97.
2803          UI     86.     74.     56.     39.     31.     29.     29.     18.     17.     17.
2804          UI      7.      5.      5.      5.      5.      5.      5.      5.      5.      5.
2805          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2806          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2807          KK   CP152
2808          KM        ADD HYDROGRAPHS AT CP152
2809          HC       2   24.01

2810          KK   1D152
2811          KM        DIVERT TO CP169 FROM CP152
2812          DT   1D169
2813          DI       0     334     482    1536    3508    6291    9848   14192
2814          DQ       0       0      49     400    1058    1986    3171    4619

2815          KK   2D152
2816          KM        DIVERT TO CP155 FROM CP152
2817          DT   DI155
2818          DI       0     334     433    1136    2450    4305    6677    9573
2819          DQ       0       0      49     400    1058    1986    3171    4619

2820          KK    R152
```

```
2821          KM        ROUTE REMAINDER FROM CP152 TO CP168
2822          RS      10            -1       0
2823          RC    .035    .035    .075    5280   .0034
2824          RX    1000    1001    1002    1020    1110    1450    1880    2100
2825          RY    1123    1123    1123    1122    1122    1124    1126    1127

2826          KK   1D151
2827          KM        RETURN DIVERT AT CP151
2828          DR   1D168
```



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

2829          KK    R151
2830          KM        ROUTE FLOW FROM CP151 TO CP168
2831          RS      56            -1       0
2832          RC    .075    .075    .075    5928   .0042
2833          RX    1000    1001    1002    1180    2100    2458    2459    2460
2834          RY    1135    1135    1135    1134    1134    1135    1135    1135
              *

2835          KK     168
2836          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 168
2837          BA     .51
2838          LG     .50     .00    5.00     .45     .00
2839          UI     21.     21.     21.     37.     73.     86.    101.    111.    122.    132.
2840          UI    145.    162.    179.    213.    262.    277.    236.    208.    188.    173.
2841          UI    158.    141.    128.    116.    104.     92.     73.     58.     38.     38.
2842          UI     35.     35.     24.     21.     21.     20.      7.      7.      7.      7.
2843          UI      7.      7.      7.      7.      7.      7.      7.      0.      0.      0.
2844          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2845          KK   1I168
2846          KM        ADD HYDROGRAPHS AT CP168
2847          HC       2   24.17

2848          KK   2D167
2849          KM        RETURN DIVERT AT CP167
2850          DR   2D168

2851          KK    R167
2852          KM        ROUTE FLOW FROM CP167 TO CP168
2853          RS      10            -1       0
2854          RC    .075     .04     .04    2600   .0035
2855          RX    1000    1060    1460    2050    2315    2328    2329    2330
2856          RY    1125    1124    1122    1120    1120    1121    1121    1121

2857          KK   2I168
2858          KM        ADD HYDROGRAPHS AT CP168
2859          HC       2   26.12

2860          KK   CP168
2861          KM        ADD HYDROGRAPHS AT CP168
2862          HC       2   26.47

2863          KK    D168
2864          KM        DIVERT TO CP169 FROM CP168
2865          DT   2D169
2866          DI       0       4     282    1072    2510    4582    7322   10770
2867          DQ       0       0      59     334     981    1974    3330    5068

2868          KK    R168
2869          KM        ROUTE REMAINDER FROM CP168 TO CP183
2870          RS       5            -1       0
2871          RC     .04     .04    .075    2400   .0029
2872          RX    1000    1001    1002    1010    1030    1480    2259    2260
2873          RY    1113    1113    1113    1112    1112    1114    1116    1116
```



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

2874          KK   1D167
2875          KM        RETURN DIVERT AT CP167
2876          DR   1D183

2877          KK    R167
2878          KM        ROUTE FLOW FROM CP167 TO CP183
2879          RS      19            -1       0
2880          RC    .075    .075    .075    2250   .0071
2881          RX    1000    1001    1002    1210    2310    2558    2559    2560
```

```
                                                                                LABCAR
2882          RY    1115    1115    1115    1114    1114    1115    1115    1115
              *

2883          KK     183
2884          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 183
2885          BA     .21
2886          LG     .50     .00    4.32     .62     .00
2887          UI     20.     38.     84.    109.    134.    172.    247.    206.    164.    131.
2888          UI    104.     74.     40.     33.     22.     16.      6.      6.      6.      6.
2889          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2890          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2891          KK   1I183
2892          KM        ADD HYDROGRAPHS AT CP183
2893          HC       2   25.82

2894          KK   D181A
2895          KM        RETURN DIVERT AT CP181A
2896          DR   2D183

2897          KK   R181A
2898          KM        ROUTE FLOW FROM CP181A TO CP183
2899          RS       3              -1       0
2900          RC     .08     .04     .04    1250   .0040
2901          RX    1000    1001    1420    1850    1870    1888    1889    1890
2902          RY    1114    1114    1112    1110    1110    1111    1111    1111

2903          KK   2I183
2904          KM        ADD HYDROGRAPHS AT CP183
2905          HC       2   26.21

2906          KK   CP183
2907          KM        ADD HYDROGRAPHS AT CP183
2908          HC       2   27.07

2909          KK    R183
2910          KM        ROUTE FLOW FROM CP183 TO CP184
2911          RS      28              -1       0
2912          RC     .08     .08     .08    4520   .0035
2913          RX    1000    1001    1215    1910    2630    3250    3499    3500
2914          RY    1101    1101    1100    1098    1098    1100    1101    1101
              *
```



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

2915          KK     184
2916          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 184
2917          BA     .79
2918          LG     .50     .00    4.74     .51     .00
2919          UI     33.     33.     33.     53.    110.    130.    154.    170.    186.    200.
2920          UI    221.    245.    268.    321.    389.    431.    371.    326.    293.    269.
2921          UI    248.    221.    201.    182.    164.    148.    121.     94.     63.     58.
2922          UI     55.     54.     43.     33.     33.     33.     15.     10.     10.     10.
2923          UI     10.     10.     10.     10.     10.     10.     10.     10.      0.      0.
2924          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2925          KK   1I184
2926          KM        ADD HYDROGRAPHS AT CP184
2927          HC       2   27.86

2928          KK   2I184
2929          KM        ADD HYDROGRAPHS AT CP184
2930          HC       2   40.32

2931          KK    D152
2932          KM        RETURN DIVERT AT CP152
2933          DR   DI155

2934          KK    R152
2935          KM        ROUTE FLOW FROM CP152 TO CP155
2936          RS      14              -1       0
2937          RC    .075     .04     .04    2640   .0019
2938          RX    1000    1040    1580    2090    2360    2363    2364    2365
2939          RY  1135.2    1134    1132    1130    1130    1131    1131    1131
              *

2940          KK     155
2941          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 155
2942          BA     .26
2943          LG     .50     .00    7.30     .17     .00
```

```
                                                                                LABCAR
2944        UI     15.     15.     29.     56.     72.     83.     93.    107.    122.    156.
2945        UI    195.    177.    147.    129.    113.     98.     85.     73.     57.     39.
2946        UI     27.     26.     23.     15.     15.      8.      5.      5.      5.      5.
2947        UI      5.      5.      5.      0.      0.      0.      0.      0.      0.      0.
2948        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2949        KK   CP155
2950        KM        ADD HYDROGRAPHS AT CP155
2951        HC       2   24.27

2952        KK    R155
2953        KM        ROUTE FLOW FROM CP155 TO CP169
2954        RS      17            -1       0
2955        RC     .04     .04     .07    5280   .0036
2956        RX    1000    1001    1002    1020    1690    2220    2269    2270
2957        RY    1117    1117    1117    1116    1116    1118    1119    1119
1                                         HEC-1 INPUT                                                          PAGE 72

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

2958        KK    D152
2959        KM        RETURN DIVERT AT CP152
2960        DR   1D169

2961        KK    R152
2962        KM        ROUTE FLOW FROM CP152 TO CP169
2963        RS       7            -1       0
2964        RC     .08     .08     .08    5928   .0040
2965        RX    1000    1001    1002    1190    2510    2898    2899    2900
2966        RY    1121    1121    1121    1120    1120    1121    1121    1121
            *

2967        KK     169
2968        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 169
2969        BA     .51
2970        LG     .50     .00    7.30     .17     .00
2971        UI     21.     21.     21.     35.     72.     84.    100.    110.    120.    130.
2972        UI    143.    159.    174.    209.    253.    278.    239.    210.    189.    174.
2973        UI    160.    142.    130.    117.    106.     95.     77.     61.     39.     38.
2974        UI     35.     35.     27.     21.     21.     21.      9.      7.      7.      7.
2975        UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
2976        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2977        KK   1I169
2978        KM        ADD HYDROGRAPHS AT CP169
2979        HC       2   24.52

2980        KK   2I169
2981        KM        ADD HYDROGRAPHS AT CP169
2982        HC       2   25.13

2983        KK    D168
2984        KM        RETURN DIVERT AT CP168
2985        DR   2D169

2986        KK    R168
2987        KM        ROUTE FLOW FROM CP168 TO CP169
2988        RS       9            -1       0
2989        RC     .08    .035    .035    2640   .0023
2990        RX    1000    1001    1440    1890    2100    2148    2149    2150
2991        RY    1116    1116    1114    1112    1112    1113    1113    1113

2992        KK   CP169
2993        KM        ADD HYDROGRAPHS AT CP169
2994        HC       2   27.24

2995        KK    R169
2996        KM        ROUTE FLOW FROM CP169 TO CP184
2997        RS      10            -1       0
2998        RC     .08     .04     .04    5280   .0032
2999        RX    1000    1001    1002    1020    1100    1670    2099    2100
3000        RY    1111    1111    1111    1110    1110    1112    1113    1113
1                                         HEC-1 INPUT                                                          PAGE 73

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

3001        KK   CP184
3002        KM        ADD HYDROGRAPHS AT CP184
3003        HC       2   41.09
```

```
3004          KK   1D184
3005          KM        DIVERT TO CP197 FROM CP184
3006          DT   DI197
3007          DI       0     350    1274    2834    4789    7664
3008          DQ       0     140     509    1134    1916    3066

3009          KK   2D184
3010          KM        DIVERT TO CP198 FROM CP184
3011          DT   DI198
3012          DI       0     210     765    1700    2873    4598
3013          DQ       0     140     509    1134    1911    3066

3014          KK    R184
3015          KM        ROUTE REMAINDER FROM CP184 TO CP185
3016          RS       8              -1       0
3017          RC    .075     .04     .04    1400   .0007
3018          RX    1000    1001    1170    1970    2260    2308    2309    2310
3019          RY    1095    1095    1094    1092    1092    1093    1093    1093
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2J WITH NEW SOILS*****
              * ***********************************************************************
              *

3020          KK     170
3021          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 170
3022          BA     .29
3023          LG     .41     .04    7.30     .16    5.00
3024          UI     19.     19.     48.     77.     95.    110.    126.    148.    189.    242.
3025          UI    212.    175.    153.    130.    112.     94.     76.     49.     34.     32.
3026          UI     25.     19.     17.      6.      6.      6.      6.      6.      6.      6.
3027          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3028          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3029          KK    R170
3030          KM        ROUTE FLOW FROM CP170 TO CP185
3031          RS      16              -1       0
3032          RC    .035    .035    .035    5280   .0032
3033          RX    1000    1001    1002    2100    2280    2338    2339    2340
3034          RY    1101    1101    1101    1100    1100    1101    1101    1101
              *

3035          KK     185
3036          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 185
3037          BA     .69
3038          LG     .50     .00    5.10     .43     .00
3039          UI     30.     30.     30.     62.    105.    126.    145.    163.    176.    193.
3040          UI    216.    236.    277.    338.    395.    352.    304.    272.    248.    227.
3041          UI    202.    183.    164.    147.    129.    101.     78.     53.     52.     50.
3042          UI     48.     30.     30.     30.     19.      9.      9.      9.      9.      9.
```



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

3043          UI      9.      9.      9.      9.      9.      0.      0.      0.      0.      0.
3044          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3045          KK   1I185
3046          KM        ADD HYDROGRAPHS AT CP185
3047          HC       2     .98

3048          KK   CP185
3049          KM        ADD HYDROGRAPHS AT CP185
3050          HC       2   44.55

3051          KK    R185
3052          KM        ROUTE FLOW FROM CP185 TO CP198
3053          RS       9              -1       0
3054          RC    .075    .075    .075    5450   .0022
3055          RX    1000    1001    1090    1410    1950    2190    2219    2220
3056          RY    1086    1086    1084    1083    1083    1084    1085    1085

3057          KK   2D184
3058          KM        RETURN DIVERT AT CP184
3059          DR   DI198

3060          KK    R184
3061          KM        ROUTE FLOW FROM CP184 TO CP198
3062          RS      55              -1       0
3063          RC    .075    .075    .075    6630   .0020
3064          RX    1000    1001    1025    1220    1990    2010    2099    2100
3065          RY    1085    1085    1084    1083    1083    1084    1085    1085
```

```
*

KK     198
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 198
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=      1.3  Lca=       .6   S=   10.3  Kn= .091  LAG=  77.1
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .90
LG     .42     .09    4.80     .44   12.00
UI     39.     39.     39.     80.    137.    165.    189.    213.    229.    252.
UI    281.    308.    360.    441.    515.    461.    398.    356.    325.    298.
UI    264.    239.    215.    192.    169.    133.    103.     70.     69.     65.
UI     63.     39.     39.     39.     25.     12.     12.     12.     12.     12.
UI     12.     12.     12.     12.     12.     12.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  198OUT
KM        DIVERSION-RETENTION
DT  198RET   14.60
DI       0   10000
DQ       0   10000
```

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

KK   1I198
KM        ADD HYDROGRAPHS AT CP198
HC       2   41.97

KK   2I198
KM        ADD HYDROGRAPHS AT CP198
HC       2   42.95

KK   1D184
KM        RETURN DIVERT AT CP184
DR   DI197

KK    R184
KM        ROUTE REMAINDER FROM CP184 TO CP197
RS      18              -1       0
RC     .04     .04     .08    5280   .0025
RX    1000    1001    1002    1015    1870    2300    2699    2700
RY    1087    1087    1087    1086    1086    1088    1089    1089
*

KK     197
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 197
BA    1.00
LG     .50     .00    4.66     .53     .00
UI     32.     32.     32.     32.     46.    106.    119.    135.    152.    164.
UI    177.    187.    200.    216.    235.    250.    276.    318.    371.    423.
UI    402.    355.    321.    296.    276.    259.    242.    222.    204.    191.
UI    175.    161.    151.    133.    112.     93.     68.     57.     57.     53.
UI     53.     52.     32.     32.     32.     32.     27.     10.     10.     10.
UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
UI     10.     10.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   CP197
KM        ADD HYDROGRAPHS AT CP197
HC       2   42.06

KK    R197
KM        ROUTE FLOW FROM CP197 TO CP203
RS       8              -1       0
RC    .035    .035    .015    2650   .0004
RX    1000    1001    1002    1030    1200    1350    1809    1810
RY    1078    1078    1078  1077.5  1077.5    1078    1080    1080
*

KK     203
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 203
BA     .11
LG     .35     .38    4.82     .29     .00
UI     16.     60.     92.    131.    189.    135.     96.     62.     29.     19.
UI      9.      5.      5.      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
```

```
3127          KK  203OUT
3128          KM        DIVERSION-RETENTION
3129          DT  203RET    6.65
3130          DI       0   10000
3131          DQ       0   10000

3132          KK   CP203
3133          KM        ADD HYDROGRAPHS AT CP203
3134          HC       2   42.17

3135          KK   CP198
3136          KM        ADD HYDROGRAPHS AT CP198
3137          HC       2   44.06

3138          KK    R198
3139          KM        ROUTE FLOW FROM CP198 TO CP204
3140          RS       2              -1       0
3141          RC     .03    .025     .03    3120   .0029
3142          RX    1000    1050    1070    1090    1190    1220    1230    1270
3143          RY    1083    1082    1078    1076    1076    1078    1080    1083
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2K WITH NEW SOILS*****
              * ************************************************************************
              *

3144          KK     204
3145          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 204
3146          BA     .27
3147          LG     .35     .37    4.82     .29     .00
3148          UI     42.    172.    257.    396.    462.    312.    214.    105.     61.     33.
3149          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3150          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3151          KK   1I204
3152          KM        ADD HYDROGRAPHS AT CP204
3153          HC       2   44.33
              *

3154          KK     174
3155          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 174
3156          BA     .45
3157          LG     .35     .33    4.58     .32     .00
3158          UI     62.    218.    346.    474.    735.    574.    418.    294.    145.     94.
3159          UI     57.     19.     19.     19.      0.      0.      0.      0.      0.      0.
3160          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3161          KK    R174
3162          KM        ROUTE FLOW FROM CP174 TO CP176
3163          RS       7              -1       0
3164          RC    .025    .025    .025    7020   .0073
3165          RX    1000    1040    1100    1200    1600    1620    1630    1750
3166          RY    1223    1222    1220    1218    1218    1220    1222    1224
              *
```

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

3167          KK     175
3168          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175
3169          BA     .28
3170          LG     .35     .33    4.66    0.31     .00
3171          UI     38.    128.    207.    279.    440.    364.    267.    192.    103.     63.
3172          UI     38.     15.     12.     12.      0.      0.      0.      0.      0.      0.
3173          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3174          KK    D175
3175          KM        DIVERT TO CP175A FROM CP175
3176          DT  DI175A
3177          DI       0      53     200     459     854    1367    2544    4308    6658    9613
3178          DQ       0      53     200     459     854    1047    1478    2105    2915    3906

3179          KK    R175
3180          KM        ROUTE REMAINDER FROM CP175 TO CP176
3181          RS       5              -1       0
3182          RC    .025    .022    .022    6500   .0074
3183          RX    1000    1100    1300    1420    1470    1558    1559    1560
3184          RY    1226    1224    1222    1220    1220    1222    1222    1222
              *
```

```
3185          KK     176
3186          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176
3187          BA     .67
3188          LG     .35     .34    4.20     .39     .00
3189          UI     66.    128.    279.    362.    449.    588.    817.    642.    515.    407.
3190          UI    319.    208.    115.     99.     66.     37.     20.     20.     20.     20.
3191          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3192          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3193          KK   1I176
3194          KM        ADD HYDROGRAPHS AT CP176
3195          HC       2     .95

3196          KK   CP176
3197          KM        ADD HYDROGRAPHS AT CP176
3198          HC       2    1.40

3199          KK    R176
3200          KM        ROUTE FLOW FROM CP176 TO CP191
3201          RS       5              -1       0
3202          RC    .035    .035    .075    5540   .0067
3203          RX    1000    1001    1002    1025    1100    1400    1720    2050
3204          RY    1163    1163    1163    1162    1162    1164    1166    1168

3205          KK    D175
3206          KM        RETURN DIVERT AT CP175
3207          DR  DI175A
```



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

3208          KK    R175
3209          KM        ROUTE FLOW FROM CP175 TO CP175A
3210          RS       2              -1       0
3211          RC    .022    .022    .025    1560   .0013
3212          RX    1000    1001    1002    1020    1055    1150    1190    1390
3213          RY    1136    1136    1136    1134    1134    1136    1138    1140
              *

3214          KK    175A
3215          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175A
3216          BA     .47
3217          LG     .35     .33    4.20     .39     .00
3218          UI     42.     66.    162.    215.    258.    317.    439.    507.    388.    320.
3219          UI    258.    207.    147.     82.     69.     48.     41.     13.     13.     13.
3220          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3221          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3222          KK  CP175A
3223          KM        ADD HYDROGRAPHS AT CP175A
3224          HC       2     .75

3225          KK   R175A
3226          KM        ROUTE FLOW FROM CP175A TO CP189
3227          RS      11              -1       0
3228          RC    .022    .022    .025    3300   .0009
3229          RX    1000    1001    1002    1020    1035    1170    1460    1720
3230          RY    1233    1233    1233    1232    1232    1234    1236    1238

3231          KK     CP3
3232          KM        RETURN DIVERTED HYDROGRAPH AT CP3 (FROM  HEC-1 MODEL)
3233          DR   DI189

3234          KK      R3
3235          KM        ROUTE FLOW AT CP3 TO CP189
3236          RS       5              -1       0
3237          RC     .05    .035     .05    4500   .0038
3238          RX    1000    1040    1175    1250    1275    1350    1430    1750
3239          RY    1261    1260  1260.5    1258    1258  1260.5    1258    1261

3240          KK   1I189
3241          KM        ADD HYDROGRAPHS AT CP189
3242          HC       2    5.81
              *

3243          KK     189
3244          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 189
3245          BA     .51
3246          LG     .35     .35    4.44     .34     .00
3247          UI     52.    110.    229.    298.    372.    516.    631.    471.    376.    293.
3248          UI    219.    118.     88.     59.     43.     16.     16.     16.     16.      0.
```

```
                                                                                LABCAR
3249          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3250          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                          HEC-1 INPUT                                                PAGE 79

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

3251          KK   CP189
3252          KM        ADD HYDROGRAPHS AT CP189
3253          HC       2    6.32

3254          KK    R189
3255          KM        ROUTE FLOW FROM CP189 TO CP190
3256          RS       8              -1       0
3257          RC     .08    .035    .035    6900   .0057
3258          RX    1000    1270    1700    2040    2090    2118    2119    2120
3259          RY    1212    1210    1208    1206    1206    1207    1207    1207
              *

3260          KK     190
3261          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 190
3262          BA     .86
3263          LG     .50     .00    4.44     .74     .00
3264          UI     44.     44.     44.    141.    176.    209.    238.    261.    292.    331.
3265          UI    381.    482.    570.    492.    422.    374.    339.    297.    264.    232.
3266          UI    207.    167.    124.     77.     76.     72.     59.     44.     44.     31.
3267          UI     13.     13.     13.     13.     13.     13.     13.     13.     13.      0.
3268          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3269          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3270          KK   CP190
3271          KM        ADD HYDROGRAPHS AT CP190
3272          HC       2    7.18

3273          KK    R190
3274          KM        ROUTE FLOW FROM CP190 TO CP191
3275          RS       5              -1
3276          RC    .075    .035    .035    5280   .0076
3277          RX    1000    1260    2080    2310    2330    2358    2359    2360
3278          RY    1182    1180    1178    1176    1176    1177    1177    1177

3279          KK   D176A
3280          KM        RETURN DIVERT AT CP176A
3281          DR   DI191

3282          KK   R176A
3283          KM        ROUTE FLOW FROM CP176A TO CP191
3284          RS       4              -1       0
3285          RC    .035    .035     .08    5280   .0062
3286          RX    1000    1001    1002    1025    1100    1400    1720    2050
3287          RY    1163    1163    1163    1162    1162    1164    1166    1168

3288          KK   1I191
3289          KM        ADD HYDROGRAPHS AT CP191
3290          HC       3   11.39
              *
1                                          HEC-1 INPUT                                                PAGE 80

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

3291          KK     191
3292          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 191
3293          BA     .99
3294          LG     .50     .00    4.66     .53     .00
3295          UI     39.     39.     39.     40.    127.    144.    170.    189.    210.    223.
3296          UI    243.    267.    293.    322.    381.    459.    509.    443.    389.    353.
3297          UI    324.    301.    272.    247.    227.    204.    186.    166.    135.    111.
3298          UI     70.     68.     65.     63.     56.     39.     39.     39.     30.     12.
3299          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
3300          UI     12.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3301          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3302          KK   CP191
3303          KM        ADD HYDROGRAPHS AT CP191
3304          HC       2   12.38

3305          KK    D191
3306          KM        DIVERT TO CP208 FROM CP191
3307          DT   1D208
3308          DI       0      80     468    1339    2000    3000    4000    5000    6000
3309          DQ       0      80     468    1339    1339    1339    1339    1339    1339
```

```
3310          KK    R191
3311          KM        ROUTE REMAINDER FROM CP191 TO CP192A
3312          RS       5             -1       0
3313          RC     .08     .04     .04    2640   .0045
3314          RX    1000    1350    1800    2200    2225    2278    2279    2280
3315          RY    1148    1146    1144    1142    1142    1143    1143    1143
              *

3316          KK    192A
3317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192A
3318          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3319          KM    L=       1.1  Lca=        .6   S=   31.3  Kn= .098  LAG=  61.4
3320          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3321          BA     .50
3322          LG     .45     .07    4.30     .60    5.00
3323          UI     27.     27.     38.     94.    116.    137.    153.    171.    197.    224.
3324          UI    289.    345.    306.    259.    229.    205.    177.    157.    136.    116.
3325          UI     86.     57.     48.     44.     38.     27.     27.     17.      8.      8.
3326          UI      8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
3327          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3328          KK  192AOT
3329          KM        DIVERSION-RETENTION
3330          DT  192ART    5.33
3331          DI       0   10000
3332          DQ       0   10000
```



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

3333          KK  CP192A
3334          KM        ADD HYDROGRAPHS AT CP192A
3335          HC       2   12.68

3336          KK   R192A
3337          KM        ROUTE REMAINDER FROM CP192A TO CP192
3338          RS       9             -1       0
3339          RC     .08     .04     .04    2640   .0045
3340          RX    1000    1350    1800    2200    2225    2278    2279    2280
3341          RY    1148    1146    1144    1142    1142    1143    1143    1143
              *

3342          KK     192
3343          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192
3344          BA     .50
3345          LG     .50     .00    4.05     .72     .00
3346          UI     22.     22.     22.     51.     80.     96.    110.    123.    134.    147.
3347          UI    165.    182.    219.    270.    290.    245.    215.    193.    178.    159.
3348          UI    142.    129.    114.    104.     83.     64.     41.     40.     37.     37.
3349          UI     24.     22.     22.     16.      7.      7.      7.      7.      7.      7.
3350          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3351          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3352          KK   CP192
3353          KM        ADD HYDROGRAPHS AT CP192
3354          HC       2   13.38

3355          KK   1D192
3356          KM        DIVERT TO CP209 FROM CP192
3357          DT   1D209
3358          DI       0     126     480     965    3703    6169    9453
3359          DQ       0     126     419     853    3404    5491    8154

3360          KK   2D192
3361          KM        DIVERT TO CP210 FROM CP192
3362          DT   1D210
3363          DI       0      61     112     299     678    1299    2208
3364          DQ       0       0       0       0       0     433     736

3365          KK    R192
3366          KM        ROUTE REMAINDER FROM CP192 TO MIDSECTION LINE
3367          RS       5             -1       0
3368          RC     .08    .025    .022    2475   .0044
3369          RX    1000    1380    1800    2160    2195    2230    2275    2310
3370          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3371          KK   1D193
3372          KM        DIVERT AT MIDSECTION OF 193 TO CP211
3373          DT   DI211
```

```
                                                                                LABCAR
3374          DI       0     100     200     400     600     800    1000    2000
3375          DQ       0      80     160     320     480     640     800    1600
1                                            HEC-1 INPUT                                                          PAGE 82

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

3376          KK   R192
3377          KM        ROUTE REMAINDER FROM D193 TO CP193
3378          RS       5              -1       0
3379          RC     .08    .025    .022    2475   .0044
3380          RX    1000    1380    1800    2160    2195    2230    2275    2310
3381          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3382          KK     193
3383          KM        RUNOFF FROM SUBBASIN 193
3384          BA     .91
3385          LG     .50     .00    4.66     .53     .00
3386          UI     36.     36.     36.     38.    117.    133.    158.    175.    193.    206.
3387          UI    225.    247.    270.    299.    353.    426.    468.    405.    357.    324.
3388          UI    297.    277.    249.    226.    209.    186.    170.    151.    122.    100.
3389          UI     63.     63.     59.     58.     50.     36.     36.     36.     25.     11.
3390          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
3391          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3392          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3393          KK   1I193
3394          KM        ADD HYDROGRAPHS AT CP193
3395          HC       2   14.29

3396          KK   1D179
3397          KM        RETURN DIVERT AT CP179
3398          DR   DI193

3399          KK    R179
3400          KM        ROUTE FLOW FROM CP179 TO CP193
3401          RS       7              -1       0
3402          RC    .022    .022     .06    5280   .0040
3403          RX    1000    1001    1002    1010    1050    1070    1150    1970
3404          RY    1113    1113    1113    1112    1112    1113    1112    1118

3405          KK   CP193
3406          KM        ADD HYDROGRAPHS AT CP193
3407          HC       2   39.17
              * DI212 HAS BEEN REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM       DIVERT TO CP212 FROM CP193
              * DT DI212
              * DI      0     500     520     580     650    1000    1500    2000    2347     30
              * DQ      0       0       4      27      67     332     768    1219    1535     21

3408          KK    R193
3409          KM        ROUTE REMAINDER FROM CP193 TO CP194
3410          RS       7              -1       0
3411          RC     .05    .020    .022    2640   .0015
3412          RX    1000    1940    1995    2020    2040    2050    2069    2070
3413          RY    1104    1100    1101    1098    1098    1100    1101    1101
1                                            HEC-1 INPUT                                                          PAGE 83

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

3414          KK   2D179
3415          KM        RETURN DIVERT AT CP179
3416          DR  DI194A

3417          KK    R179
3418          KM        ROUTE FLOW FROM CP179 TO CP194A
3419          RS       8              -1       0
3420          RC    .075    .075    .075    7500   .0039
3421          RX    1000    1001    1002    1360    2780    2998    2999    3000
3422          RY    1109    1109    1109    1108    1108    1109    1109    1109
              *

3423          KK    194A
3424          KM   BASIN 194A
3425          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3426          KM    L=       .7  Lca=       .4   S=   26.8  Kn= .120  LAG=  54.8
3427          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3428          BA     .25
3429          LG     .50     .00    3.75     .46     .00
```

```
                                                                                                  LABCAR
3430          UI     15.     15.     32.     57.     73.     84.     95.    110.    128.    167.
3431          UI    198.    162.    138.    122.    104.     91.     77.     65.     46.     28.
3432          UI     26.     25.     15.     15.     10.      5.      5.      5.      5.      5.
3433          UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
3434          UI      0.      0.      0.      0.      0.      0.      0.      0.

3435          KK  CP194A
3436          KM        ADD HYDROGRAPHS AT CP194A
3437          HC       2   36.84
              *

3438          KK    194B
3439          KM   BASIN 194B
3440          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3441          KM    L=        .7  Lca=       .4   S=   23.9  Kn= .120  LAG=  56.0
3442          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3443          BA     .25
3444          LG     .50     .00    3.75     .46     .00
3445          UI     15.     15.     30.     55.     71.     81.     91.    105.    121.    158.
3446          UI    191.    167.    140.    123.    108.     92.     80.     69.     51.     34.
3447          UI     26.     25.     19.     15.     15.      5.      5.      5.      5.      5.
3448          UI      5.      5.      5.      0.      0.      0.      0.      0.      0.      0.
3449          UI      0.      0.      0.      0.      0.      0.      0.      0.

3450          KK  CP194B
              * KO     1                                21
3451          KM        ADD HYDROGRAPHS AT CP194B
3452          HC       3   36.84

3453          KK  SR194B
              * KO     1                                21
3454          KM        STORAGE ROUTE THROUGH 74-ACRE DETENTION BASIN 1 AT CP194B
3455          KM        BASIN MODIFIED TO INCORPORATE GOLF COURSE ROUGH GEOMETRY (SFC 3/31/95)
3456          KM        1 - 6' X 6' BOX CULVERT - INLET ELEVATION = 1089.85
3457          KM        DISCHARGES TO DYSART DRAIN
1                                          HEC-1 INPUT                                          PAGE 84

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

3458          RS       1    STOR       0       0
3459          SV       0    13.5   41.42   83.54  133.61  216.27  563.72
3460          SQ       0      67     110     160     211     300     555
3461          SE  1089.9  1092.5  1093.5  1094.5  1095.5    1097    1102

3462          KK   R194B
3463          KM        ROUTE DETENTION BASIN FLOWS FROM CP194B TO CP194C
3464          RS       7              -1       0
3465          RC    .016    .016    .016    2640   .0011
3466          RX    2000    2007    2013    2020    2030    2037    2043    2050
3467          RY  1099.5  1096.2  1092.8  1089.5  1089.5  1092.8  1096.2  1099.5
              *

3468          KK    194C
3469          KM   BASIN 194C
3470          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3471          KM    L=       1.1  Lca=       .6   S=   20.5  Kn= .120  LAG=  81.5
3472          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3473          BA     .49
3474          LG     .50     .00    3.75     .46     .00
3475          UI     20.     20.     20.     32.     68.     80.     95.    104.    114.    123
3476          UI    136.    150.    164.    195.    236.    267.    232.    203.    183.    167
3477          UI    155.    138.    126.    114.    102.     94.     78.     58.     42.     36
3478          UI     34.     33.     29.     20.     20.     20.     12.      6.      6.      6
3479          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0
3480          UI      0.      0.      0.      0.      0.      0.      0.      0.
              *

3481          KK  CP194C
3482          KM        ADD HYDROGRAPHS AT CP194
3483          HC       2   37.33

3484          KK   R194C
3485          KM        ROUTE FLOW FROM CP194C TO CP195
3486          RS       2              -1       0
3487          RC    .016    .016    .016    3750   .0011
3488          RX    2000    2007    2013    2020    2030    2037    2043    2050
3489          RY  1094.5  1091.2  1087.8  1084.5  1084.5  1087.8  1091.2  1094.5

3490          KK    D180
3491          KM        RETURN DIVERT AT CP180
3492          DR   1D195
```

```
3493          KK    R180
3494          KM       ROUTE FLOW FROM CP180 TO CP195
3495          RS      40              -1       0
3496          RC     .08      .08      .08    7050    .0031
3497          RX    1000     1001     1002    1350     2300    2448    2449    2450
3498          RY    1101     1101     1100    1099     1099    1100    1101    1101
              *
1                                          HEC-1 INPUT                                                          PAGE 85

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


3499          KK     195
3500          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 195
3501          BA     .49
3502          LG     .50      .00     4.82      .49      .00
3503          UI     16.      16.      16.      16.      27.      53.      61.      70.      77.      84.
3504          UI     90.      95.     102.     110.     121.     128.     145.     172.     193.     215.
3505          UI    190.     169.     154.     143.     133.     126.     115.     106.      98.      91.
3506          UI     83.      77.      70.      60.      46.      38.      29.      29.      27.      26.
3507          UI     26.      17.      16.      16.      16.      13.       5.       5.       5.       5.
3508          UI      5.       5.       5.       5.       5.       5.       5.       5.       5.       5.
3509          UI      5.       0.       0.       0.       0.       0.       0.       0.       0.       0.
3510          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

3511          KK   1I195
3512          KM       ADD HYDROGRAPHS AT CP195
3513          HC       2   33.41

3514          KK    D181
3515          KM       RETURN DIVERT AT CP181
3516          DR   2D195

3517          KK    R181
3518          KM       ROUTE FLOW FROM CP181 TO CP195
3519          RS       4              -1       0
3520          RC    .022     .022     .07    6400    .0033
3521          RX    1000     1001     1002    1040     1055    1080    1899    1900
3522          RY    1103     1103     1103    1098     1098    1102    1103    1103

3523          KK   CP195
3524          KM       ADD HYDROGRAPHS AT CP195
3525          HC       3   41.02

3526          KK    R195
3527          KM       ROUTE FLOW FROM CP195 TO CP196
3528          RS       1              -1       0
3529          RC    .016     .016     .016    2800    .0011
3530          RX    1000     1006     1013    1020     1030    1037    1043    1050
3531          RY    1085     1082     1078    1074     1074    1078    1082    1085

3532          KK    D182
3533          KM       RETURN DIVERT AT CP182
3534          DR   DI196

3535          KK    R182
3536          KM       ROUTE FLOW FROM CP182 TO CP196
3537          RS      13              -1       0
3538          RC    .025     .025     .04    5280    .0034
3539          RX    1000     1001     1002    1030     1060    1115    1220    1750
3540          RY    1097     1097     1097    1096     1096  1096.5  1095.5    1097
              *
1                                          HEC-1 INPUT                                                          PAGE 86

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


3541          KK     196
3542          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 196
3543          BA     .47
3544          LG     .46      .03     4.58      .53     2.00
3545          UI     21.      21.      21.      50.      76.      92.     106.     117.     128.     142.
3546          UI    159.     176.     215.     264.     269.     227.     200.     181.     166.     147.
3547          UI    132.     118.     106.      93.      73.      56.      38.      37.      35.      32.
3548          UI     21.      21.      21.       9.       7.       7.       7.       7.       7.       7.
3549          UI      7.       7.       7.       7.       0.       0.       0.       0.       0.       0.
3550          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

3551          KK   1I196
3552          KM       ADD HYDROGRAPHS AT CP196
3553          HC       2   38.90
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```
3554          KK   CP196
3555          KM        ADD HYDROGRAPHS AT CP196
3556          HC       2   51.58

3557          KK    R196
3558          KM        ROUTE FLOW FROM CP196 TO CP202
3559          RS       2              -1       0
3560          RC     .02     .016     .02     5460    .0015
3561          RX    1000     1001    1008     1020     1030    1042    1074    1075
3562          RY    1085     1078    1076     1070     1070    1076    1078    1085
              *

3563          KK     202
3564          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 202
3565          BA     .48
3566          LG     .50      .00    4.82      .49      .00
3567          UI     16.      16.     16.      16.      28.     52.     60.     69.     76.     83.
3568          UI     89.      95.    102.     110.     120.    128.    146.    175.    193.    209.
3569          UI    184.     165.    150.     139.     130.    122.    111.    103.     95.     88.
3570          UI     80.      75.     66.      55.      46.     33.     28.     28.     26.     26.
3571          UI     23.      16.     16.      16.      16.      9.      5.      5.      5.      5.
3572          UI      5.       5.      5.       5.       5.      5.      5.      5.      5.      5.
3573          UI      0.       0.      0.       0.       0.      0.      0.      0.      0.      0.
3574          UI      0.       0.      0.       0.       0.      0.      0.      0.      0.      0.

3575          KK   CP202
3576          KM        ADD HYDROGRAPHS AT CP202
3577          HC       2   52.06

3578          KK    R202
3579          KM        ROUTE FLOW FROM CP202 TO CP204
3580          RS       2              -1       0
3581          RC    .022     .016    .022     4200    .0009
3582          RX    1000     1001    1008     1020     1030    1042    1074    1075
3583          RY    1093     1083    1079     1073     1073    1079    1083    1093
```



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

3584          KK   CP204
3585          KM        ADD HYDROGRAPHS AT CP204
3586          HC       2   57.76

3587          KK    R204
3588          KM        ROUTE FLOW FROM CP204 TO CP205
3589          RS       1              -1       0
3590          RC    .022     .016    .022     1050  0.0009
3591          RX    1000     1001    1008     1020     1030    1042    1074    1075
3592          RY    1080     1080    1073     1067     1067    1073    1073    1078
              *

3593          KK     205
3594          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 205
3595          BA     .06
3596          LG     .35      .36    4.28      .38      .00
3597          UI     40.     117.    176.      90.      28.      9.      5.      0.      0.      0.
3598          UI      0.       0.      0.       0.       0.      0.      0.      0.      0.      0.

3599          KK   CP205
3600          KM        ADD HYDROGRAPHS AT CP205
3601          HC       2   57.82

3602          KK    R205
3603          KM        ROUTE FLOW FROM CP205 TO CP206
3604          RS       1              -1       0
3605          RC    .022     .016    .022     1100    .0009
3606          RX    1000     1001    1008     1020     1030    1042    1074    1075
3607          RY    1080     1080    1072     1066     1066    1072    1080    1080
              *

3608          KK     206
3609          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 206
3610          BA     .12
3611          LG     .35      .35    4.50      .33      .00
3612          UI     30.     102.    159.     252.     175.    112.     49.     27.     10.      7.
3613          UI      0.       0.      0.       0.       0.      0.      0.      0.      0.      0.
3614          UI      0.       0.      0.       0.       0.      0.      0.      0.      0.      0.

3615          KK   CP206
3616          KM        ADD HYDROGRAPHS AT CP206
3617          HC       2   58.31
```

```
3618          KK  RCP206
3619          KM        ADD HYDROGRAPHS AT RCP206
3620          HC       2   68.69

3621          KK   RR206
3622          KM        RIVER ROUTE RCP206 TO RCP228A
3623          RS       1             -1       0
3624          RC    .035    .035    .035    2500   .0036
3625          RX    1000    1001    1002    1042    2042    2082    2083    2084
3626          RY    1070    1070    1070    1060    1060    1070    1070    1070
              *
1                                          HEC-1 INPUT                                                    PAGE 88

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

3627          KK    228A
3628          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 228A
3629          BA     .08
3630          LG     .35     .35    4.32     .37       6
3631          UI     27.     86.    150.    170.    102.     47.     22.      7.      5.      0.
3632          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3633          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3634          KK   AFR2K
3635          KM        ADD HYDROGRAPHS AT RCP228A
3636          HC       2   68.77

3637          KK   R228A
3638          KM        RIVER ROUTE RCP228A TO RCP245
3639          RS      11             -1       0
3640          RC    .035    .035    .035   10560   .0025
3641          RX    1000    1001    1002    1042    2042    2082    2083    2084
3642          RY    1066    1066    1066    1050    1050    1066    1066    1066
              * Sam Hanna 2/1/01
              * KK2R228A
              * KM        THIS IS AN ARTIFICALLY DIVERTED HYDROGRAPH TO BE RETRIEVED LATER
              * DTDR228A
              * DI      0    1000    2000    4000    6000    8000
              * DQ      0    1000    2000    4000    6000    8000
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 3  WITH NEW SOILS*****
              * ************************************************************************
              *
              * 1D10 AND 2D10 ARE MODIFICATIONS PER FLOODPLAIN ANALYSIS BY URS

3643          KK    1D10
3644          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3645          DR  1DI188

3646          KK    2D10
3647          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3648          DR  2DI188

3649          KK   1I188
3650          KM   ADD ORIGINAL DIVERT 2DI188 (DI188) WITH ADDED DIVERT 1DI188
3651          HC       2   11.08

3652          KK     R10
3653          KM        ROUTE FLOW AT CP10 TO CP188
3654          RS       1             -1       0
3655          RC     .06     .04     .06    1000   .0044
3656          RX    1000    1050    1150    1240    1300    1350    1400    1405
3657          RY    1228  1227.5    1226    1225    1225    1226  1227.5    1228
              *
1                                          HEC-1 INPUT                                                    PAGE 89

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

3658          KK     188
3659          KM        RUNOFFF HYDROGRAPH FROM SUB-BASIN 188
3660          BA     .19
3661          LG     .35     .33    4.44     .34     .00
3662          UI     29.    120.    179.    274.    326.    221.    152.     76.     44.     24.
3663          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
3664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3665          KK   CP188
3666          KM        ADD HYDROGRAPHS AT CP188
```

```
3667          HC       2   11.08

3668          KK    R188
3669          KM        ROUTE FLOW FROM CP188 TO CP207A
3670          RS       3              -1
3671          RC    .025    .022    .025    5460   .0079
3672          RX    1000    1100    1200    1210    1230    1335    1355    1510
3673          RY    1240    1214    1212    1210    1210    1212    1214    1240
              *

3674          KK    207A
3675          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207A
3676          BA     .50
3677          LG     .35     .34    4.15     .40     .00
3678          UI     53.    124.    244.    314.    400.    593.    595.    448.    350.    270.
3679          UI    176.     93.     76.     53.     20.     16.     16.     16.      0.      0.
3680          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3681          KK  CP207A
3682          KM        ADD HYDROGRAPHS AT CP207A
3683          HC       2   11.58

3684          KK   R207A
              * KO     1                                  21
3685          KM        ROUTE FLOW FROM CP207A TO CP214
3686          RS       2              -1
3687          RC    .022    .022    .025    3200   .0069
3688          RX    1000    1020    1030    1045    1065    1085    1325    1490
3689          RY    1179    1176    1172    1170    1170    1172    1174    1176
              *

3690          KK     214
              * KO     1                                  21
3691          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 214
3692          BA     .16
3693          LG     .35     .35    4.16     .40     .00
3694          UI     22.     81.    127.    176.    267.    201.    146.    100.     47.     31.
3695          UI     18.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3696          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

3697          KK   CP214
              * KO     1                                  21
3698          KM        ADD HYDROGRAPHS AT CP214
3699          HC       2   11.74

3700          KK    R214
3701          KM        ROUTE FLOW FROM CP214 TO CP215
3702          RS       1              -1
3703          RC    .022    .022    .025    2250   .0049
3704          RX    1000    1010    1030    1045    1070    1150    1190    1310
3705          RY    1061    1060    1058    1056    1056    1058    1060    1062
              *

3706          KK    215A
3707          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215A
3708          BA     .45
3709          LG     .35     .33    4.32     .37     .00
3710          UI     47.    103.    209.    271.    341.    487.    551.    410.    325.    252.
3711          UI    178.     95.     77.     47.     29.     14.     14.     14.     14.      0.
3712          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3713          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3714          KK   R215A
3715          KM        ROUTE FLOW FROM CP215A TO CP215
3716          RS       2              -1
3717          RC    .025     .02    .025    2800   .0046
3718          RX    1000    1190    1425    1435    1455    1478    1479    1480
3719          RY    1158    1156    1154    1152    1152    1159    1159    1159
              *

3720          KK     215
3721          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215
3722          BA     .35
3723          LG     .35     .34    4.66     .31     .00
3724          UI     39.     95.    181.    233.    303.    457.    398.    306.    235.    177.
3725          UI     98.     65.     45.     29.     12.     12.     12.     12.      0.      0.
3726          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *
```

```
* THE FOLLOWING DIVERSIONS ARE SPECIFIC TO EXISTING SUB BASIN BOUDNARIES AS
* WELL AS THE 100-YEAR 24-HOUR STORM EVENT.  ANY FUTURE  MODELS BASED
* ON THIS ADMP UPDATE MUST RE-EVALUATE ALL OF THE DIVERSIONS ASSOCIATED WITH
* PERRYVILLE ROAD AND 185TH AVENUE FOLLOWING BELOW.
*

KK   1I215
KM        ADD HYDROGRAPHS AT CP215
HC       2     .80

KK   2I215
KM        ADD HYDROGRAPHS AT CP215
HC       2   12.54
```



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

KK   3I215
KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
DT  1DI216
DI       0    1297    2784    4733
DQ       0       0    1559    2741

KK   4I215
KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
DT  2DI216
DI       0      52    1225    1992
DQ       0       0     722    1150

KK   5I215
KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
DT  3DI216
DI       0     190     503     842
DQ       0       0       0       0

KK   CP215
KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
DT  4DI216
DI       0      51     516     842
DQ       0       0     154     194

KK    R215
KM        ROUTE FLOW FROM CP215 TO CP233
RS       3                -1
RC     .02     .02    .025    5280   .0032
RX    1000    1010    1020    1030    1050    1070    1190    1540
RY    1043    1042    1040    1038    1038    1040    1042    1044
*

KK     233
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 233
BA     .50
LG     .35     .35    4.10     .41     .00
UI     49.     94.    206.    267.    331.    430.    604.    483.    386.    306.
UI    242.    163.     86.     76.     49.     31.     15.     15.     15.     15.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   CP233
KM        ADD HYDROGRAPHS AT CP233
HC       2   13.04

KK    R233
KM        ROUTE FLOW FROM CP233 TO CP234
RS       2                -1
RC    .075    .035    .035    2640   .0057
RX    1000    1200    1540    1930    1965    1980    2009    2010
RY    1031    1030    1028    1026    1026    1028    1029    1029
*
```



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

KK     216
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 216
BA     .51
LG     .46     .09    4.10     .63     .00
UI     26.     26.     27.     88.    108.    128.    145.    160.    180.    203.
UI    240.    304.    342.    285.    246.    220.    198.    172.    154.    134.
UI    117.     89.     63.     47.     44.     43.     27.     26.     26.      9.
```

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                                                                                                LABCAR
3783          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
3784          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * SPLIT SUB BASIN 216 INTO OVERLAND FLOW SEGMENTS FOR COMBINATION AT EACH DIVERT
              * LOCATION ALONG 183RD AVENUE

3785          KK  1D216I
3786          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3787          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3788          DT  10L216
3789          DI       0      50    1000
3790          DQ       0      50      50

3791          KK  2D216I
3792          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3793          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3794          DT  20L216
3795          DI       0      50    1000
3796          DQ       0      50      50

3797          KK  3D216I
3798          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3799          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3800          DT  30L216
3801          DI       0      50    1000
3802          DQ       0      50      50

3803          KK  4D216I
3804          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3805          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3806          DT  40L216
3807          DI       0      50    1000
3808          DQ       0      50      50

3809          KK  5D216I
3810          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3811          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3812          DT  50L216
3813          DI       0      50    1000
3814          DQ       0      50      50

3815          KK   1D215
3816          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3817          DR  1DI216
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE
1                                          HEC-1 INPUT                                          PAGE 93

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

3818          KK  1DI186
3819          KM   ASSUME APPROX. 17% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3820          KM   183RD AVENUE
3821          DT   3D183
3822          DI       0    1560    2500
3823          DQ       0    1285    2060

3824          KK   1I216
3825          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3826          HC       2   13.58

3827          KK   1D216
3828          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3829          DT  1DI217
3830          DI       0      72     325     553    1560    1600
3831          DQ       0       0     142     282     900     930

3832          KK   1216I
3833          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3834          DR  10L216

3835          KK  1DI183
3836          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3837          DR   3D183

3838          KK   2I216
3839          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3840          HC       3   13.58
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3841          KK  2DI186
3842          KM   ASSUME APPROX. 28% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3843          KM   183RD AVENUE
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```
3844          DT   4D183
3845          DI       0    1285    2500
3846          DQ       0     925    1800

3847          KK   2D216
3848          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3849          DT  2DI217
3850          DI       0     132     556     945    1560    1600
3851          DQ       0       0     237     414     680     690

3852          KK   2216I
3853          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3854          DR  2OL216

3855          KK  2DI183
3856          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3857          DR   4D183
```



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

3858          KK   3I216
3859          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3860          HC       3   13.58
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3861          KK  3DI186
3862          KM   ASSUME APPROX. 41% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3863          KM   183RD AVENUE
3864          DT   5D183
3865          DI       0     925    2500
3866          DQ       0     380    1030

3867          KK   3D216
3868          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3869          DT  3DI217
3870          DI       0     800     831    1413    1560    1600
3871          DQ       0       0       7      55      58      60

3872          KK   3216I
3873          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3874          DR  3OL216

3875          KK  3DI183
3876          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3877          DR   5D183

3878          KK   4I216
3879          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3880          HC       3   13.58

3881          KK   2D215
3882          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3883          DR  2DI216

3884          KK   2I216
3885          KM   COMBINE WITH FLOWS FROM THE WEST AT 183RD AVE.
3886          HC       2   13.58

3887          KK   3D215
3888          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3889          DR  3DI216

3890          KK   3I216
3891          KM   COMBINE WITH FLOW FROM WEST JUST US OF CP216
3892          HC       2   13.58

3893          KK   4D216
3894          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3895          DT  4DI217
3896          DI       0    1008    2008    3413
3897          DQ       0       0     151     457
```



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

3898          KK   4D215
3899          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3900          DR  4DI216
```

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3901          KK   5I216
3902          KM   COMBINE WITH FLOW FROM WEST JUST US CP216
3903          HC       2   13.58

3904          KK   4216I
3905          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3906          DR  4OL216

3907          KK   6I216
3908          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3909          HC       2   13.58

3910          KK   5D216
3911          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3912          DT  5DI217
3913          DI       0     308    2532    4304
3914          DQ       0       0     911    1538

3915          KK   5216I
3916          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3917          DR  5OL216

3918          KK   7I216
3919          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3920          HC       2   13.58

3921          KK   6D216
3922          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3923          DT  6DI217
3924          DI       0     123    1247    2766
3925          DQ       0       0     424     980
              * KK CP216
              * KM COMBINE HYDROGRAPHS AT CP216
              * HC     2   13.58
              * KK RD215
              * KM ROUTE FLOW PERRYVILLE OVERLAND THROUGH SUB 216
              * RS   4.3          -1
              * RC 0.035   0.035   0.035    4745  0.0053
              * RX     0     290     355     452     524     568     750     868
              * RY  1163    1162    1160    1160    1162    1162    1160  1162.5

3926          KK    R216
3927          KM        ROUTE FLOW FROM CP216 TO CP234
3928          RS       4          -1
3929          RC     .02     .02     .04    5280   .0044
3930          RX    1000    1015    1020    1035    1070    1080    1140    1400
3931          RY    1031    1030    1028    1026    1026    1028    1030    1032
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3932          KK     234
3933          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 234
3934          BA     .53
3935          LG     .50     .00    4.05     .72     .00
3936          UI     22.     22.     22.     35.     74.     87.    103.    113.    124.    134.
3937          UI    148.    164.    179.    214.    259.    289.    250.    219.    197.    181.
3938          UI    167.    149.    136.    122.    110.    100.     82.     63.     43.     39.
3939          UI     37.     36.     30.     22.     22.     22.     11.      7.      7.      7.
3940          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
3941          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3942          KK   1I234
3943          KM       ADD HYDROGRAPHS AT CP234
3944          HC       2    1.04

3945          KK   CP234
3946          KM       ADD HYDROGRAPHS AT CP234
3947          HC       2   14.08

3948          KK    D234
3949          KM        DIVERT FROM CP234 TO CP248
3950          DT   1D248
3951          DI       0     290     677    3521   13393
3952          DQ       0       0     174    1824   10224

3953          KK    R234
3954          KM        ROUTE REMAINDER FROM CP234 TO CP235
3955          RS       3          -1
3956          RC     .06    .025    .025    2640   .0023
```

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                                                                                LABCAR
3957          RX    1000    1460    1900    1915    1930    1958    1959    1960
3958          RY    1018    1016    1016    1014    1014    1015    1015    1015
              *

3959          KK     207
3960          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207
3961          BA    1.00
3962          LG     .50     .00    4.20     .66     .00
3963          UI     39.     39.     39.     39.    125.    143.    169.    187.    209.    222.
3964          UI    241.    263.    291.    316.    374.    445.    510.    454.    399.    358.
3965          UI    329.    306.    280.    252.    231.    210.    191.    174.    145.    111.
3966          UI     83.     68.     66.     63.     63.     40.     39.     39.     39.     14.
3967          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
3968          UI     12.     12.      0.      0.      0.      0.      0.      0.      0.      0.
3969          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3970          KK    D207
3971          KM        DIVERT FROM CP207 TO CP208
3972          DT   2D208
3973          DI       0    1709   12182
3974          DQ       0    1314    6607
1                                          HEC-1 INPUT                                                    PAGE 97

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

3975          KK    R207
3976          KM        ROUTE REMAINDER FROM CP207 TO CP217
3977          RS       8              -1
3978          RC    .035    .035    .075    5280   .0057
3979          RX    1000    1001    1002    1015    1060    1490    1740    2250
3980          RY    1151    1151    1151    1150    1150    1152    1154    1156
              *

3981          KK     217
3982          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 217
3983          BA     .49
3984          LG     .50     .00    4.66     .53     .00
3985          UI     22.     22.     22.     54.     81.     98.    112.    124.    135.    150.
3986          UI    167.    188.    233.    278.    278.    235.    207.    188.    172.    152.
3987          UI    137.    122.    109.     95.     73.     54.     40.     38.     37.     31.
3988          UI     22.     22.     22.      7.      7.      7.      7.      7.      7.      7.
3989          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3990          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3991          KK   1D216
3992          KM   RETURN DIVERT EAST AT 183RD AVE
3993          DR  1DI217

3994          KK   2I216
3995          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
3996          HC       2   12.54

3997          KK   2D216
3998          KM   RETURN DIVERT EAST AT 183RD AVE
3999          DR  2DI217

4000          KK   3I216
4001          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4002          HC       2   12.54

4003          KK   3D216
4004          KM   RETURN DIVERT EAST AT 83RD AVE
4005          DR  3DI217

4006          KK   4I216
4007          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4008          HC       2   12.54

4009          KK   4D216
4010          KM   RETURN DIVERT EAST AT 83RD AVE
4011          DR  4DI217

4012          KK   5I216
4013          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4014          HC       2   12.54
1                                          HEC-1 INPUT                                                    PAGE 98

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

4015          KK   5D216
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4016          KM   RETURN DIVERT EAST AT 83RD AVE
4017          DR  5DI217

4018          KK   6I216
4019          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4020          HC       2   12.54

4021          KK   6D216
4022          KM   RETURN DIVERT EAST AT 83RD AVE
4023          DR  6DI217

4024          KK   7I216
4025          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4026          HC       2   12.54

4027          KK   RD216
4028          KM   ROUTE FLOW 183RD OVERLAND THROUGH SUB 217
4029          RS     2.8            -1
4030          RC   0.035   0.035   0.035  4949.7  0.0057
4031          RX       0     849  1113.6    1552    1981    2488    2616    2990
4032          RY    1156    1154    1153    1153  1151.5    1152    1154    1156

4033          KK   CP217
4034          KM       ADD HYDROGRAPHS AT CP217
4035          HC       2   14.03

4036          KK    D217
4037          KM        DIVERT FROM CP217 TO CP218
4038          DT   DI218
4039          DI       0      90     884    6576   28127
4040          DQ       0      51     163    1840   10674

4041          KK    R217
4042          KM        ROUTE REMAINDER FROM CP217 TO CP235
4043          RS       7            -1
4044          RC     .02     .03    .075    5280   .0036
4045          RX    1000    1020    1035    1040    1050    1300    1640    1790
4046          RY    1015    1014    1015    1014    1014    1016    1018    1019
              *

4047          KK     235
4048          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 235
4049          BA     .47
4050          LG     .50     .00    4.00     .74     .00
4051          UI     19.     19.     19.     28.     63.     74.     89.     98.    106.    115.
4052          UI    126.    140.    152.    178.    216.    251.    228.    198.    177.    162.
4053          UI    150.    135.    122.    112.     99.     91.     79.     62.     49.     34.
4054          UI     33.     31.     31.     21.     19.     19.     19.      6.      6.      6.
4055          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
4056          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4057          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

4058          KK   1I235
4059          KM       ADD HYDROGRAPHS AT CP235
4060          HC       2    1.96

4061          KK   CP235
4062          KM       ADD HYDROGRAPHS AT CP235
4063          HC       2   16.04

4064          KK    D235
4065          KM        DIVERT FROM CP235 TO CP248
4066          DT   2D248
4067          DI       0     158     313    4490    9737
4068          DQ       0       0     155    2380    5077

4069          KK    R235
4070          KM        ROUTE REMAINDER FROM CP235 TO CP236
4071          RS       5            -1
4072          RC     .04     .02     .02    5280   .0051
4073          RX    1000    1640    1660    1675    1685    1778    1779    1780
4074          RY    1097    1094    1095    1094    1094    1095    1095    1095

4075          KK    D191
4076          KM        RETURN DIVERTED HYDROGRAPH AT CP291 IN THE WTPHS1 HEC-1 MODEL
4077          DR   1D208

4078          KK    R191
```

```
KM        ROUTE FLOW FROM CP191 TO CP208
RS       5          -1        0
RC    .022    .022    .050    5280   .0040
RX    1000    1001    1002    1045    1110    1130    1160    1890
RY    1143    1143    1143    1142    1142    1143  1141.5    1150
*

KK     208
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 208
BA    1.00
LG     .50     .00    4.20     .66     .00
UI     40.     40.     40.     57.    133.    156.    188.    206.    224.    243.
UI    265.    294.    320.    371.    453.    523.    489.    424.    379.    346.
UI    321.    290.    262.    239.    215.    195.    172.    137.    110.     72.
UI     72.     67.     67.     50.     40.     40.     40.     17.     12.     12.
UI     12.     12.     12.     12.     12.     12.     12.     12.     12.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   1I208
KM        ADD HYDROGRAPHS AT CP208
HC       2   13.18
```

1 HEC-1 INPUT PAGE100

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

KK    D207
KM        RETURN DIVERT AT CP207
DR   2D208

KK    R207
KM        ROUTE FLOW FROM CP207 TO CP208
RS       8          -1
RC    .075    .035    .035    5280   .0059
RX    1000    1001    1350    2000    2020    2038    2039    2040
RY    1056    1056    1054    1052    1052    1053    1053    1053

KK   CP208
KM        ADD HYDROGRAPHS AT CP208
HC       2   14.18

KK   1D208
KM        DIVERT FROM CP208 TO CP219
DT   1D219
DI       0     599    5129    9299
DQ       0     406    1039    1295

KK   2D208
KM        DIVERT FROM CP208 TO CP209A
DT  DI209A
DI       0     193    4090    8004
DQ       0     193    4066    7610

KK    R208
KM        ROUTE REMAINDER FROM CP208 TO CP218
RS      13          -1
RC    .025    .025    .035    5280   .0047
RX    1000    1001    1002    1010    1040    1055    1100    2010
RY    1123    1123    1123    1122    1122    1125    1124    1130
*

KK     218
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 218
BA    1.00
LG     .50     .00    4.05     .72     .00
UI     39.     39.     39.     41.    128.    145.    172.    191.    212.    225.
UI    246.    269.    295.    325.    385.    463.    514.    447.    393.    356.
UI    327.    304.    275.    249.    229.    206.    188.    168.    136.    112.
UI     71.     69.     65.     64.     57.     39.     39.     39.     31.     12.
UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
UI     12.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   1I218
KM        ADD HYDROGRAPHS AT CP218
HC       2   15.18
```

1 HEC-1 INPUT PAGE101

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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
KK    D217
KM        RETURN DIVERT AT CP217
DR   DI218

KK    R217
KM        ROUTE FLOW FROM CP217 TO CP218
RS      10              -1
RC    .075    .035    .035    5280   .0047
RX    1000    1190    1650    1980    2030    2048    2049    2050
RY    1123    1122    1120    1118    1118    1119    1119    1119

KK   CP218
KM        ADD HYDROGRAPHS AT CP218
HC       2   28.21

KK   1D218
KM        DIVERT FROM CP218 TO CP237
DT   DI237
DI       0      68    1086   10670
DQ       0      68     664    2533

KK   2D218
KM        DIVERT FROM CP218 TO CP219
DT   2D219
DI       0       0     422    8137
DQ       0       0      99    2461

KK    R218
KM        ROUTE REMAINDER FROM CP218 TO CP236
RS       5              -1
RC     .02     .02    .075    5280   .0040
RX    1000    1001    1002    1020    1090    1100    1210    1720
RY    1097    1097    1097    1096    1096    1099    1098    1102
*

KK     236
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 236
BA    1.00
LG     .50     .00    4.44     .59     .00
UI     38.     38.     38.     38.    113.    137.    160.    180.    199.    214.
UI    229.    251.    276.    297.    343.    419.    470.    474.    411.    366.
UI    334.    310.    288.    261.    236.    220.    196.    181.    161.    132.
UI    108.     70.     67.     64.     62.     60.     38.     38.     38.     38.
UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
UI     12.     12.     12.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   1I236
KM        ADD HYDROGRAPHS AT CP236
HC       2   16.67
```

1 HEC-1 INPUT PAGE102

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

KK   CP236
KM        ADD HYDROGRAPHS AT CP236
HC       2   26.34

KK   1D236
KM        DIVERT FROM CP236 TO CP249
DT   DI249
DI       0     236     411    6597   30351
DQ       0       0      38    2223    8777

KK   2D236
KM        DIVERT FROM CP236 TO CP250
DT   1D250
DI       0     236     373    4374   21574
DQ       0       0     124    2251    8636

KK    R236
KM        ROUTE REMAINDER FROM CP236 TO CP237
RS       2              -1
RC     .02     .02     .02    2640   .0038
RX    1000    1070    1100    1120    1150    1178    1179    1180
RY    1079    1075    1082    1076    1076    1077    1077    1077
*

KK    209A
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 209A
BA     .50
```

```
4204          LG     .50     .00    4.10     .70     .00
4205          UI     22.     22.     22.     42.     75.     89.    103.    115.    124.    137.
4206          UI    152.    166.    191.    238.    275.    260.    224.    199.    181.    167.
4207          UI    149.    134.    121.    108.     99.     80.     62.     40.     38.     36.
4208          UI     35.     26.     22.     22.     20.      7.      7.      7.      7.      7.
4209          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
4210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4211          KK   1D208
4212          KM        RETURN DIVERT AT CP208
4213          DR  DI209A

4214          KK    R208
4215          KM        ROUTE FLOW FROM CP208 TO CP209A
4216          RS      2       -1
4217          RC     .75     .03     .03    2640   .0045
4218          RX    1000    1490    1890    1950    1970    1998    1999    2000
4219          RY    1130    1128    1126    1124    1124    1125    1125    1125

4220          KK  CP209A
4221          KM        ADD HYDROGRAPHS AT CP209A
4222          HC      2   14.68
```



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

4223          KK  1D209A
4224          KM        DIVERT FROM CP209A TO CP220
4225          DT   1D220
4226          DI      0      57    5215   28650
4227          DQ      0      39    1907    3775

4228          KK  2D209A
4229          KM        DIVERT FROM CP209A TO CP209
4230          DT   2D209
4231          DI      0      18    3308   24875
4232          DQ      0       0     900   10854

4233          KK   R209A
4234          KM        ROUTE REMAINDER FROM CP209A TO CP219
4235          RS      7       -1
4236          RC    .035    .035    .075    5280   .0045
4237          RX    1000    1001    1002    1010    1200    1500    1880    2100
4238          RY    1113    1113    1113    1112    1112    1114    1116    1117

4239          KK   2D208
4240          KM        RETURN DIVERT AT CP208
4241          DR   1D219

4242          KK    R208
4243          KM        ROUTE FLOW FROM CP208 TO CP219
4244          RS     22       -1
4245          RC    .075    .075    .075    6070   .0059
4246          RX    1000    1001    1002    1270    2570    2698    2699    2700
4247          RY    1115    1115    1115    1114    1114    1115    1115    1115
              *

4248          KK     219
4249          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 219
4250          BA     .50
4251          LG     .50     .00    4.05     .72     .00
4252          UI     22.     22.     22.     45.     77.     92.    105.    119.    128.    140.
4253          UI    158.    173.    202.    247.    289.    253.    220.    196.    180.    164.
4254          UI    146.    132.    119.    106.     93.     72.     55.     39.     38.     36.
4255          UI     33.     22.     22.     22.     12.      7.      7.      7.      7.      7.
4256          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
4257          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4258          KK   1I219
4259          KM        ADD HYDROGRAPHS AT CP219
4260          HC      2   14.68

4261          KK   2I219
4262          KM        ADD HYDROGRAPHS AT CP219
4263          HC      2   15.18
```



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

4264          KK   2D218
```

```
4265          KM        RETURN DIVERT AT CP218
4266          DR   2D219

4267          KK    R218
4268          KM        ROUTE FLOW FROM CP218 TO CP219
4269          RS      12          -1
4270          RC    .075     .04     .04    2640   .0045
4271          RX    1000    1110    1290    1600    2050    2108    2109    2110
4272          RY    1101    1100    1098    1096    1096    1097    1097    1097

4273          KK   CP219
4274          KM        ADD HYDROGRAPHS AT CP219
4275          HC       2   29.21

4276          KK   1D219
4277          KM        DIVERT FROM CP219 TO CP238
4278          DT   DI238
4279          DI       0      70    1410   16774
4280          DQ       0      68     990   10452

4281          KK   2D219
4282          KM        DIVERT FROM CP219 TO CP220
4283          DT   2D220
4284          DI       0       2     420    6322
4285          DQ       0       0     174    3073

4286          KK    R219
4287          KM        ROUTE REMAINDER FROM CP219 TO CP237
4288          RS      14          -1
4289          RC    .035    .035    .075    5280   .0036
4290          RX    1000    1001    1002    1020    1300    1820    2099    2100
4291          RY    1087    1087    1087    1086    1086    1088    1089    1089

4292          KK   1D218
4293          KM        RETURN DIVERT AT CP218
4294          DR   DI237

4295          KK    R218
4296          KM        ROUTE FLOW FROM CP218 TO CP237
4297          RS      14          -1
4298          RC    .035    .035    .075    6700   .0046
4299          RX    1000    1001    1002    1020    1300    1820    2099    2100
4300          RY    1087    1087    1087    1086    1086    1088    1089    1089
              *

4301          KK     237
4302          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 237
4303          BA     .50
4304          LG     .50     .00    4.90     .51     .00
4305          UI     20.     20.     20.     23.     65.     74.     88.     98.    108.    115.
4306          UI    126.    139.    151.    169.    204.    241.    255.    219.    195.    176.
4307          UI    162.    150.    135.    123.    113.    100.     93.     80.     62.     49.
4308          UI     35.     35.     32.     32.     23.     20.     20.     20.      9.      6.
```



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

4309          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
4310          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4311          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4312          KK   1I237
4313          KM        ADD HYDROGRAPHS AT CP237
4314          HC       2   16.17

4315          KK   2I237
4316          KM        ADD HYDROGRAPHS AT CP237
4317          HC       2   17.17

4318          KK   CP237
4319          KM        ADD HYDROGRAPHS AT CP237
4320          HC       2   27.84

4321          KK   1D237
4322          KM        DIVERT FROM CP237 TO CP250
4323          DT   2D250
4324          DI       0     292     346     629    3340   24038
4325          DQ       0       0       0     103    1577   11878

4326          KK   2D237
4327          KM        DIVERT FROM CP237 TO CP250A
4328          DT  1D250A
```

```
4329          DI       0     292     346     526    1763   12160
4330          DQ       0       0      54     203     974    3738

4331          KK    R237
4332          KM        ROUTE REMAINDER FROM CP237 TO CP238
4333          RS       1              -1
4334          RC     .04     .02     .02    2640   .0049
4335          RX    1000    1545    1560    1570    1585    1618    1619    1620
4336          RY    1069    1066    1067  1062.5  1062.5    1067    1067    1067

4337          KK   1D192
4338          KM        RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4339          DR   1D209

4340          KK    R192
4341          KM        ROUTE FLOW FROM CP192 TO CP209
4342          RS       5              -1       0
4343          RC    .035    .035     .15    5280   .0045
4344          RX    1000    1001    1002    1015    1200    1470    1840    2300
4345          RY    1111    1111    1111    1110    1110    1112    1114    1116
              *

4346          KK     209
4347          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 209
4348          BA     .50
4349          LG     .50     .00    4.58     .55     .00
4350          UI     22.     22.     22.     51.     80.     97.    111.    123.    134.    148.
4351          UI    166.    183.    221.    273.    289.    244.    215.    193.    178.    158.
4352          UI    141.    128.    113.    103.     82.     64.     40.     40.     37.     37.
4353          UI     23.     22.     22.     14.      7.      7.      7.      7.      7.      7.
1                                          HEC-1 INPUT                                          PAGE106

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

4354          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
4355          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4356          KK   1I209
4357          KM        ADD HYDROGRAPHS AT CP209
4358          HC       2   13.68

4359          KK  2D209A
4360          KM        RETURN DIVERT AT CP209A
4361          DR   2D209

4362          KK   R209A
4363          KM        ROUTE FLOW FROM CP209A TO CP209
4364          RS       7              -1
4365          RC    .075    .035    .035    2640   .0057
4366          RX    1000    1240    1700    1980    1990    3028    3029    3030
4367          RY    1117    1116    1114    1112    1112    1113    1113    1113

4368          KK   CP209
4369          KM        ADD HYDROGRAPHS AT CP209
4370          HC       2   16.18

4371          KK   1D209
4372          KM        DIVERT FROM CP209 TO CP221
4373          DT   1D221
4374          DI       0      39    3983   16787
4375          DQ       0      34    1666    5085

4376          KK   2D209
4377          KM        DIVERT FROM CP209 TO CP210
4378          DT   2D210
4379          DI       0       5    2317   11702
4380          DQ       0       0     703    5354

4381          KK    R209
4382          KM        ROUTE REMAINDER FROM CP209 TO CP220
4383          RS       7              -1
4384          RC    .035    .035    .075    5280   .0040
4385          RX    1000    1001    1002    1015    1180    1560    1820    2050
4386          RY    1091    1091    1091    1090    1090    1092    1094    1095

4387          KK  1D209A
4388          KM        RETURN DIVERT AT CP209A
4389          DR   1D220

4390          KK   R209A
4391          KM        ROUTE FLOW FROM CP209A TO CP220
4392          RS      12              -1
```

```
4393          RC    .075    .075    .075    6230   .0058
4394          RX    1000    1001    1002    1090    1280    1298    1299    1300
4395          RY    1140    1107    1107    1106    1106    1107    1107    1140
              *
```



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

4396          KK     220
4397          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 220
4398          BA     .50
4399          LG     .50     .00    4.20     .66     .00
4400          UI     22.     22.     22.     41.     74.     89.    103.    115.    124.    136.
4401          UI    151.    166.    189.    237.    272.    262.    224.    199.    182.    167.
4402          UI    150.    134.    122.    109.    100.     81.     62.     42.     38.     36.
4403          UI     35.     27.     22.     22.     21.      7.      7.      7.      7.      7.
4404          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
4405          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4406          KK   1I220
4407          KM       ADD HYDROGRAPHS AT CP220
4408          HC       2   15.18

4409          KK   2I220
4410          KM       ADD HYDROGRAPHS AT CP220
4411          HC       2   16.68

4412          KK   2D219
4413          KM       RETURN DIVERT AT CP219
4414          DR   2D220

4415          KK    R219
4416          KM       ROUTE FLOW FROM CP219 TO CP220
4417          RS       3          -1
4418          RC    .075    .020    .020    2640   .0045
4419          RX    1000    1460    1670    1700    1730    1768    1769    1770
4420          RY    1088    1085    1087    1080    1080    1087    1087    1087

4421          KK   CP220
4422          KM       ADD HYDROGRAPHS AT CP220
4423          HC       2   30.71

4424          KK   1D220
4425          KM       DIVERT FROM CP220 TO CP239
4426          DT   DI239
4427          DI       0     735    9080   34764
4428          DQ       0     537    3765    9314

4429          KK   2D220
4430          KM       DIVERT FROM CP220 TO CP221
4431          DT   2D221
4432          DI       0     198    5315   25450
4433          DQ       0     174    4011   17035

4434          KK    R220
4435          KM       ROUTE REMAINDER FROM CP220 TO CP238
4436          RS      15          -1
4437          RC    .035    .035    .075    5280   .0038
4438          RX    1000    1001    1002    1020    1150    1670    1869    1870
4439          RY    1033    1033    1033    1032    1032    1034    1036    1036
```



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

4440          KK   1D219
4441          KM       RETURN DIVERT AT CP219
4442          DR   DI238

4443          KK    R219
4444          KM       ROUTE FLOW FROM CP219 TO CP238
4445          RS       8          -1
4446          RC    .035    .035    .075    6230   .0051
4447          RX    1000    1001    1002    1020    1150    1670    1869    1870
4448          RY    1033    1033    1033    1032    1032    1034    1036    1036
              *

4449          KK     238
4450          KM       RUNOFF HYDROGRAPH FROM SUB-BASIN 238
4451          BA     .50
4452          LG     .50     .00    4.90     .47     .00
```

```
                                                                                LABCAR
4453          UI     21.     21.     21.     34.     70.     83.     98.    108.    118.    127.
4454          UI    140.    156.    170.    204.    247.    273.    234.    206.    185.    170.
4455          UI    157.    140.    127.    115.    104.     93.     76.     60.     39.     37.
4456          UI     35.     34.     27.     21.     21.     21.      9.      6.      6.      6.
4457          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
4458          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4459          KK   1I238
4460          KM        ADD HYDROGRAPHS AT CP238
4461          HC       2   17.17

4462          KK   2I238
4463          KM        ADD HYDROGRAPHS AT CP238
4464          HC       2   18.67

4465          KK   CP238
4466          KM        ADD HYDROGRAPHS AT CP238
4467          HC       2   30.34

4468          KK   1D238
4469          KM        DIVERT FROM CP238 TO CP250A
4470          DT  2D250A
4471          DI       0     180     568    2711    8584   18252
4472          DQ       0       0       0     184     837    2617

4473          KK   2D238
4474          KM        DIVERT FROM CP238 TO CP251
4475          DT   1D251
4476          DI       0     180     568    2527    7747   15635
4477          DQ       0       0       0     522    2262    4829

4478          KK    R238
4479          KM        ROUTE REMAINDER FROM CP238 TO CP239
4480          RS       4              -1
4481          RC    .075     .02     .02    2640   .0023
4482          RX    1000    1230    1780    1790    1800    1810    1829    1830
4483          RY    1062    1060    1058    1056    1056    1058    1059    1059
```

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

4484          KK   2D192
4485          KM        RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4486          DR   1D210

4487          KK    R192
4488          KM        ROUTE FLOW FROM CP192 TO CP210
4489          RS       7              -1       0
4490          RC     .15     .15     .15    5900   .0054
4491          RX    1000    1001    1002    1050    2400    2548    2549    2550
4492          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5
              *

4493          KK     210
4494          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 210
4495          BA     .46
4496          LG     .50     .00    4.66     .53     .00
4497          UI     20.     20.     20.     42.     71.     85.     97.    110.    118.    130.
4498          UI    146.    160.    188.    230.    266.    232.    202.    180.    165.    151.
4499          UI    133.    121.    108.     97.     84.     65.     49.     36.     35.     33.
4500          UI     29.     20.     20.     20.      9.      6.      6.      6.      6.      6.
4501          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
4502          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4503          KK   1I210
4504          KM        ADD HYDROGRAPHS AT CP210
4505          HC       2   13.64

4506          KK   2D209
4507          KM        RETURN DIVERT AT CP209
4508          DR   2D210

4509          KK    R209
4510          KM        ROUTE FLOW FROM CP209 TO CP210
4511          RS       6              -1
4512          RC    .075    .035    .035    2560   .0030
4513          RX    1000    1001    1630    2120    2250    2268    2269    2270
4514          RY    1102    1102    1100    1098    1098    1099    1099    1099

4515          KK   CP210
4516          KM        ADD HYDROGRAPHS AT CP210
```

```
4517          HC       2   16.58

4518          KK    R210
4519          KM        ROUTE FLOW FROM CP210 TO CP221
4520          RS      14             -1
4521          RC    .035    .035    .075    5450   .0033
4522          RX    1000    1001    1002    1020    1280    1880    2469    2470
4523          RY    1083    1083    1083    1082    1082    1084    1086    1088
1                                           HEC-1 INPUT                                                          PAGE110

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

4524          KK   1D209
4525          KM        RETURN DIVERT AT CP209
4526          DR   1D221

4527          KK    R209
4528          KM        ROUTE FLOW FROM CP209 TO CP221
4529          RS      22             -1
4530          RC    .075    .075    .075    5910   .0044
4531          RX    1000    1001    1002    1120    2150    2278    2279    2280
4532          RY    1091    1091    1091    1090    1090    1091    1091    1091
              *

4533          KK     221
4534          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 221
4535          BA     .48
4536          LG     .50     .00    4.90     .47     .00
4537          UI     20.     20.     20.     36.     69.     82.     96.    106.    116.    126.
4538          UI    139.    154.    172.    210.    250.    258.    220.    194.    176.    162.
4539          UI    147.    132.    120.    107.     97.     84.     66.     50.     36.     35.
4540          UI     33.     33.     20.     20.     20.     15.      6.      6.      6.      6.
4541          UI      6.      6.      6.      6.      6.      6.      6.      0.      0.      0.
4542          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4543          KK   1I221
4544          KM        ADD HYDROGRAPHS AT CP221
4545          HC       2   16.66

4546          KK   2I221
4547          KM        ADD HYDROGRAPHS AT CP221
4548          HC       2   17.06

4549          KK   2D220
4550          KM        RETURN DIVERT AT CP220
4551          DR   2D221

4552          KK    R220
4553          KM        ROUTE FLOW FROM CP220 TO CP221
4554          RS       4             -1
4555          RC    .075    .035    .035    2200   .0023
4556          RX    1000    1001    1470    1870    2160    2178    2179    2180
4557          RY    1082    1082    1080    1078    1078    1081    1081    1081

4558          KK   CP221
4559          KM        ADD HYDROGRAPHS AT CP221
4560          HC       2   31.65

4561          KK    R221
4562          KM        ROUTE FLOW FROM CP221 TO CP239
4563          RS      20             -1
4564          RC    .075    .075    .075    5750   .0032
4565          RX    1000    1001    1002    1320    2850    2998    2999    2999
4566          RY    1100    1071    1071    1070    1070    1071    1071    1100
1                                           HEC-1 INPUT                                                          PAGE111

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

4567          KK   1D220
4568          KM        RETURN DIVERT AT CP220
4569          DR   DI239

4570          KK    R220
4571          KM        ROUTE FLOW FROM CP220 TO CP239
4572          RS      21             -1
4573          RC    .075    .075    .075    5750   .0045
4574          RX    1000    1001    1002    1320    2850    2998    2999    3000
4575          RY    1071    1071    1071    1070    1070    1071    1071    1071
              *
```

```
4576          KK     239
4577          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 239
4578          BA     .48
4579          LG     .50     .00    4.90     .47     .00
4580          UI     21.     21.     21.     41.     72.     86.    100.    112.    120.    133.
4581          UI    148.    161.    188.    231.    269.    247.    213.    191.    173.    159.
4582          UI    142.    128.    115.    104.     92.     74.     59.     37.     37.     34.
4583          UI     34.     23.     21.     21.     17.      6.      6.      6.      6.      6.
4584          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4585          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4586          KK   1I239
4587          KM        ADD HYDROGRAPHS AT CP239
4588          HC       2   18.65

4589          KK   2I239
4590          KM        ADD HYDROGRAPHS AT CP239
4591          HC       2   19.59

4592          KK   CP239
4593          KM        ADD HYDROGRAPHS AT CP239
4594          HC       2   31.76

4595          KK   1D239
4596          KM        DIVERT FROM CP239 TO CP251
4597          DT   2D251
4598          DI       0     283     389     786    3215
4599          DQ       0       0      69     333    2481

4600          KK   2D239
4601          KM        DIVERT FROM CP239 TO CP252
4602          DT   DI252
4603          DI       0     283     320     632    3061
4604          DQ       0       0     0.0   179.0    2327

4605          KK    R239
4606          KM        ROUTE REMAINDER FROM CP239 TO CP240
4607          RS       5              -1
4608          RC     .05     .02     .02    2640   .0007
4609          RX    1000    1510    1755    1765    1775    1785    1809    1810
4610          RY    1058    1056    1054    1052    1052    1054    1055    1055
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

4611          KK     240
4612          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 240
4613          BA     .40
4614          LG     .50     .00    4.74     .51     .00
4615          UI     19.     19.     19.     53.     71.     89.     99.    110.    121.    136.
4616          UI    151.    180.    225.    249.    209.    182.    163.    149.    131.    117.
4617          UI    104.     92.     79.     59.     41.     34.     32.     32.     21.     19.
4618          UI     19.     11.      6.      6.      6.      6.      6.      6.      6.      6.
4619          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4620          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4621          KK   CP240
4622          KM        ADD HYDROGRAPHS AT CP240
4623          HC       2   32.16

4624          KK    R240
4625          KM        ROUTE FLOW FROM CP240 TO CP241
4626          RS       5              -1
4627          RC    .025     .02     .02    3600   .0011
4628          RX    1000    1280    1620    1745    1770    1798    1799    1800
4629          RY    1056    1054    1052    1050    1050    1051    1051    1051
              *

4630          KK     213
4631          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 213
4632          BA     .35
4633          LG     .35     .35    4.90     .28     .00
4634          UI     31.     51.    124.    164.    197.    244.    345.    374.    285.    235.
4635          UI    189.    151.    103.     56.     52.     32.     26.     10.     10.     10.
4636          UI     10.     10.      0.      0.      0.      0.      0.      0.      0.      0.
4637          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4638          KK    R213
4639          KM        ROUTE FLOW FROM CP213 TO CP212
4640          RS       8              -1
```

```
4641          RC    .025    .022    .025    4060   .0002
4642          RX    1000    1001    1140    1220    1290    1478    1479    1480
4643          RY  1077.7  1077.7    1076    1074    1074    1076  1077.7  1077.7
              *

4644          KK     212
4645          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 212
4646          BA     .54
4647          LG     .50     .00    4.82     .49     .00
4648          UI     18.     18.     18.     18.     34.     59.     69.     80.     87.     95.
4649          UI    102.    109.    116.    127.    137.    148.    171.    205.    226.    232.
4650          UI    203.    183.    167.    155.    146.    135.    124.    114.    106.     97.
4651          UI     89.     84.     70.     57.     49.     32.     32.     31.     30.     30.
4652          UI     22.     18.     18.     18.     17.      6.      6.      6.      6.      6.
4653          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
4654          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4655          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * DI212 REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM       RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
              * DR DI212
              * KK  R193
              * KM       ROUTE FLOW FROM CP193 TO CP212
              * RS     5              -1       0
              * RC  .022    .022     .06    8500   .0038
              * RX  1000    1001    1002    1035    1070    1085    1140    2450
              * RY1095.5    1095    1095    1094    1094    1095    1094    1100
              * KK 1I212
              * KM       ADD HYDROGRAPHS AT CP212
              * HC     2   36.88
```



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

4656          KK   SR212
4657          KM        STORAGE ROUTE THROUGH CP212
4658          RS       1    STOR       0       0
4659          SV       0    2.48   13.74   26.18   63.33
4660          SQ       0       0       0     483    6314
4661          SE  1077.1    1078  1079.4    1080    1081

4662          KK   CP212
4663          KM        ADD HYDROGRAPHS AT CP212
4664          HC       2   37.23

4665          KK    R212
4666          KM        ROUTE FLOW FROM CP212 TO CP221A
4667          RS      11              -1
4668          RC    .025    .022    .025    5000   .0002
4669          RX    1000    1001    1070    1090    1220    1287    1289    1290
4670          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4671          KK   1D193
4672          KM        RETURN DIVERTED HYDROGRAPH FROM
4673          DR   DI211

4674          KK    R193
4675          KM        ROUTE FLOW FROM DI211 TO CP211
4676          RS      17              -1       0
4677          RC     .15     .15     .15    5300   .0030
4678          RX    1000    1001    1002    1050    2400    2548    2549    2550
4679          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5

4680          KK     211
4681          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 211
4682          BA     .49
4683          LG     .50     .00    4.82     .49     .00
4684          UI     21.     21.     21.     40.     72.     86.    100.    112.    121.    132.
4685          UI    147.    162.    183.    231.    264.    258.    220.    196.    178.    165.
4686          UI    147.    132.    120.    107.     98.     81.     60.     43.     37.     35.
4687          UI     35.     28.     21.     21.     21.      8.      6.      6.      6.      6.
4688          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4689          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4690          KK   CP211
4691          KM        COMBINE DIVERT FROM 193
4692          HC       2   13.87

4693          KK    R211
4694          KM        ROUTE FLOW FROM TO CP221A
```

```
4695          RS       9              -1
4696          RC    .035    .035    .075    5400   .0009
4697          RX    1000    1001    1002    1020    1100    1620    2119    2120
4698          RY    1081    1081    1081    1080    1080    1082    1084    1084
              *
```



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

4699          KK    221A
4700          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 221A
4701          BA     .31
4702          LG     .50     .00    4.82     .49     .00
4703          UI     12.     12.     12.     12.     36.     43.     50.     57.     63.     67.
4704          UI     72.     79.     87.     94.    109.    132.    151.    145.    126.    113.
4705          UI    103.     96.     88.     80.     73.     67.     60.     56.     48.     38.
4706          UI     32.     21.     21.     20.     19.     17.     12.     12.     12.      9.
4707          UI      4.      4.      4.      4.      4.      4.      4.      4.      4.      4.
4708          UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
4709          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4710          KK  1I221A
4711          KM        ADD HYDROGRAPHS AT CP221A
4712          HC       2     .80

4713          KK  SR221A
4714          KM        STORAGE ROUTE THROUGH CP221A
4715          RS       1    STOR       0       0
4716          SV       0    1.31    8.04   28.16      40
4717          SQ       0       0       0    2250    5262
4718          SE    1077    1078  1078.9    1080  1080.5

4719          KK  CP221A
4720          KM        ADD HYDROGRAPHS AT CP221A
4721          HC       2   38.03

4722          KK   R221A
4723          KM        ROUTE FLOW FROM CP221A TO CP222
4724          RS       6              -1
4725          RC    .025    .022    .022    7800   .0024
4726          RX    1000    1001    1070    1090    1220    1287    1289    1290
4727          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4728          KK     222
4729          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 222
4730          BA    1.10
4731          LG     .31     .35    4.82     .28   15.00
4732          UI     34.     34.     34.     34.     34.    112.    121.    135.    158.    168.
4733          UI    184.    194.    205.    219.    237.    257.    272.    305.    354.    407.
4734          UI    455.    414.    370.    337.    311.    291.    274.    257.    236.    218.
4735          UI    204.    189.    173.    163.    148.    130.     98.     87.     60.     60.
4736          UI     58.     56.     56.     47.     34.     34.     34.     34.     24.     10.
4737          UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
4738          UI     10.     10.     10.     10.      0.      0.      0.      0.      0.      0.
4739          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4740          KK   CP222
4741          KM        ADD HYDROGRAPHS AT CP222
4742          HC       2   39.13
```



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

4743          KK    R222
4744          KM        ROUTE FLOW FROM CP222 TO CP241
4745          RS       8              -1
4746          RC     .03    .025     .03    5770   .0022
4747          RX    1000    1100    1320    1540    2350    2470    2630    2710
4748          RY    1057    1056    1054    1052    1052    1054    1056    1057
              *

4749          KK     226
4750          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 226
4751          BA    1.18
4752          LG     .15     .26    4.82     .36   17.00
4753          UI    134.    343.    641.    827.   1094.   1619.   1306.   1008.    765.    549.
4754          UI    283.    214.    134.     68.     41.     41.     41.      0.      0.      0.
4755          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
4756          KK   SR226
4757          KM        STORAGE ROUTE THROUGH CP226
4758          RS       1    STOR       0       0
4759          SV       0    0.24    3.34   18.04   51.44  102.84  171.74
4760          SQ       0       0      21     136     428     875    1487
4761          SE  1075.2  1075.5    1076  1076.5    1077  1077.5    1078

4762          KK    R226
4763          KM        ROUTE REMAINDER FROM CP226 TO CP223
4764          RS      26              -1       0
4765          RC     .05     .05     .05    7840   .0011
4766          RX    1000    1200    1300    1500    1600    1800    1900    2000
4767          RY    1100  1074.5    1074    1073    1073    1074  1074.5    1100
              *

4768          KK     201
4769          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 201
4770          BA     .34
4771          LG     .35     .35    4.82     .29     .00
4772          UI     38.     96.    180.    233.    304.    457.    381.    294.    225.    166.
4773          UI     86.     64.     40.     24.     12.     12.     12.      0.      0.      0.
4774          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4775          KK    R201
4776          KM        ROUTE FLOW FROM CP201 TO CP223
4777          RS      19              -1       0
4778          RC     .05    .035    .050    7000   .0017
4779          RX    1000    1200    1300    1500    1600    1800    1900    2000
4780          RY    1078  1074.5    1074    1073    1073    1074  1074.5    1078
              *

4781          KK     223
4782          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 223
4783          BA    1.26
4784          LG     .12     .33    5.52     .19   72.00
4785          UI    119.    218.    491.    643.    786.   1003.   1453.   1254.    993.    797.
4786          UI    634.    465.    257.    200.    140.    112.     37.     37.     37.     37.
4787          UI     37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

4788          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4789          KK   1I223
4790          KM        ADD HYDROGRAPHS AT CP223 (223 + 201)
4791          HC       2     1.6

4792          KK   CP223
4793          KM        ADD HYDROGRAPHS AT CP223 (223 + 226)
4794          HC       2   54.67

4795          KK    R223
4796          KM        ROUTE REMAINDER FROM CP223 TO CP224
4797          RS       4              -1
4798          RC     .03    .025     .03    2900   .0017
4799          RX    1000    1120    1350    1590    1780    1960    2129    2130
4800          RY    1067    1066    1064    1063    1063    1064  1065.5  1065.5
              *

4801          KK     224
4802          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 224
4803          BA     .80
4804          LG     .35     .32    5.64     .20       6
4805          UI     94.    258.    469.    606.    833.   1145.    854.    655.    492.    310.
4806          UI    163.    121.     79.     29.     29.     29.     29.      0.      0.      0.
4807          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4808          KK   CP224
4809          KM        ADD HYDROGRAPHS AT CP224 (224 + 223)
4810          HC       2   55.47

4811          KK    R224
4812          KM        ROUTE FLOW FROM CP224 TO CP241
4813          RS       7              -1
4814          RC     .03    .025     .03    5460   .0027
4815          RX    1000    1100    1320    1540    2350    2470    2630    2710
4816          RY    1057    1056    1054    1052    1052    1054    1056    1057
              *

4817          KK     241
4818          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 241
```

```
4819          BA    1.51
4820          LG     .38     .28    4.74     .34     .00
4821          UI    133.    206.    513.    682.    817.   1005.   1376.   1635.   1253.   1036.
4822          UI    834.    673.    488.    276.    223.    162.    133.     50.     41.     41.
4823          UI     41.     41.      0.      0.      0.      0.      0.      0.      0.      0.
4824          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4825          KK   1I241
4826          KM        ADD HYDROGRAPHS AT CP241 (241 + 224)
4827          HC       2   56.98
```



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


4828          KK   2I241
4829          KM        ADD HYDROGRAPHS AT CP241 (241 + 222)
4830          HC       2   59.77

4831          KK   CP241
4832          KM        ADD HYDROGRAPHS AT CP241 (241 + 240)
4833          HC       2   78.75

4834          KK   SR241
4835          KM        STORAGE ROUTE THROUGH CP241
4836          RS       1    STOR       0       0
4837          SV       0     .09     .65     .94    8.45   16.94
4838          SQ       0       4     280     324    1773    7505
4839          SE  1042.2    1044    1046  1046.3    1048    1049
4840          ZZ
```

1

```
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    55           1
                 V
                 V
    66         RCP1
                 .
                 .
    72           .           2
                 .           .
                 .           .
    81          CP2...........
                 V
                 V
    84         RCP2
                 .
                 .
    90           .          3A
                 .           V
                 .           V
    97           .       RCP3A
                 .           .
                 .           .
   103           .           .           3
                 .           .           .
                 .           .           .
   110           .       I1CP3...........
                 .           .
                 .           .
   113          CP3...........
                 .
                 .
   120           .-------->  DI189
   116          D3
                 V
                 V
   123         RCP3
                 .
                 .
   129           .           4
                 .           .
                 .           .
   136           .           .           5
                 .           .           .
                 .           .           .
   143           .          CP5...........
                 .           V
```

```
                 .          V
146              .       RCP5
                 .          .
                 .          .
152              .          .          6
                 .          .          .
                 .          .          .
158              .       CP6...........
                 .          V
                 .          V
161              .       RCP6
                 .          .
                 .          .
167              .          .          7
                 .          .          .
                 .          .          .
173              .       CP7...........
                 .          V
                 .          V
176              .       RCP7
                 .          .
                 .          .
182              .          .          9
                 .          .          .
                 .          .          .
189              .      I1CP9...........
                 .          .
                 .          .
192              .          .          8
                 .          .          .
                 .          .          .
199              .       CP9...........
                 .          V
                 .          V
202              .       RCP9
                 .          .
                 .          .
208              .          .         10
                 .          .          .
                 .          .          .
217              .     I1CP10...........
                 .          .
                 .          .
220          CP10...........
                 .
                 .
225              .-------> 1DI188
223          1D10
                 .
                 .
231              .-------> 2DI188
228          2D10
                 V
                 V
234         RCP10
                 .
                 .
240              .         12
                 .          .
                 .          .
248          CP12...........
                 V
                 V
251         RCP12
                 .
                 .
257              .         11
                 .          V
                 .          V
265              .      RCP11
                 .          .
                 .          .
271              .          .         13
                 .          .          .
                 .          .          .
279              .       CP13...........
                 .          V
                 .          V
282              .      RCP13
                 .          .
                 .          .
288              .          .         14
```

```
                 .          .          V
                 .          .          V
295              .          .       RCP14
                 .          .          .
                 .          .          .
301              .          .          .          15
                 .          .          .           .
                 .          .          .           .
309              .          .     I1CP15............
                 .          .          .
                 .          .          .
312              .          .          .          16
                 .          .          .           V
                 .          .          .           V
320              .          .          .        SR16
                 .          .          .           .
                 .          .          .           .
326              .          .       CP15............
                 .          .          V
                 .          .          V
329              .          .       RCP15
                 .          .          .
                 .          .          .
335              .          .          .          17
                 .          .          .           .
                 .          .          .           .
342              .          .     I1CP17............
                 .          .          .
                 .          .          .
345              .       CP17............
                 .          V
                 .          V
348              .      RCP17
                 .          .
                 .          .
354              .          .        WT3
                 .          .          .
                 .          .          .
362              .    I1CWT3............
                 .          .
                 .          .
365         CPWT3............
                 V
                 V
368         SRWT3
                 .
                 .
381              .        116
                 .          .
                 .          .
392              .          .-------> 116RET
390              .     116OUT
                 .          V
                 .          V
395              .       R116
                 .          .
                 .          .
401              .          .        117
                 .          .          .
                 .          .          .
413              .          .          .-------> 117RET
411              .          .     117OUT
                 .          .          .
                 .          .          .
416              .      CP117............
                 .          V
                 .          V
419              .       R117
                 .          .
                 .          .
425              .          .        123
                 .          .          .
                 .          .          .
438              .          .          .-------> DI134
435              .          .       D123
                 .          .          V
                 .          .          V
441              .          .       R123
                 .          .          .
                 .          .          .
447              .          .          .         124
                 .          .          .           .
```

```
458                 CP124...........
                                 .
463                              .-------> DI136
461                 1D124
                                 .
469                              .-------> DI135
466                 2D124
                                 V
                                 V
472                 R124
                                 .
                                 .
478                              .        125
                                 .          .
                                 .          .
486                 1I125...........
                                 .
                                 .
489             CP125...........
                                 .
                                 .
494                              .-------> DI137
492             1D125
                                 .
                                 .
499                              .-------> DI138
497             2D125
                                 V
                                 V
502              R125
                                 .
                                 .
508                                118
                                 .
                                 .
519                              .-------> 118RET
517                           118OUT
                                 V
                                 V
522                            R118
                                 .
                                 .
528                              .        126
                                 .          .
                                 .          .
540                              .-------> 126RET
538                              .      126OUT
                                 .          .
                                 .          .
543                            1I126...........
                                 .
                                 .
546             CP126...........
                                 .
                                 .
552                              .-------> DI139
549              D126
                                 V
                                 V
555              R126
                                 .
                                 .
561                             100A
                                 V
                                 V
569                           R100A
                                 .
                                 .
575                              .       102A
                                 .          .
                                 .          .
586                          1I102A...........
                                 .
                                 .
589                              .        101
                                 .          V
                                 .          V
599                              .       R101
                                 .          .
```

```
605                 CP102A............
                         .
612                      .-------> 102ART
608                 102AOT
                         V
                         V
615                  R102A
                         .
621                      .        106
                         .          .
634                      .          .-------> 106RET
632                      .     106OUT
                         .          .
637                  CP106............
                         V
                         V
640                   R106
                         .
653                      .        105
                         .          V
                         .          V
663                      .       R105
                         .          .
669                      .          .         112
                         .          .           .
681                      .          .           .-------> 112RET
679                      .          .      112OUT
                         .          .           .
684                      .      CP112............
                         .          .
689                      .          .------->   DI120
687                      .      1D112
                         .          .
694                      .          .-------> 1D121A
692                      .      2D112
                         .          V
                         .          V
697                      .       R112
                         .          .
703                      .          .        113A
                         .          .           .
715                      .          .           .-------> 113ART
713                      .          .      113AOT
                         .          .           .
718                      .     CP113A............
                         .          .
723                      .          .-------> 2D121A
721                      .      D113A
                         .          V
                         .          V
726                      .      R113A
                         .          .
732                      .          .         114
                         .          .           .
745                      .          .           .-------> 114RET
743                      .          .      114OUT
                         .          .           .
748                  CP114........................
                         .
753                      .-------> DI122B
751                   D114
                         V
                         V
```

```
756                 R114
                      .
762                   .        115
                      .          .
775                   .          .-------> 115RET
773                   .     115OUT
                      .          .
778                   .          .
                 CP115............
                      V
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781                 R115
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787                   .       122A
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800                   .          .-------> 122ART
797                   .     122AOT
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803                   .          .
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808                   .          .<-------  DI122B
806                   .       D114
                      .          V
                      .          V
809                   .       R114
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815                   .          .       122B
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828                   .          .          .-------> 122BRT
825                   .          .     122BOT
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831                   .     CP122B............
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                      .          V
834                   .      R122B
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840                   .          .
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                      V
                      V
843               1R122A
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                      V
850               2R122A
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857                   .        111
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869                   .          .-------> 111RET
867                   .     111OUT
                      .          V
                      .          V
872                   .       R111
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878                   .          .        104
                      .          .         V
                      .          .         V
888                   .          .       R104
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894                   .          .          .       111A
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909                   .          .          .         .-------> 111ART
907                   .          .          .     111AOT
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912                   .     CP111A.......................
                      .          V
                      .          V
915                   .      R111A
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921                 119
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933                  .-------> DI128
931             D119
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                     V
936             R119
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942                  .       119A
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953                  .
                CP119A............
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958                  .-------> DI130
956             D119A
                     V
                     V
963             R119A
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969                  .         120
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980                  .
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985                  .<-------  DI120
983             1D112
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                     V
986             R112
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992            CP120............
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                 V
995             R120
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1003                 .<-------  DI128
1001            D119
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                     V
1004            R119
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1010                 .         128
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1019            CP128............
                     V
                     V
1022            R128
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1030                 .           .<-------  DI130
1028                 .       D119A
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                     .         V
1031                 .       R119A
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1037                 .         .         130
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1048            1I130......................
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1051                 .         129
                     .         V
                     .         V
1060                 .       R129
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1066           CP130......................
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1071                    .------->  DI144
1069                 D130
                        V
                        V
1074                 R130
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1080                    .       131A
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1090               CP131A...........
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                        V
1093                 R131A
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1099                    .        131
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1109               1I131...........
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1114                    .         .<-------  1D121A
1112                    .      2D112
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                        .         V
1115                    .       R112
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1121                    .         .       121A
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1130                    .     1I121A...........
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1135                    .         .           .<-------  2D121A
1133                    .         .      D113A
                        .         .         V
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1136                    .         .      R113A
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1142                    .     CP121A...........
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1145                    .      R121A
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1151                    .         .        121
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1160                    .      CP121...........
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                        .         V
1163                    .       R121
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1169               CP131...........
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1174                    .------->  DI145
1172                 D131
                        V
                        V
1177                 R131
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1183                    .        132
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1193               CP132...........
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                        V
1196                 R132
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1202                    .        133
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1216                    .         .------->  133RET
1214                    .     133OUT
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1219                    1I133............
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1222            CP133............
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1227                    .------->   DI146
1225            1D133
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1232                    .------->   1D147
1230            2D133
                            V
                            V
1235             R133
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1241                        134
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1253                                     .<-------   DI134
1251                                 D123
                                         V
                                         V
1254                                 R123
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1260            CP134......................
                                 .
1265                    .------->   2D147
1263             D134
                            V
                            V
1268             R134
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1276                                 .<-------   DI135
1274                    1D124
                                 V
                                 V
1277                     R124
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1283                                     135
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1297                                     .------->  135RET
1295                                 135OUT
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1300            CP135......................
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1305                    .------->   DI148
1303             D135
                            V
                            V
1308             R135
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1316                                 .<-------   DI136
1314                    2D124
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                                 V
1317                     R124
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1323                                     136
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1333                    1I136............
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1336            CP136............
                            V
                            V
1339             R136
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1347                                 .<-------   DI137
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1345                    1D125
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1348                     R125
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1354                       .          137
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1366                 CP137.....................
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1371                       .-------> DI149
1369                 1D137
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1376                       .-------> DI153
1374                 2D137
                        V
                        V
1379                  R137
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1387                       .<-------  DI138
1385                    2D125
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                           V
1388                     R125
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1394                       .          138
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1407                    1I138...........
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1410                 CP138............
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1413                  R138
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1419                     138A
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1431                       .-------> 138ART
1429                   138AOT
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1434               1I138A............
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1437           2I138A............
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1442                       .<-------  DI153
1440                 2D137
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1443                  R137
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1460                 CP153............
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1463           CP138A............
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1468                       .-------> DI154
1466            D138A
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                   V
1471            R138A
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1479                       .<-------  DI154
1477                 D138A
                        V
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1497          .           .       RLLE1
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1517          .           .           ..------->  157RET
1515          .           .           .     157OUT
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1520          .           .       1I157...........
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1523          .       2I157...........
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1526          .           .         127
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1532          .           .        R127
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1538          .           .           .        139
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1550          .           .           ...------->  139RET
1548          .           .           .     139OUT
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1553          .           .       1I139...........
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1558          .           .           .          .<-------   DI139
1556          .           .           .       D126
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1559          .           .           .        RLE
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1565          .           .       2I139...........
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1576          .           .         LE1...........
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1579          .           .        RLE1
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1594          .           .         LE2...........
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1597          .           .        RLE2
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1603          .         LE3...........
              .           V
              .           V
1606          .       1RLE3
              .           V
              .           V
1612          .       2RLE3
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1626          .         LE4...........
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1645             .     CP173...........
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1648             .          .       156A
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1655             .          .      R156A
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1661             .          .          .        158
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1673             .          .          .          .-------> 158RET
1671             .          .          .     158OUT
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1676             .          .      CP158...........
                 .          .          V
                 .          .          V
1679             .          .       R158
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1685             .          .          .       173B
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1694             .          .     CP173B...........
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1697             .     AFR2E...........
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1700             .     RR173
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1706             .          .        171
                 .          .          V
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1718             .          .       R171
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1724             .          .          .       173A
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1733             .          .     CP173A...........
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1736             .    AFR2F1...........
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                 .          V
1739             .    RR173A
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1745             .          .        186
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1768             .          .      CP187...........
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1771             .    AFR2F2...........
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1774             .     RR187
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1780             .          .        199
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1790             .          .       R199
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1805             .          .      CP200...........
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1808             .     AFR2F3...........
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                 .          V
1811             .      RR200
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1817             .          .        141
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1824             .          .       R141
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1830             .          .          .        141A
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1837             .          .     CP141A...........
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1840             .          .      R141A
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1846             .          .          .         142
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1856             .          .      CP142...........
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1859             .          .       R142
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1865             .          .          .         143
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1875             .          .      CP143...........
                 .          .          V
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1878             .          .       R143
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1886             .          .          .          .<-------   DI144
1884             .          .          .        D130
                 .          .          .          V
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1887             .          .          .        R130
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1893             .          .          .          .         144
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1903             .          .          .      1I144...........
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1906             .          .      CP144...........
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                 .          .          .-------> DI164A
1911             .          .
1909             .          .       D144
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1914             .          .       R144
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1920             .          .          .        145A
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1930             .          .     CP145A...........
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1933             .          .      R145A
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1941             .          .          .          .<-------   DI145
1939             .          .          .        D131
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1961                                       CP145............
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1964                                       1D145
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1971                                          .------->   DI165
1969                                       2D145
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1974                                       R145B
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1982                                          .------->  DI165B
1980                                       3D145
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                                                  V
1985                                       R145C
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1993                                          .------->  DI165C
1991                                       4D145
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                                                  V
1996                                       R145D
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2004                                                .<-------   DI146
2002                                           1D133
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2005                                            R133
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2030                                          .------->   1D166
2028                                        D146
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2033                                       R146A
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2041                                                .<-------  DI165C
2039                                           4D145
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2042                                           R145E
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2048                                       1D165............
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2053                                          .------->   DIRB1
2051                                       D146B
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2056                                       R146B
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2064                                                .<-------  DI165B
2062                                           3D145
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2065                    R145F
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2071            2D165............
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2076                      .-------> DIRB2
2074            D146C
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                          V
2079            R146C
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2085                     159
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2092                    R159
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2106                  CP160............
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2109                    R160
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2125                  CP161............
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2128                    R161
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2142                      .        R162
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2161                  CP163............
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2166                      .-------> DI176A
2164                    D163
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2169                    R163
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2177                      .           .<-------  DI164A
2175                      .        D144
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                          .           V
2178                      .        R144
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2184                      .           .        164A
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2194                      .      1I164A............
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2197                  CP164A...........
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2200                  R164A
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2222                                                         R145
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2228                                                   CP164...........
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2233                                                            .------->   DI177
2231                                                    D164
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2236                                                    R164
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2244                                                            .<-------   DI165
2242                                                        2D145
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2245                                                         R145
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2251                                                            .         165
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2265                                                   2I165...........
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2268                                            CP165...........
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2273                                                    .------->   DI180
2271                                            D165
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2276                                            R165
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2284                                                            .<-------  DI176A
2282                                                    D163
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2285                                                    R163
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2302                                                   CP176A...........
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2307                                                            .------->   DI191
2305                                                    D176A
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2310                                                    R176A
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2316                                                            .        177A
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2326                                                   CP177A...........
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2329                                                    R177A
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2345                                                    1I177...........
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2348                                                            .        D164
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2351                                                           R164
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2357                                                   CP177...........
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2360                                                    R177
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2376                                                   CP178...........
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2403                                                .------->   DI193
2401                                           1D179
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2408                                                .------->  DI194A
2406                                           2D179
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2411                                            R179
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2417                                                    180
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2428                                           1I180...........
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2433                                                           .<-------   1D147
2431                                                   2D133
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2434                                                    R133
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2450                                                   1I147...........
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2455                                                                  .<-------   2D147
2453                                                           D134
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2456                                                           R134
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2462                                                  CP147 ...........
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2465                                                    D147
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2470                                                    R147
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2491                                                  .<-------   DI148
2489                                            D135
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2492                                            R135
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2498                                     CP148............
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2503                                               .------->   DI150
2501                                      D148
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2506                                      R148
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2514                                               .<-------   2D166
2512                                            D147
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2515                                            R147
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2534                                               .           .<-------   1D166
2532                                               .           .       D146
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2535                                               .           .       R146
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2541                                               .       1I166............
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2544                                            2I166............
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2547                                     CP166............
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2552                                               .------->   DI167
2550                                      D166
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2555                                      R166
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2563                                               .<-------   DI180
2561                                            D165
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2564                                            R165
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2570                                     1I180............
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2573                                CP180............
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2578                                               .------->   1D195
2576                                       D180
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2581                                       R180
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2587                                               .         181
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2596                                CP181............
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2601                                               .------->   2D195
2599                                       D181
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2604                                       R181
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2619              1I182...........
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2624                         .<-------   DI150
2622                    D148
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2625                    R148
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2631                         .        150
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2640                    CP150...........
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2643                    R150
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2649                         .        151
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2658                    1I151...........
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2663                         .                .<-------   DI149
2661                         .        1D137
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2664                         .        R137
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2670                         .          .          149
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2680                         .        CP149...........
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2683                         .        R149
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2689                    CP151...........
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2694                     .------->   1D168
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2699                     .------->   DI152
2697                    2D151
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2702                    R151
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2725                         .        R166
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2731                    CP167...........
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2736                     .------->   1D183
2734                    1D167
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2741                     .------->   2D168
2739                    2D167
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2765          .          .          .          .------->   2D183
2763          .          .          .      D181A
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2768          .          .          .      R181A
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2774          .          .      CP182...........
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2779          .          .          .------->   DI196
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2782          .          .       R182
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2790          .          .          .          .<-------   DI152
2788          .          .          .      2D151
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2791          .          .          .       R151
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2797          .          .          .          .        152
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2817          .          .          .          .------->   DI155
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2845          .          .          .          .      1I168...........
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2848          .          .          .          .          .      2D167
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3855                                        2DI183
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4225                                  .------->   1D220
4223                                  .     1D209A
                                      .
                                      .
4230                                  .------->   2D209
4228                                  .     2D209A
                                      V
                                      V
4233                                  .      R209A
                                      .
                                      .
4241                                  .           .<-------   1D219
4239                                  .       2D208
                                      .           V
                                      .           V
4242                                  .        R208
                                      .           .
                                      .           .
4248                                  .           .         219
                                      .           .           .
                                      .           .           .
4258                                  .       1I219............
                                      .           .
                                      .           .
4261                                  .      2I219............
                                      .
                                      .
4266                                  .           .<-------   2D219
4264                                  .       2D218
                                      .           V
                                      .           V
4267                                  .        R218
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                                      .           .
4273                                  .      CP219............
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4278                                  .------->  DI238
4276                            1D219
                                    .
                                    .
4283                                  .------->  2D220
4281                            2D219
                                    V
                                    V
4286                             R219
                                    .
                                    .
4294                                  .<-------  DI237
4292                                  1D218
                                    V
                                    V
4295                                  R218
                                    .
                                    .
4301                                  .         237
                                    .           .
                                    .           .
4312                                  1I237............
                                    .
                                    .
4315                            2I237............
                                    .
                                    .
4318                      CP237............
                                    .
                                    .
4323                                .------->  2D250
4321                      1D237
                                    .
                                    .
4328                                .------->  1D250A
4326                      2D237
                                    V
                                    V
4331                       R237
                                    .
                                    .
4339                                  .<-------  1D209
4337                            1D192
                                    V
                                    V
4340                             R192
                                    .
                                    .
4346                                  .         209
                                    .           .
                                    .           .
4356                            1I209............
                                    .
                                    .
4361                                  .<-------  2D209
4359                                  2D209A
                                    V
                                    V
4362                                  R209A
                                    .
                                    .
4368                            CP209............
                                    .
                                    .
4373                                  .------->  1D221
4371                            1D209
                                    .
                                    .
4378                                  .------->  2D210
4376                            2D209
                                    V
                                    V
4381                             R209
                                    .
                                    .
4389                                  .<-------  1D220
4387                                  1D209A
                                    V
                                    V
4390                                  R209A
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4396                                                    220
                                                         .
4406                                        1I220........
                                                         .
4409                                    2I220........
                                                         .
4414                                                <-------   2D220
4412                                        2D219
                                                    V
                                                    V
4415                                         R219
                                                         .
4421                                    CP220........
                                                         .
4426                                        -------->   DI239
4424                                    1D220
                                                         .
4431                                        -------->   2D221
4429                                    2D220
                                                    V
                                                    V
4434                                     R220
                                                         .
4442                                                <-------   DI238
4440                                        1D219
                                                    V
                                                    V
4443                                         R219
                                                         .
4449                                                     .      238
                                                         .       .
4459                                        1I238........
                                                         .
4462                                    2I238........
                                                         .
4465                                CP238........
                                                         .
4470                                    -------->  2D250A
4468                                1D238
                                                         .
4475                                    -------->   1D251
4473                                2D238
                                        V
                                        V
4478                                 R238
                                                         .
4486                                                <-------   1D210
4484                                    2D192
                                                    V
                                                    V
4487                                     R192
                                                         .
4493                                                     .      210
                                                         .
4503                                    1I210........
                                                         .
4508                                                <-------   2D210
4506                                        2D209
                                                    V
                                                    V
4509                                         R209
                                                         .
4515                                    CP210........
                                                    V
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                                                                                  V
4518                                                                            R210
                                                                                   .
4526                                                                               .<-------   1D221
4524                                                                        1D209
                                                                                   V
                                                                                   V
4527                                                                         R209
                                                                                   .
4533                                                                               .         221
                                                                                   .           .
4543                                                                        1I221...........
                                                                                   .
4546                                                                     2I221...........
                                                                                   .
4551                                                                               .<-------   2D221
4549                                                                        2D220
                                                                                   V
                                                                                   V
4552                                                                         R220
                                                                                   .
4558                                                                     CP221...........
                                                                                   V
                                                                                   V
4561                                                                         R221
                                                                                   .
4569                                                                               .<-------   DI239
4567                                                                        1D220
                                                                                   V
                                                                                   V
4570                                                                         R220
                                                                                   .
4576                                                                               .         239
                                                                                   .           .
4586                                                                        1I239...........
                                                                                   .
4589                                                                     2I239...........
                                                                                   .
4592                                                          CP239...........
                                                                   .
4597                                                               .------->   2D251
4595                                                          1D239
                                                                   .
4602                                                               .------->   DI252
4600                                                          2D239
                                                                   V
                                                                   V
4605                                                           R239
                                                                   .
4611                                                               .         240
                                                                   .           .
4621                                                          CP240...........
                                                                   V
                                                                   V
4624                                                           R240
                                                                   .
4630                                                               .         213
                                                                   .           V
                                                                   .           V
4638                                                                     R213
                                                                                   .
4644                                                                               .         212
                                                                                   .           V
                                                                                   .           V
4656                                                                        SR212
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4662                                                              CP212.......
                                                                      V
                                                                      V
4665                                                               R212
                                                                      .
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4673                                                                  .<-------   DI211
4671                                                                  .       1D193
                                                                      .          V
                                                                      .          V
4674                                                                  .       R193
                                                                      .          .
                                                                      .          .
4680                                                                  .          .        211
                                                                      .          .          .
                                                                      .          .          .
4690                                                                  .       CP211.......
                                                                      .          V
                                                                      .          V
4693                                                                  .       R211
                                                                      .          .
                                                                      .          .
4699                                                                  .          .       221A
                                                                      .          .          .
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4710                                                                  .      1I221A.......
                                                                      .          V
                                                                      .          V
4713                                                                  .      SR221A
                                                                      .          .
                                                                      .          .
4719                                                              CP221A.......
                                                                      V
                                                                      V
4722                                                               R221A
                                                                      .
                                                                      .
4728                                                                  .        222
                                                                      .          .
                                                                      .          .
4740                                                              CP222.......
                                                                      V
                                                                      V
4743                                                               R222
                                                                      .
                                                                      .
4749                                                                  .        226
                                                                      .          V
                                                                      .          V
4756                                                                  .       SR226
                                                                      .          V
                                                                      .          V
4762                                                                  .       R226
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4768                                                                  .          .        201
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                                                                      .          .          V
4775                                                                  .          .       R201
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4781                                                                  .          .          .        223
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4789                                                                  .          .      1I223.......
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4792                                                                  .       CP223.......
                                                                      .          V
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4795                                                                  .       R223
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4801                                                                  .          .        224
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4808                                                                  .       CP224.......
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4811                                                                  .       R224
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 4817           .         .         .         .         .        241
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 4825           .         .         .         .      1I241............
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                .         .         .         .         .
 4828           .         .         .      2I241............
                .         .         .         .
                .         .         .         .
 4831           .         .      CP241............
                .         .         V
                .         .         V
 4834           .         .      SR241

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN   1998              *
 *            VERSION 4.1               *
 *                                      *
 *  RUN DATE   14JUN04  TIME  14:36:41  *
 *                                      *
 ****************************************
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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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LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'

PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY TURNED OFF) AT DI189.

THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL

REVISED BY URS DATE: 01-14-04
FILE: L303M1L.DAT

NOTES:
1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN THE WLB MODEL.
4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO DRAINAGE REPORTS.
5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY. GRAND. COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115. ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL STORM.
8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO THE DATA FILE BY THE FCDMC.
10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS AREAS #3 & #4) WERE ESTIMATED BY EEC.

```
 38 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1    0  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         600  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      3    0  ENDING DATE
                     NDTIME        0155  ENDING TIME
                      ICENT          19  CENTURY MARK
```

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          COMPUTATION INTERVAL      .08 HOURS
               TOTAL TIME BASE    49.92 HOURS

     ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT

40 JD       INDEX STORM NO. 1
                 STRM        4.03  PRECIPITATION DEPTH
                 TRDA         .00  TRANSPOSITION DRAINAGE AREA

41 PI         PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                 .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                 .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00

51 JD       INDEX STORM NO. 2
                 STRM        3.79  PRECIPITATION DEPTH
                 TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                 .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                 .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00
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52 JD          INDEX STORM NO. 3
                     STRM        3.51  PRECIPITATION DEPTH
                     TRDA       50.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                  .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                  .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                  .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00
53 JD          INDEX STORM NO. 4
                     STRM        3.39  PRECIPITATION DEPTH
                     TRDA      100.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                  .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                  .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                  .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00
54 JD          INDEX STORM NO. 5
                     STRM        3.29  PRECIPITATION DEPTH
                     TRDA      200.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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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	1	1573.	12.50	222.	61.	30.	1.94		
+	ROUTED TO	RCP1	1386.	12.83	222.	61.	30.	1.94		
+	HYDROGRAPH AT	2	1339.	12.75	237.	66.	32.	1.82		
+	2 COMBINED AT	CP2	2657.	12.75	456.	126.	61.	3.76		
+	ROUTED TO	RCP2	2458.	12.92	455.	126.	61.	3.76		
+	HYDROGRAPH AT	3A	313.	12.33	31.	8.	4.	.29		
+	ROUTED TO	RCP3A	250.	12.50	31.	8.	4.	.29		
+	HYDROGRAPH AT	3	863.	12.33	89.	22.	11.	.81		
+	2 COMBINED AT	I1CP3	1048.	12.42	119.	30.	14.	1.10		
+	2 COMBINED AT	CP3	2655.	12.92	571.	155.	75.	4.86		
+	DIVERSION TO	DI189	548.	12.92	54.	14.	7.	4.86		
+	HYDROGRAPH AT	D3	2107.	12.92	517.	141.	68.	4.86		

+	ROUTED TO	RCP3	2038.	13.08	517.	141.	68.	4.86
+	HYDROGRAPH AT	4	396.	12.25	36.	10.	5.	.30
+	HYDROGRAPH AT	5	927.	12.25	86.	23.	11.	.72
+	2 COMBINED AT	CP5	1315.	12.25	121.	33.	16.	1.02
+	ROUTED TO	RCP5	1312.	12.25	121.	33.	16.	1.02
+	HYDROGRAPH AT	6	746.	12.08	52.	14.	7.	.45
+	2 COMBINED AT	CP6	1854.	12.17	172.	47.	23.	1.47
+	ROUTED TO	RCP6	1784.	12.17	172.	47.	23.	1.47
+	HYDROGRAPH AT	7	494.	12.08	36.	10.	5.	.31
+	2 COMBINED AT	CP7	2245.	12.17	206.	57.	27.	1.78
+	ROUTED TO	RCP7	1947.	12.33	206.	57.	27.	1.78
+	HYDROGRAPH AT	9	1402.	12.33	161.	44.	21.	1.40
+	2 COMBINED AT	I1CP9	3324.	12.33	364.	100.	48.	3.18
+	HYDROGRAPH AT	8	890.	12.33	93.	26.	12.	.81
+	2 COMBINED AT	CP9	4190.	12.33	455.	125.	60.	3.99
+	ROUTED TO	RCP9	3543.	12.75	454.	125.	60.	3.99
+	HYDROGRAPH AT	10	1357.	12.75	237.	62.	30.	2.02
+	2 COMBINED AT	I1CP10	4868.	12.75	686.	185.	89.	6.01
+	2 COMBINED AT	CP10	6522.	12.75	1189.	323.	156.	10.87
+	DIVERSION TO	1DI188	958.	12.75	174.	47.	23.	10.87
+	HYDROGRAPH AT	1D10	5564.	12.75	1014.	276.	133.	10.87
+	DIVERSION TO	2DI188	1596.	12.75	215.	54.	26.	10.87
+	HYDROGRAPH AT	2D10	3968.	12.75	799.	222.	107.	10.87
+	ROUTED TO	RCP10	3822.	12.83	799.	222.	107.	10.87
+	HYDROGRAPH AT	12	1214.	12.50	167.	43.	21.	1.38
+	2 COMBINED AT	CP12	4459.	12.83	953.	261.	126.	12.25
+	ROUTED TO	RCP12	4085.	13.00	952.	261.	126.	12.25

+	HYDROGRAPH AT	11	1559.	12.42	202.	54.	26.	1.56
+	ROUTED TO	RCP11	1268.	12.75	201.	54.	26.	1.56
+	HYDROGRAPH AT	13	1223.	12.42	145.	36.	17.	1.30
+	2 COMBINED AT	CP13	2062.	12.58	344.	89.	43.	2.86
+	ROUTED TO	RCP13	2035.	12.67	344.	89.	43.	2.86
+	HYDROGRAPH AT	14	1548.	12.33	173.	47.	23.	1.47
+	ROUTED TO	RCP14	1392.	12.58	173.	47.	23.	1.47
+	HYDROGRAPH AT	15	1272.	12.42	149.	40.	19.	1.26
+	2 COMBINED AT	I1CP15	2485.	12.50	319.	86.	42.	2.73
+	HYDROGRAPH AT	16	1206.	12.42	149.	41.	20.	1.13
+	ROUTED TO	SR16	0.	.00	0.	0.	0.	1.13
+	2 COMBINED AT	CP15	2485.	12.50	319.	86.	42.	3.90
+	ROUTED TO	RCP15	2108.	12.75	318.	86.	41.	3.90
+	HYDROGRAPH AT	17	1036.	12.33	108.	27.	13.	1.07
+	2 COMBINED AT	I1CP17	2480.	12.67	423.	112.	54.	4.97
+	2 COMBINED AT	CP17	4474.	12.67	761.	200.	96.	7.83
+	ROUTED TO	RCP17	4407.	12.75	761.	200.	96.	7.83
+	HYDROGRAPH AT	WT3	383.	12.50	50.	13.	6.	.44
+	2 COMBINED AT	I1CWT3	4657.	12.75	809.	212.	102.	8.27
+	2 COMBINED AT	CPWT3	7618.	12.92	1684.	453.	218.	20.52
+	ROUTED TO	SRWT3	0.	.00	0.	0.	0.	20.52
+	HYDROGRAPH AT	116	872.	12.33	111.	33.	16.	.66
+	DIVERSION TO	116RET	872.	12.33	93.	25.	12.	.66
+	HYDROGRAPH AT	116OUT	233.	12.67	27.	8.	4.	.66
+	ROUTED TO	R116	110.	13.17	26.	8.	4.	.66
+	HYDROGRAPH AT	117	920.	12.58	158.	47.	23.	.92
+	DIVERSION TO	117RET	920.	12.58	130.	35.	17.	.92
	HYDROGRAPH AT							

+		117OUT	364.	13.08	41.	12.	LABCAR 6.	.92
+	2 COMBINED AT	CP117	454.	13.08	65.	20.	10.	1.65
+	ROUTED TO	R117	248.	13.67	62.	20.	10.	1.65
+	HYDROGRAPH AT	123	320.	13.00	69.	17.	8.	.44
+	DIVERSION TO	DI134	0.	.00	0.	0.	0.	.44
+	HYDROGRAPH AT	D123	320.	13.00	69.	17.	8.	.44
+	ROUTED TO	R123	293.	13.33	69.	17.	8.	.44
+	HYDROGRAPH AT	124	331.	13.33	89.	22.	11.	.57
+	2 COMBINED AT	CP124	618.	13.33	156.	39.	19.	1.65
+	DIVERSION TO	DI136	296.	13.33	81.	20.	10.	1.65
+	HYDROGRAPH AT	1D124	323.	13.33	76.	19.	9.	1.65
+	DIVERSION TO	DI135	131.	13.33	23.	6.	3.	1.65
+	HYDROGRAPH AT	2D124	191.	13.33	52.	13.	6.	1.65
+	ROUTED TO	R124	178.	13.83	52.	13.	6.	1.65
+	HYDROGRAPH AT	125	934.	12.50	118.	29.	14.	1.00
+	2 COMBINED AT	1I125	930.	12.50	169.	42.	20.	2.01
+	2 COMBINED AT	CP125	924.	12.50	222.	61.	29.	3.66
+	DIVERSION TO	DI137	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	1D125	616.	12.50	148.	41.	20.	3.66
+	DIVERSION TO	DI138	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	2D125	309.	12.50	74.	20.	10.	3.66
+	ROUTED TO	R125	273.	12.75	73.	20.	10.	3.66
+	HYDROGRAPH AT	118	326.	12.08	42.	14.	7.	.16
+	DIVERSION TO	118RET	321.	12.08	25.	7.	4.	.16
+	HYDROGRAPH AT	118OUT	253.	12.17	23.	7.	3.	.16
+	ROUTED TO	R118	72.	13.83	21.	7.	3.	.16
+	HYDROGRAPH AT	126	1038.	12.50	159.	47.	23.	.95
+	DIVERSION TO	126RET	1038.	12.50	121.	32.	15.	.95

+	HYDROGRAPH AT	126OUT	522.	12.83	51.	15.	7.	.95
+	2 COMBINED AT	1I126	522.	12.83	70.	21.	10.	1.11
+	2 COMBINED AT	CP126	776.	12.83	139.	41.	20.	4.75
+	DIVERSION TO	DI139	776.	12.83	139.	41.	20.	4.75
+	HYDROGRAPH AT	D126	0.	.00	0.	0.	0.	4.75
+	ROUTED TO	R126	0.	.00	0.	0.	0.	4.75
+	HYDROGRAPH AT	100A	173.	12.50	23.	6.	3.	.18
+	ROUTED TO	R100A	145.	13.08	23.	6.	3.	.18
+	HYDROGRAPH AT	102A	462.	12.50	60.	15.	7.	.51
+	2 COMBINED AT	1I102A	462.	12.50	83.	21.	10.	.69
+	HYDROGRAPH AT	101	215.	12.25	20.	5.	2.	.16
+	ROUTED TO	R101	211.	12.25	20.	5.	2.	.16
+	2 COMBINED AT	CP102A	597.	12.42	102.	25.	12.	.75
+	DIVERSION TO	102ART	597.	12.42	61.	15.	7.	.75
+	HYDROGRAPH AT	102AOT	372.	12.83	41.	10.	5.	.75
+	ROUTED TO	R102A	265.	13.42	41.	10.	5.	.75
+	HYDROGRAPH AT	106	712.	12.50	96.	24.	11.	.77
+	DIVERSION TO	106RET	712.	12.50	66.	17.	8.	.77
+	HYDROGRAPH AT	106OUT	413.	12.83	29.	7.	4.	.77
+	2 COMBINED AT	CP106	409.	12.83	68.	17.	8.	1.70
+	ROUTED TO	R106	281.	13.83	67.	17.	8.	1.70
+	HYDROGRAPH AT	105	306.	12.25	27.	7.	3.	.21
+	ROUTED TO	R105	264.	12.42	27.	7.	3.	.21
+	HYDROGRAPH AT	112	846.	12.25	99.	29.	14.	.63
+	DIVERSION TO	112RET	846.	12.25	83.	22.	11.	.63
+	HYDROGRAPH AT	112OUT	241.	12.67	23.	7.	3.	.63
+	2 COMBINED AT	CP112	393.	12.67	48.	13.	6.	.82

								LABCAR
+	DIVERSION TO	DI120	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	1D112	263.	12.67	32.	9.	4.	.82
+	DIVERSION TO	1D121A	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	2D112	132.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	77.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	113A	772.	12.25	92.	27.	13.	.50
+	DIVERSION TO	113ART	489.	12.08	33.	9.	5.	.50
+	HYDROGRAPH AT	113AOT	772.	12.25	67.	18.	9.	.50
+	2 COMBINED AT	CP113A	766.	12.25	81.	22.	11.	1.34
+	DIVERSION TO	2D121A	43.	12.25	1.	0.	0.	1.34
+	HYDROGRAPH AT	D113A	723.	12.25	80.	22.	10.	1.34
+	ROUTED TO	R113A	562.	12.50	78.	22.	10.	1.34
+	HYDROGRAPH AT	114	2117.	12.75	423.	125.	60.	2.47
+	DIVERSION TO	114RET	2117.	12.75	365.	97.	47.	2.47
+	HYDROGRAPH AT	114OUT	600.	13.42	92.	28.	13.	2.47
+	3 COMBINED AT	CP114	860.	13.50	225.	65.	31.	5.26
+	DIVERSION TO	DI122B	597.	13.50	107.	27.	13.	5.26
+	HYDROGRAPH AT	D114	263.	13.50	118.	38.	18.	5.26
+	ROUTED TO	R114	240.	14.00	116.	38.	18.	5.26
+	HYDROGRAPH AT	115	2122.	12.67	408.	121.	58.	2.40
+	DIVERSION TO	115RET	2122.	12.67	369.	99.	47.	2.40
+	HYDROGRAPH AT	115OUT	376.	13.58	71.	23.	11.	2.40
+	2 COMBINED AT	CP115	513.	13.58	180.	60.	29.	7.59
+	ROUTED TO	R115	428.	14.08	179.	60.	29.	7.59
+	HYDROGRAPH AT	122A	587.	12.25	76.	23.	11.	.38
+	DIVERSION TO	122ART	587.	12.25	57.	15.	7.	.38
+	HYDROGRAPH AT	122AOT	274.	12.50	26.	8.	4.	.38
	2 COMBINED AT							

+		1I122A	442.	14.08	195.	66.	LABCAR 32.	8.33
+	HYDROGRAPH AT	D114	597.	13.50	107.	27.	13.	5.26
+	ROUTED TO	R114	506.	13.83	107.	27.	13.	5.26
+	HYDROGRAPH AT	122B	734.	12.25	92.	28.	14.	.51
+	DIVERSION TO	122BRT	537.	12.08	41.	12.	6.	.51
+	HYDROGRAPH AT	122BOT	734.	12.25	61.	17.	8.	.51
+	2 COMBINED AT	CP122B	719.	12.25	165.	43.	21.	5.66
+	ROUTED TO	R122B	641.	12.33	165.	43.	21.	5.66
+	2 COMBINED AT	CP122A	911.	14.00	353.	108.	52.	8.49
+	ROUTED TO	1R122A	888.	14.08	350.	108.	52.	8.49
+	ROUTED TO	2R122A	865.	14.42	344.	108.	52.	8.49
+	HYDROGRAPH AT	111	482.	12.08	45.	13.	6.	.26
+	DIVERSION TO	111RET	374.	12.00	23.	6.	3.	.26
+	HYDROGRAPH AT	111OUT	477.	12.17	25.	7.	3.	.26
+	ROUTED TO	R111	271.	12.42	25.	7.	3.	.26
+	HYDROGRAPH AT	104	218.	12.25	19.	5.	2.	.15
+	ROUTED TO	R104	79.	14.75	19.	5.	2.	.15
+	HYDROGRAPH AT	111A	870.	12.25	95.	27.	13.	.61
+	DIVERSION TO	111ART	870.	12.25	95.	27.	13.	.61
+	HYDROGRAPH AT	111AOT	1.	19.75	1.	0.	0.	.61
+	3 COMBINED AT	CP111A	271.	12.42	44.	12.	6.	.97
+	ROUTED TO	R111A	109.	13.92	40.	12.	6.	.97
+	HYDROGRAPH AT	119	544.	13.17	126.	32.	15.	.86
+	DIVERSION TO	DI128	317.	13.17	74.	18.	9.	.86
+	HYDROGRAPH AT	D119	227.	13.17	53.	13.	6.	.86
+	ROUTED TO	R119	204.	13.58	53.	13.	6.	.86
+	HYDROGRAPH AT	119A	296.	13.17	69.	17.	8.	.47
+	2 COMBINED AT	CP119A	439.	13.25	121.	30.	15.	1.26

+	DIVERSION TO	DI130	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	D119A	439.	13.25	121.	30.	15.	1.26
+	ROUTED TO	R119A	430.	13.42	121.	30.	15.	1.26
+	HYDROGRAPH AT	120	388.	13.25	105.	26.	13.	.54
+	3 COMBINED AT	1I120	787.	13.33	254.	67.	32.	2.88
+	HYDROGRAPH AT	1D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	76.	13.33	16.	4.	2.	.82
+	2 COMBINED AT	CP120	857.	13.33	268.	71.	34.	3.58
+	ROUTED TO	R120	805.	13.83	266.	71.	34.	3.58
+	HYDROGRAPH AT	D119	317.	13.17	74.	18.	9.	.86
+	ROUTED TO	R119	298.	13.42	74.	18.	9.	.86
+	HYDROGRAPH AT	128	299.	12.92	57.	14.	7.	.41
+	2 COMBINED AT	CP128	481.	12.92	130.	32.	16.	1.27
+	ROUTED TO	R128	464.	14.50	130.	32.	16.	1.27
+	HYDROGRAPH AT	D119A	0.	.00	0.	0.	0.	1.26
+	ROUTED TO	R119A	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	130	571.	13.25	147.	37.	18.	1.00
+	3 COMBINED AT	1I130	577.	14.50	270.	68.	33.	3.77
+	HYDROGRAPH AT	129	339.	12.67	54.	14.	7.	.43
+	ROUTED TO	R129	274.	13.33	54.	14.	7.	.43
+	3 COMBINED AT	CP130	1457.	13.42	584.	153.	74.	5.37
+	DIVERSION TO	DI144	638.	13.42	165.	41.	20.	5.37
+	HYDROGRAPH AT	D130	818.	13.42	419.	112.	54.	5.37
+	ROUTED TO	R130	814.	13.67	417.	112.	54.	5.37
+	HYDROGRAPH AT	131A	316.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	CP131A	979.	13.58	479.	128.	62.	5.87
+	ROUTED TO	R131A	975.	13.75	478.	128.	62.	5.87

+	HYDROGRAPH AT	131	317.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	1I131	1115.	13.58	534.	145.	70.	9.57
+	HYDROGRAPH AT	2D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	81.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	121A	366.	12.92	70.	17.	8.	.50
+	2 COMBINED AT	1I121A	402.	12.92	84.	22.	10.	1.34
+	HYDROGRAPH AT	D113A	43.	12.25	1.	0.	0.	1.34
+	ROUTED TO	R113A	9.	13.08	1.	0.	0.	1.34
+	2 COMBINED AT	CP121A	402.	12.92	85.	22.	10.	3.54
+	ROUTED TO	R121A	383.	13.08	84.	22.	10.	3.54
+	HYDROGRAPH AT	121	360.	12.92	68.	17.	8.	.50
+	2 COMBINED AT	CP121	692.	12.92	151.	38.	18.	4.03
+	ROUTED TO	R121	635.	13.50	150.	38.	18.	4.03
+	2 COMBINED AT	CP131	1727.	13.50	680.	182.	88.	10.47
+	DIVERSION TO	DI145	1405.	13.50	548.	145.	70.	10.47
+	HYDROGRAPH AT	D131	322.	13.50	132.	37.	18.	10.47
+	ROUTED TO	R131	316.	13.83	131.	37.	18.	10.47
+	HYDROGRAPH AT	132	253.	13.00	52.	13.	6.	.41
+	2 COMBINED AT	CP132	415.	13.58	178.	50.	24.	9.97
+	ROUTED TO	R132	403.	13.92	175.	50.	24.	9.97
+	HYDROGRAPH AT	133	304.	12.83	57.	16.	7.	.50
+	DIVERSION TO	133RET	192.	12.50	18.	5.	2.	.50
+	HYDROGRAPH AT	133OUT	304.	12.83	42.	11.	5.	.50
+	2 COMBINED AT	1I133	439.	13.83	213.	59.	29.	11.37
+	2 COMBINED AT	CP133	1005.	14.42	508.	155.	75.	15.93
+	DIVERSION TO	DI146	402.	14.42	203.	62.	30.	15.93
+	HYDROGRAPH AT	1D133	604.	14.42	305.	93.	45.	15.93
	DIVERSION TO							

							LABCAR	
+		1D147	201.	14.42	101.	31.	15.	15.93
+	HYDROGRAPH AT	2D133	403.	14.42	204.	62.	30.	15.93
+	ROUTED TO	R133	394.	14.58	202.	62.	30.	15.93
+	HYDROGRAPH AT	134	313.	13.08	68.	17.	8.	.50
+	HYDROGRAPH AT	D123	0.	.00	0.	0.	0.	.44
+	ROUTED TO	R123	0.	.00	0.	0.	0.	.44
+	3 COMBINED AT	CP134	558.	13.25	252.	78.	37.	16.87
+	DIVERSION TO	2D147	316.	13.25	124.	33.	16.	16.87
+	HYDROGRAPH AT	D134	242.	13.25	129.	45.	21.	16.87
+	ROUTED TO	R134	233.	13.42	128.	45.	21.	16.87
+	HYDROGRAPH AT	1D124	131.	13.33	23.	6.	3.	1.65
+	ROUTED TO	R124	108.	14.00	23.	6.	3.	1.65
+	HYDROGRAPH AT	135	373.	12.67	65.	18.	9.	.49
+	DIVERSION TO	135RET	350.	12.58	34.	9.	4.	.49
+	HYDROGRAPH AT	135OUT	351.	12.75	35.	9.	5.	.49
+	3 COMBINED AT	CP135	389.	12.83	178.	58.	28.	17.92
+	DIVERSION TO	DI148	35.	12.83	8.	2.	1.	17.92
+	HYDROGRAPH AT	D135	354.	12.83	170.	56.	27.	17.92
+	ROUTED TO	R135	311.	13.42	169.	56.	27.	17.92
+	HYDROGRAPH AT	2D124	296.	13.33	81.	20.	10.	1.65
+	ROUTED TO	R124	273.	15.00	75.	20.	10.	1.65
+	HYDROGRAPH AT	136	291.	13.08	63.	16.	8.	.46
+	2 COMBINED AT	1I136	289.	13.08	128.	36.	17.	1.03
+	2 COMBINED AT	CP136	527.	13.17	283.	90.	43.	18.33
+	ROUTED TO	R136	497.	13.67	282.	90.	43.	18.33
+	HYDROGRAPH AT	1D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	234.	13.08	73.	21.	10.	3.66
+	HYDROGRAPH AT	137	280.	13.42	77.	19.	9.	.54

+	3 COMBINED AT	CP137	867.	13.50	404.	125.	60.	21.60
+	DIVERSION TO	DI149	289.	13.50	134.	41.	20.	21.60
+	HYDROGRAPH AT	1D137	578.	13.50	269.	83.	40.	21.60
+	DIVERSION TO	DI153	289.	13.50	134.	41.	20.	21.60
+	HYDROGRAPH AT	2D137	289.	13.50	135.	42.	20.	21.60
+	ROUTED TO	R137	280.	14.08	134.	42.	20.	21.60
+	HYDROGRAPH AT	2D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	123.	15.42	62.	21.	10.	3.66
+	HYDROGRAPH AT	138	278.	13.00	54.	14.	7.	.54
+	2 COMBINED AT	1I138	250.	13.00	85.	30.	15.	22.08
+	2 COMBINED AT	CP138	314.	14.08	209.	72.	35.	22.08
+	ROUTED TO	R138	311.	14.50	208.	72.	35.	22.08
+	HYDROGRAPH AT	138A	717.	12.17	80.	24.	12.	.46
+	DIVERSION TO	138ART	717.	12.17	65.	17.	8.	.46
+	HYDROGRAPH AT	138AOT	257.	12.50	22.	7.	3.	.46
+	2 COMBINED AT	1I138A	320.	14.50	215.	76.	37.	23.70
+	2 COMBINED AT	2I138A	319.	14.50	214.	75.	37.	24.81
+	HYDROGRAPH AT	2D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	232.	15.83	119.	41.	20.	21.60
+	HYDROGRAPH AT	153	117.	13.33	32.	8.	4.	.20
+	2 COMBINED AT	CP153	234.	15.83	119.	48.	23.	21.92
+	2 COMBINED AT	CP138A	453.	16.08	326.	123.	60.	23.68
+	DIVERSION TO	DI154	306.	16.08	222.	84.	41.	23.68
+	HYDROGRAPH AT	D138A	147.	16.08	104.	39.	19.	23.68
+	ROUTED TO	R138A	138.	17.50	102.	39.	19.	23.68
+	HYDROGRAPH AT	D138A	306.	16.08	222.	84.	41.	23.68
+	ROUTED TO	RLLE	305.	16.17	222.	84.	41.	23.68

							LABCAR	
+	HYDROGRAPH AT	154	174.	12.58	28.	7.	3.	.17
+	2 COMBINED AT	LLE1	366.	16.00	271.	102.	50.	.33
+	ROUTED TO	RLLE1	363.	16.33	270.	102.	50.	.33
+	HYDROGRAPH AT	157	610.	12.83	117.	33.	16.	.89
+	DIVERSION TO	157RET	517.	12.67	51.	14.	7.	.89
+	HYDROGRAPH AT	157OUT	610.	12.83	72.	19.	9.	.89
+	2 COMBINED AT	1I157	725.	12.92	286.	106.	51.	25.08
+	2 COMBINED AT	2I157	725.	12.92	364.	144.	70.	25.08
+	HYDROGRAPH AT	127	456.	12.08	41.	12.	6.	.22
+	ROUTED TO	R127	248.	13.42	41.	12.	6.	.22
+	HYDROGRAPH AT	139	719.	12.25	84.	25.	12.	.47
+	DIVERSION TO	139RET	719.	12.25	56.	15.	7.	.47
+	HYDROGRAPH AT	139OUT	526.	12.42	34.	10.	5.	.47
+	2 COMBINED AT	1I139	528.	12.42	75.	21.	10.	.69
+	HYDROGRAPH AT	D126	776.	12.83	139.	41.	20.	4.75
+	ROUTED TO	RLE	692.	13.00	138.	41.	20.	4.75
+	2 COMBINED AT	2I139	739.	13.00	207.	61.	29.	7.04
+	HYDROGRAPH AT	140	180.	12.67	30.	8.	4.	.18
+	2 COMBINED AT	LE1	870.	13.00	243.	71.	34.	.88
+	ROUTED TO	RLE1	806.	13.08	243.	71.	34.	.88
+	HYDROGRAPH AT	156	233.	12.75	42.	11.	5.	.30
+	2 COMBINED AT	LE2	965.	13.00	281.	82.	39.	1.18
+	ROUTED TO	RLE2	891.	13.25	278.	82.	39.	1.18
+	2 COMBINED AT	LE3	1487.	12.92	700.	243.	118.	1.65
+	ROUTED TO	1RLE3	1509.	12.92	700.	243.	118.	1.65
+	ROUTED TO	2RLE3	1512.	12.92	700.	243.	118.	1.65
+	HYDROGRAPH AT	172	111.	12.58	16.	4.	2.	.12
	2 COMBINED AT							

+		LE4	1573.	12.92	706.	246.	LABCAR 120.	1.77
+	ROUTED TO	R172	1462.	13.33	702.	246.	120.	1.77
+	HYDROGRAPH AT	173	193.	13.00	40.	11.	5.	.31
+	2 COMBINED AT	CP173	1578.	13.33	725.	255.	125.	2.08
+	HYDROGRAPH AT	156A	501.	12.17	46.	13.	6.	.31
+	ROUTED TO	R156A	178.	14.17	45.	13.	6.	.31
+	HYDROGRAPH AT	158	1195.	12.33	147.	44.	21.	.97
+	DIVERSION TO	158RET	1195.	12.33	116.	31.	15.	.97
+	HYDROGRAPH AT	158OUT	534.	12.58	44.	13.	6.	.97
+	2 COMBINED AT	CP158	534.	12.58	85.	26.	13.	1.28
+	ROUTED TO	R158	198.	13.25	81.	26.	13.	1.28
+	HYDROGRAPH AT	173B	110.	12.83	18.	5.	2.	.20
+	2 COMBINED AT	CP173B	257.	13.17	95.	30.	15.	1.48
+	2 COMBINED AT	AFR2E	1576.	13.25	732.	262.	128.	30.12
+	ROUTED TO	RR173	1319.	13.50	673.	246.	121.	30.12
+	HYDROGRAPH AT	171	386.	13.42	112.	30.	14.	.70
+	ROUTED TO	R171	365.	13.67	111.	30.	14.	.70
+	HYDROGRAPH AT	173A	161.	12.75	29.	8.	4.	.20
+	2 COMBINED AT	CP173A	387.	13.67	139.	37.	18.	.90
+	2 COMBINED AT	AFR2F1	1653.	13.50	776.	278.	137.	31.02
+	ROUTED TO	RR173A	1449.	14.08	762.	278.	137.	31.02
+	HYDROGRAPH AT	186	180.	13.25	46.	11.	6.	.33
+	ROUTED TO	R186	166.	13.67	46.	11.	6.	.33
+	HYDROGRAPH AT	187	75.	12.00	4.	1.	0.	.35
+	2 COMBINED AT	CP187	166.	13.67	50.	12.	6.	.68
+	2 COMBINED AT	AFR2F2	1555.	14.08	795.	288.	142.	31.70
+	ROUTED TO	RR187	1357.	14.67	782.	288.	142.	31.70
+	HYDROGRAPH AT	199	71.	13.08	15.	4.	2.	.11

+	ROUTED TO	R199	62.	13.67	15.	4.	2.	.11
+	HYDROGRAPH AT	200	216.	12.67	34.	9.	4.	.29
+	2 COMBINED AT	CP200	216.	12.67	49.	12.	6.	.40
+	2 COMBINED AT	AFR2F3	1378.	14.67	790.	299.	147.	32.10
+	ROUTED TO	RR200	1285.	15.00	785.	299.	147.	32.10
+	HYDROGRAPH AT	141	484.	12.33	50.	12.	6.	.47
+	ROUTED TO	R141	478.	12.42	50.	12.	6.	.47
+	HYDROGRAPH AT	141A	214.	12.17	16.	4.	2.	.15
+	2 COMBINED AT	CP141A	571.	12.33	65.	16.	8.	.62
+	ROUTED TO	R141A	533.	12.50	65.	16.	8.	.62
+	HYDROGRAPH AT	142	305.	13.00	63.	16.	8.	.51
+	2 COMBINED AT	CP142	690.	12.50	127.	32.	15.	1.13
+	ROUTED TO	R142	645.	12.92	127.	32.	15.	1.13
+	HYDROGRAPH AT	143	300.	13.00	62.	16.	7.	.50
+	2 COMBINED AT	CP143	921.	12.92	188.	47.	23.	1.63
+	ROUTED TO	R143	900.	13.08	188.	47.	23.	1.63
+	HYDROGRAPH AT	D130	638.	13.42	165.	41.	20.	5.37
+	ROUTED TO	R130	603.	14.00	165.	41.	20.	5.37
+	HYDROGRAPH AT	144	328.	13.00	69.	17.	8.	.51
+	2 COMBINED AT	1I144	683.	13.83	232.	58.	28.	6.05
+	2 COMBINED AT	CP144	1199.	13.08	416.	104.	50.	7.68
+	DIVERSION TO	DI164A	93.	13.08	22.	5.	3.	7.68
+	HYDROGRAPH AT	D144	1106.	13.08	394.	99.	47.	7.68
+	ROUTED TO	R144	1077.	13.33	393.	99.	47.	7.68
+	HYDROGRAPH AT	145A	287.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP145A	1318.	13.25	454.	114.	55.	8.17
+	ROUTED TO	R145A	1289.	13.50	453.	114.	55.	8.17

							LABCAR	
+	HYDROGRAPH AT	D131	1405.	13.50	548.	145.	70.	10.47
+	ROUTED TO	R131	1358.	14.00	544.	145.	70.	10.47
+	HYDROGRAPH AT	145	297.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	1I145	1436.	14.00	588.	161.	78.	9.00
+	2 COMBINED AT	CP145	2498.	14.00	1028.	272.	131.	11.63
+	DIVERSION TO	DI164	788.	14.00	228.	57.	27.	11.63
+	HYDROGRAPH AT	1D145	1710.	14.00	800.	215.	103.	11.63
+	DIVERSION TO	DI165	746.	14.00	293.	73.	35.	11.63
+	HYDROGRAPH AT	2D145	964.	14.00	507.	142.	68.	11.63
+	ROUTED TO	R145B	939.	14.42	507.	142.	68.	11.63
+	DIVERSION TO	DI165B	778.	14.42	360.	91.	44.	11.63
+	HYDROGRAPH AT	3D145	162.	14.42	147.	51.	24.	11.63
+	ROUTED TO	R145C	162.	14.50	147.	51.	24.	11.63
+	DIVERSION TO	DI165C	78.	14.50	62.	18.	9.	11.63
+	HYDROGRAPH AT	4D145	86.	15.58	86.	33.	16.	11.63
+	ROUTED TO	R145D	86.	15.67	85.	33.	16.	11.63
+	HYDROGRAPH AT	1D133	402.	14.42	203.	62.	30.	15.93
+	ROUTED TO	R133	388.	14.83	199.	62.	30.	15.93
+	HYDROGRAPH AT	146	523.	13.17	124.	31.	15.	.90
+	2 COMBINED AT	1I146	660.	13.50	304.	92.	44.	15.02
+	2 COMBINED AT	CP146	727.	13.50	376.	122.	59.	18.49
+	DIVERSION TO	1D166	249.	13.50	99.	25.	12.	18.49
+	HYDROGRAPH AT	D146	478.	13.50	277.	98.	47.	18.49
+	ROUTED TO	R146A	476.	13.58	277.	98.	47.	18.49
+	HYDROGRAPH AT	4D145	78.	14.50	62.	18.	9.	11.63
+	ROUTED TO	R145E	77.	15.00	61.	18.	9.	11.63
+	2 COMBINED AT	1D165	512.	13.58	330.	115.	55.	18.49
	DIVERSION TO							

							LABCAR	
+		DIRB1	178.	12.42	178.	76.	37.	18.49
+	HYDROGRAPH AT	D146B	334.	13.58	152.	39.	19.	18.49
+	ROUTED TO	R146B	333.	13.67	151.	39.	19.	18.49
+	HYDROGRAPH AT	3D145	778.	14.42	360.	91.	44.	11.63
+	ROUTED TO	R145F	761.	15.08	352.	91.	44.	11.63
+	2 COMBINED AT	2D165	962.	15.00	479.	127.	61.	18.49
+	DIVERSION TO	DIRB2	486.	15.00	242.	64.	31.	18.49
+	HYDROGRAPH AT	D146C	476.	15.00	237.	63.	30.	18.49
+	ROUTED TO	R146C	474.	15.08	237.	63.	30.	18.49
+	HYDROGRAPH AT	159	608.	12.33	61.	15.	7.	.58
+	ROUTED TO	R159	594.	12.42	61.	15.	7.	.58
+	HYDROGRAPH AT	160	409.	12.42	44.	11.	5.	.39
+	2 COMBINED AT	CP160	996.	12.42	105.	26.	13.	.97
+	ROUTED TO	R160	893.	12.58	105.	26.	13.	.97
+	HYDROGRAPH AT	161	310.	13.00	62.	15.	7.	.50
+	2 COMBINED AT	CP161	1087.	12.58	165.	41.	20.	1.47
+	ROUTED TO	R161	925.	13.08	165.	41.	20.	1.47
+	HYDROGRAPH AT	162	268.	12.50	34.	8.	4.	.25
+	ROUTED TO	R162	198.	13.17	34.	8.	4.	.25
+	HYDROGRAPH AT	163	492.	12.92	99.	25.	12.	.75
+	2 COMBINED AT	1I163	664.	13.00	132.	33.	16.	1.00
+	2 COMBINED AT	CP163	1565.	13.00	295.	74.	35.	2.47
+	DIVERSION TO	DI176A	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	D163	1565.	13.00	295.	74.	35.	2.47
+	ROUTED TO	R163	1519.	13.17	295.	74.	35.	2.47
+	HYDROGRAPH AT	D144	93.	13.08	22.	5.	3.	7.68
+	ROUTED TO	R144	65.	16.00	22.	5.	3.	7.68
+	HYDROGRAPH AT	164A	309.	13.08	66.	17.	8.	.49

+	2 COMBINED AT	1I164A	302.	13.08	81.	22.	10.	8.17
+	2 COMBINED AT	CP164A	1765.	13.17	369.	94.	45.	10.64
+	ROUTED TO	R164A	1698.	13.25	368.	94.	45.	10.64
+	HYDROGRAPH AT	164	314.	13.08	68.	17.	8.	.49
+	2 COMBINED AT	1I164	1944.	13.25	431.	110.	53.	11.13
+	HYDROGRAPH AT	1D145	788.	14.00	228.	57.	27.	11.63
+	ROUTED TO	R145	772.	14.42	228.	57.	27.	11.63
+	2 COMBINED AT	CP164	1944.	13.25	656.	167.	80.	15.08
+	DIVERSION TO	DI177	257.	13.25	73.	19.	9.	15.08
+	HYDROGRAPH AT	D164	1639.	13.25	566.	144.	69.	15.08
+	ROUTED TO	R164	1516.	13.75	562.	144.	69.	15.08
+	HYDROGRAPH AT	2D145	746.	14.00	293.	73.	35.	11.63
+	ROUTED TO	R145	729.	15.25	282.	73.	35.	11.63
+	HYDROGRAPH AT	165	507.	13.25	122.	31.	15.	.90
+	2 COMBINED AT	1I165	740.	15.25	359.	102.	49.	12.53
+	2 COMBINED AT	2I165	1811.	13.67	907.	244.	117.	15.98
+	2 COMBINED AT	CP165	1945.	15.17	1107.	299.	144.	22.84
+	DIVERSION TO	DI180	945.	15.17	307.	77.	37.	22.84
+	HYDROGRAPH AT	D165	1000.	13.25	801.	222.	107.	22.84
+	ROUTED TO	R165	1000.	14.83	796.	222.	107.	22.84
+	HYDROGRAPH AT	D163	0.	.00	0.	0.	0.	2.47
+	ROUTED TO	R163	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	176A	327.	13.25	79.	20.	10.	.62
+	2 COMBINED AT	CP176A	322.	13.25	78.	20.	9.	3.09
+	DIVERSION TO	DI191	0.	.00	0.	0.	0.	3.09
+	HYDROGRAPH AT	D176A	322.	13.25	78.	20.	9.	3.09
+	ROUTED TO	R176A	298.	13.50	78.	20.	9.	3.09

							LABCAR	
+	HYDROGRAPH AT	177A	293.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP177A	493.	13.17	139.	35.	17.	3.58
+	ROUTED TO	R177A	488.	13.50	139.	35.	17.	3.58
+	HYDROGRAPH AT	177	291.	13.08	62.	15.	7.	.49
+	2 COMBINED AT	1I177	684.	13.33	200.	50.	24.	4.07
+	HYDROGRAPH AT	D164	257.	13.25	73.	19.	9.	15.08
+	ROUTED TO	R164	224.	14.00	73.	19.	9.	15.08
+	2 COMBINED AT	CP177	738.	13.75	261.	66.	32.	16.68
+	ROUTED TO	R177	723.	13.92	260.	66.	32.	16.68
+	HYDROGRAPH AT	178	274.	13.08	59.	15.	7.	.44
+	2 COMBINED AT	CP178	810.	13.42	314.	80.	39.	17.12
+	ROUTED TO	R178	805.	13.83	312.	80.	39.	17.12
+	HYDROGRAPH AT	179	293.	13.08	64.	16.	8.	.46
+	2 COMBINED AT	1I179	938.	13.58	369.	95.	46.	17.58
+	2 COMBINED AT	CP179	1834.	14.00	1120.	314.	151.	25.34
+	DIVERSION TO	DI193	891.	14.00	423.	106.	51.	25.34
+	HYDROGRAPH AT	1D179	943.	14.00	696.	208.	100.	25.34
+	DIVERSION TO	DI194A	222.	14.00	144.	37.	18.	25.34
+	HYDROGRAPH AT	2D179	721.	14.00	552.	171.	82.	25.34
+	ROUTED TO	R179	716.	14.25	550.	171.	82.	25.34
+	HYDROGRAPH AT	180	515.	13.33	136.	34.	16.	.99
+	2 COMBINED AT	1I180	946.	14.00	642.	203.	97.	26.33
+	HYDROGRAPH AT	2D133	201.	14.42	101.	31.	15.	15.93
+	ROUTED TO	R133	190.	16.00	93.	31.	15.	15.93
+	HYDROGRAPH AT	147	325.	13.00	68.	17.	8.	.50
+	2 COMBINED AT	1I147	310.	13.00	134.	48.	23.	14.62
+	HYDROGRAPH AT	D134	316.	13.25	124.	33.	16.	16.87
	ROUTED TO							

							LABCAR	
+		R134	259.	14.17	121.	33.	16.	16.87
+	2 COMBINED AT	CP147	372.	15.33	249.	81.	39.	15.92
+	DIVERSION TO	2D166	367.	15.33	246.	80.	38.	15.92
+	HYDROGRAPH AT	D147	5.	15.33	2.	1.	0.	15.92
+	ROUTED TO	R147	4.	16.42	2.	1.	0.	15.92
+	HYDROGRAPH AT	148	307.	13.00	66.	16.	8.	.48
+	2 COMBINED AT	1I148	291.	13.00	64.	16.	8.	16.40
+	HYDROGRAPH AT	D135	35.	12.83	8.	2.	1.	17.92
+	ROUTED TO	R135	21.	14.58	8.	2.	1.	17.92
+	2 COMBINED AT	CP148	291.	13.00	73.	18.	9.	17.46
+	DIVERSION TO	DI150	44.	13.00	11.	3.	1.	17.46
+	HYDROGRAPH AT	D148	246.	13.00	61.	15.	7.	17.46
+	ROUTED TO	R148	172.	14.08	60.	15.	7.	17.46
+	HYDROGRAPH AT	D147	367.	15.33	246.	80.	38.	15.92
+	ROUTED TO	R147	346.	17.25	232.	80.	38.	15.92
+	HYDROGRAPH AT	166	496.	13.33	132.	33.	16.	.98
+	HYDROGRAPH AT	D146	249.	13.50	99.	25.	12.	18.49
+	ROUTED TO	R146	161.	16.58	88.	25.	12.	18.49
+	2 COMBINED AT	1I166	496.	13.33	207.	64.	31.	19.47
+	2 COMBINED AT	2I166	464.	13.33	337.	130.	63.	21.45
+	2 COMBINED AT	CP166	506.	13.42	392.	143.	69.	22.45
+	DIVERSION TO	DI167	487.	13.42	382.	141.	68.	22.45
+	HYDROGRAPH AT	D166	20.	13.42	10.	2.	1.	22.45
+	ROUTED TO	R166	16.	18.00	10.	2.	1.	22.45
+	HYDROGRAPH AT	D165	945.	15.17	307.	77.	37.	22.84
+	ROUTED TO	R165	663.	16.50	290.	77.	37.	22.84
+	2 COMBINED AT	1I180	618.	16.58	275.	73.	35.	30.29
+	2 COMBINED AT	CP180	1185.	16.50	893.	275.	132.	30.29

+	DIVERSION TO	1D195	1003.	16.50	761.	236.	113.	30.29
+	HYDROGRAPH AT	D180	182.	16.50	132.	39.	19.	30.29
+	ROUTED TO	R180	180.	16.92	131.	39.	19.	30.29
+	HYDROGRAPH AT	181	258.	12.92	49.	12.	6.	.37
+	2 COMBINED AT	CP181	240.	12.92	156.	50.	24.	30.66
+	DIVERSION TO	2D195	240.	12.92	156.	50.	24.	30.66
+	HYDROGRAPH AT	D181	0.	.00	0.	0.	0.	30.66
+	ROUTED TO	R181	0.	.00	0.	0.	0.	30.66
+	HYDROGRAPH AT	182	191.	12.75	31.	8.	4.	.24
+	2 COMBINED AT	1I182	172.	12.75	28.	7.	3.	30.90
+	HYDROGRAPH AT	D148	44.	13.00	11.	3.	1.	17.46
+	ROUTED TO	R148	35.	13.83	11.	3.	1.	17.46
+	HYDROGRAPH AT	150	188.	12.75	32.	8.	4.	.23
+	2 COMBINED AT	CP150	183.	12.75	41.	10.	5.	17.69
+	ROUTED TO	R150	160.	13.17	41.	10.	5.	17.69
+	HYDROGRAPH AT	151	200.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	1I151	287.	12.92	73.	18.	9.	17.94
+	HYDROGRAPH AT	1D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	274.	13.83	134.	41.	20.	21.60
+	HYDROGRAPH AT	149	293.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	CP149	400.	13.67	186.	56.	27.	22.20
+	ROUTED TO	R149	392.	13.92	184.	56.	27.	22.20
+	2 COMBINED AT	CP151	531.	13.42	249.	74.	36.	23.66
+	DIVERSION TO	1D168	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	1D151	361.	13.42	173.	54.	26.	23.66
+	DIVERSION TO	DI152	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	2D151	191.	13.42	97.	34.	16.	23.66

							LABCAR	
+	ROUTED TO	R151	184.	14.25	96.	34.	16.	23.66
+	HYDROGRAPH AT	167	501.	13.33	133.	33.	16.	.97
+	2 COMBINED AT	1I167	531.	13.42	209.	65.	31.	24.63
+	HYDROGRAPH AT	D166	487.	13.42	382.	141.	68.	22.45
+	ROUTED TO	R166	460.	13.92	381.	141.	68.	22.45
+	2 COMBINED AT	CP167	924.	13.75	557.	202.	98.	25.61
+	DIVERSION TO	1D183	216.	13.75	94.	24.	12.	25.61
+	HYDROGRAPH AT	1D167	707.	13.75	463.	178.	87.	25.61
+	DIVERSION TO	2D168	41.	13.75	18.	5.	2.	25.61
+	HYDROGRAPH AT	2D167	666.	13.75	445.	174.	84.	25.61
+	ROUTED TO	R167	659.	14.00	444.	174.	84.	25.61
+	HYDROGRAPH AT	181A	227.	13.17	52.	13.	6.	.39
+	2 COMBINED AT	CP181A	736.	13.83	476.	185.	90.	26.00
+	DIVERSION TO	2D183	141.	13.83	78.	27.	13.	26.00
+	HYDROGRAPH AT	D181A	595.	13.83	397.	158.	77.	26.00
+	ROUTED TO	R181A	589.	14.17	396.	158.	77.	26.00
+	2 COMBINED AT	CP182	582.	14.17	386.	159.	77.	38.46
+	DIVERSION TO	DI196	295.	14.17	196.	81.	39.	38.46
+	HYDROGRAPH AT	D182	287.	14.17	190.	78.	38.	38.46
+	ROUTED TO	R182	279.	15.08	189.	78.	38.	38.46
+	HYDROGRAPH AT	2D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	164.	13.92	75.	20.	10.	23.66
+	HYDROGRAPH AT	152	252.	12.92	50.	12.	6.	.35
+	2 COMBINED AT	CP152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	1D169	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	1D152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	DI155	0.	.00	0.	0.	0.	24.01
	HYDROGRAPH AT							

							LABCAR	
+		2D152	266.	13.00	117.	31.	15.	24.01
+	ROUTED TO	R152	259.	13.83	114.	31.	15.	24.01
+	HYDROGRAPH AT	1D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	150.	15.83	65.	20.	10.	23.66
+	HYDROGRAPH AT	168	312.	13.17	71.	18.	9.	.51
+	2 COMBINED AT	1I168	289.	13.17	107.	36.	17.	24.17
+	HYDROGRAPH AT	2D167	41.	13.75	18.	5.	2.	25.61
+	ROUTED TO	R167	38.	14.67	18.	5.	2.	25.61
+	2 COMBINED AT	2I168	289.	13.17	122.	41.	20.	26.12
+	2 COMBINED AT	CP168	424.	13.58	231.	72.	35.	26.47
+	DIVERSION TO	2D169	108.	13.58	51.	15.	7.	26.47
+	HYDROGRAPH AT	D168	316.	13.58	180.	56.	27.	26.47
+	ROUTED TO	R168	311.	13.92	179.	56.	27.	26.47
+	HYDROGRAPH AT	1D167	216.	13.75	94.	24.	12.	25.61
+	ROUTED TO	R167	211.	14.42	91.	24.	12.	25.61
+	HYDROGRAPH AT	183	226.	12.42	27.	7.	3.	.21
+	2 COMBINED AT	1I183	211.	14.42	96.	30.	14.	25.82
+	HYDROGRAPH AT	D181A	141.	13.83	78.	27.	13.	26.00
+	ROUTED TO	R181A	140.	14.08	78.	27.	13.	26.00
+	2 COMBINED AT	2I183	345.	14.25	166.	57.	27.	26.21
+	2 COMBINED AT	CP183	638.	14.17	340.	113.	54.	27.07
+	ROUTED TO	R183	592.	15.42	339.	113.	54.	27.07
+	HYDROGRAPH AT	184	465.	13.17	106.	27.	13.	.79
+	2 COMBINED AT	1I184	602.	15.42	354.	136.	66.	27.86
+	2 COMBINED AT	2I184	846.	15.42	513.	207.	101.	40.32
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01
+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	155	255.	12.75	51.	13.	6.	.26

+	2 COMBINED AT	CP155	237.	12.75	47.	12.	6.	24.27
+	ROUTED TO	R155	187.	13.92	47.	12.	6.	24.27
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01
+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	169	384.	13.17	100.	25.	12.	.51
+	2 COMBINED AT	1I169	358.	13.17	92.	23.	11.	24.52
+	2 COMBINED AT	2I169	370.	13.83	138.	35.	17.	25.13
+	HYDROGRAPH AT	D168	108.	13.58	51.	15.	7.	26.47
+	ROUTED TO	R168	105.	14.08	51.	15.	7.	26.47
+	2 COMBINED AT	CP169	463.	13.83	181.	50.	24.	27.24
+	ROUTED TO	R169	422.	14.50	178.	50.	24.	27.24
+	2 COMBINED AT	CP184	1085.	15.25	675.	254.	124.	41.09
+	DIVERSION TO	DI197	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	1D184	652.	15.25	405.	153.	74.	41.09
+	DIVERSION TO	DI198	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	2D184	218.	15.25	135.	51.	25.	41.09
+	ROUTED TO	R184	216.	15.67	135.	51.	25.	41.09
+	HYDROGRAPH AT	170	296.	12.67	53.	14.	7.	.29
+	ROUTED TO	R170	234.	13.75	53.	14.	7.	.29
+	HYDROGRAPH AT	185	443.	13.08	97.	24.	12.	.69
+	2 COMBINED AT	1I185	466.	13.58	149.	38.	18.	.98
+	2 COMBINED AT	CP185	486.	13.67	246.	84.	41.	44.55
+	ROUTED TO	R185	370.	15.33	225.	83.	41.	44.55
+	HYDROGRAPH AT	2D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	423.	17.00	262.	99.	49.	41.09
+	HYDROGRAPH AT	198	547.	13.08	129.	36.	17.	.90
+	DIVERSION TO	198RET	265.	12.50	26.	7.	4.	.90

+	HYDROGRAPH AT	198OUT	547.	13.08	109.	28.	14.	.90
+	2 COMBINED AT	1I198	485.	13.08	266.	121.	61.	41.97
+	2 COMBINED AT	2I198	686.	16.83	454.	204.	101.	42.95
+	HYDROGRAPH AT	1D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	425.	16.17	268.	101.	49.	41.09
+	HYDROGRAPH AT	197	468.	13.50	133.	33.	16.	1.00
+	2 COMBINED AT	CP197	435.	16.17	319.	130.	64.	42.06
+	ROUTED TO	R197	431.	16.58	317.	129.	63.	42.06
+	HYDROGRAPH AT	203	145.	12.25	13.	3.	2.	.11
+	DIVERSION TO	203RET	145.	12.25	13.	3.	2.	.11
+	HYDROGRAPH AT	203OUT	0.	.00	0.	0.	0.	.11
+	2 COMBINED AT	CP203	431.	16.58	317.	129.	63.	42.17
+	2 COMBINED AT	CP198	1111.	16.75	745.	332.	164.	44.06
+	ROUTED TO	R198	1108.	16.92	745.	331.	164.	44.06
+	HYDROGRAPH AT	204	366.	12.25	31.	8.	4.	.27
+	2 COMBINED AT	1I204	1108.	16.92	744.	336.	167.	44.33
+	HYDROGRAPH AT	174	572.	12.25	51.	13.	6.	.45
+	ROUTED TO	R174	351.	12.83	51.	13.	6.	.45
+	HYDROGRAPH AT	175	354.	12.25	32.	8.	4.	.28
+	DIVERSION TO	DI175A	354.	12.25	32.	8.	4.	.28
+	HYDROGRAPH AT	D175	0.	.00	0.	0.	0.	.28
+	ROUTED TO	R175	0.	.00	0.	0.	0.	.28
+	HYDROGRAPH AT	176	635.	12.42	71.	18.	9.	.67
+	2 COMBINED AT	1I176	633.	12.42	71.	18.	8.	.95
+	2 COMBINED AT	CP176	708.	12.50	121.	30.	14.	1.40
+	ROUTED TO	R176	618.	12.92	121.	30.	14.	1.40
+	HYDROGRAPH AT	D175	354.	12.25	32.	8.	4.	.28
	ROUTED TO							

+		R175	322.	12.42	32.	8.	LABCAR 4.	.28
+	HYDROGRAPH AT	175A	417.	12.50	50.	13.	6.	.47
+	2 COMBINED AT	CP175A	721.	12.42	82.	20.	10.	.75
+	ROUTED TO	R175A	683.	12.67	82.	20.	10.	.75
+	HYDROGRAPH AT	CP3	548.	12.92	54.	14.	7.	4.86
+	ROUTED TO	R3	372.	13.42	54.	14.	7.	4.86
+	2 COMBINED AT	1I189	683.	12.67	140.	35.	17.	5.81
+	HYDROGRAPH AT	189	514.	12.42	56.	14.	7.	.51
+	2 COMBINED AT	CP189	954.	12.58	188.	47.	23.	6.32
+	ROUTED TO	R189	796.	13.17	187.	47.	23.	6.32
+	HYDROGRAPH AT	190	534.	12.92	101.	25.	12.	.86
+	2 COMBINED AT	CP190	1224.	13.08	286.	72.	34.	7.18
+	ROUTED TO	R190	1152.	13.33	285.	72.	34.	7.18
+	HYDROGRAPH AT	D176A	0.	.00	0.	0.	0.	3.09
+	ROUTED TO	R176A	0.	.00	0.	0.	0.	3.09
+	3 COMBINED AT	1I191	1559.	13.33	396.	99.	48.	11.39
+	HYDROGRAPH AT	191	545.	13.25	131.	33.	16.	.99
+	2 COMBINED AT	CP191	2050.	13.25	518.	130.	63.	12.38
+	DIVERSION TO	1D208	1339.	13.08	457.	115.	55.	12.38
+	HYDROGRAPH AT	D191	711.	13.25	62.	15.	7.	12.38
+	ROUTED TO	R191	622.	13.58	62.	15.	7.	12.38
+	HYDROGRAPH AT	192A	327.	12.83	61.	16.	8.	.50
+	DIVERSION TO	192ART	146.	12.33	10.	3.	1.	.50
+	HYDROGRAPH AT	192AOT	327.	12.83	52.	13.	6.	.50
+	2 COMBINED AT	CP192A	704.	13.58	110.	28.	13.	12.68
+	ROUTED TO	R192A	665.	13.83	110.	28.	13.	12.68
+	HYDROGRAPH AT	192	282.	13.08	60.	15.	7.	.50
+	2 COMBINED AT	CP192	747.	13.83	166.	42.	20.	13.38

+	DIVERSION TO	1D209	659.	13.83	149.	38.	18.	13.38
+	HYDROGRAPH AT	1D192	88.	13.83	17.	4.	2.	13.38
+	DIVERSION TO	1D210	0.	.00	0.	0.	0.	13.38
+	HYDROGRAPH AT	2D192	88.	13.83	17.	4.	2.	13.38
+	ROUTED TO	R192	85.	14.00	17.	4.	2.	13.38
+	DIVERSION TO	DI211	68.	14.00	13.	3.	2.	13.38
+	HYDROGRAPH AT	1D193	17.	14.00	3.	1.	0.	13.38
+	ROUTED TO	R192	16.	14.25	3.	1.	0.	13.38
+	HYDROGRAPH AT	193	502.	13.25	121.	30.	15.	.91
+	2 COMBINED AT	1I193	484.	13.25	119.	30.	14.	14.29
+	HYDROGRAPH AT	1D179	891.	14.00	423.	106.	51.	25.34
+	ROUTED TO	R179	868.	14.50	422.	106.	51.	25.34
+	2 COMBINED AT	CP193	926.	14.42	499.	130.	63.	39.17
+	ROUTED TO	R193	916.	14.75	499.	130.	63.	39.17
+	HYDROGRAPH AT	2D179	222.	14.00	144.	37.	18.	25.34
+	ROUTED TO	R179	152.	18.42	111.	37.	18.	25.34
+	HYDROGRAPH AT	194A	210.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	CP194A	192.	12.75	111.	45.	22.	36.84
+	HYDROGRAPH AT	194B	206.	12.75	35.	9.	4.	.25
+	3 COMBINED AT	CP194B	921.	14.75	584.	183.	88.	36.84
+	ROUTED TO	SR194B	284.	18.67	267.	176.	88.	36.84
+	ROUTED TO	R194B	284.	18.75	267.	176.	88.	36.84
+	HYDROGRAPH AT	194C	707.	13.42	122.	30.	15.	.49
+	2 COMBINED AT	CP194C	748.	13.42	290.	202.	101.	37.33
+	ROUTED TO	R194C	720.	13.58	288.	202.	101.	37.33
+	HYDROGRAPH AT	D180	1003.	16.50	761.	236.	113.	30.29
+	ROUTED TO	R180	983.	17.92	736.	235.	113.	30.29

+	HYDROGRAPH AT	195	239.	13.50	67.	17.	8.	.49
+	2 COMBINED AT	1I195	978.	17.92	736.	249.	120.	33.41
+	HYDROGRAPH AT	D181	240.	12.92	156.	50.	24.	30.66
+	ROUTED TO	R181	219.	13.17	155.	50.	24.	30.66
+	3 COMBINED AT	CP195	1360.	18.00	1083.	492.	241.	41.02
+	ROUTED TO	R195	1359.	18.00	1081.	492.	241.	41.02
+	HYDROGRAPH AT	D182	295.	14.17	196.	81.	39.	38.46
+	ROUTED TO	R182	288.	15.00	195.	80.	39.	38.46
+	HYDROGRAPH AT	196	284.	13.00	61.	16.	7.	.47
+	2 COMBINED AT	1I196	296.	15.00	208.	93.	46.	38.90
+	2 COMBINED AT	CP196	1483.	18.08	1221.	573.	281.	51.58
+	ROUTED TO	R196	1480.	18.25	1219.	572.	281.	51.58
+	HYDROGRAPH AT	202	235.	13.42	66.	16.	8.	.48
+	2 COMBINED AT	CP202	1480.	18.25	1221.	586.	288.	52.06
+	ROUTED TO	R202	1477.	18.33	1220.	585.	288.	52.06
+	2 COMBINED AT	CP204	2295.	17.50	1922.	905.	448.	57.76
+	ROUTED TO	R204	2294.	17.58	1922.	905.	448.	57.76
+	HYDROGRAPH AT	205	112.	12.08	6.	2.	1.	.06
+	2 COMBINED AT	CP205	2294.	17.58	1922.	906.	449.	57.82
+	ROUTED TO	R205	0.	.00	0.	0.	0.	57.82
+	HYDROGRAPH AT	206	182.	12.17	13.	3.	2.	.12
+	2 COMBINED AT	CP206	153.	12.17	11.	3.	1.	58.31
+	2 COMBINED AT	RCP206	1406.	15.00	785.	303.	149.	68.69
+	ROUTED TO	RR206	1020.	15.75	701.	276.	136.	68.69
+	HYDROGRAPH AT	228A	129.	12.08	10.	3.	1.	.08
+	2 COMBINED AT	AFR2K	1020.	15.75	701.	278.	137.	68.77
+	ROUTED TO	R228A	962.	17.50	691.	277.	137.	68.77
	HYDROGRAPH AT							

							LABCAR	
+		1D10	958.	12.75	174.	47.	23.	10.87
+	HYDROGRAPH AT	2D10	1596.	12.75	215.	54.	26.	10.87
+	2 COMBINED AT	1I188	2551.	12.75	389.	101.	49.	11.08
+	ROUTED TO	R10	2512.	12.83	389.	101.	49.	11.08
+	HYDROGRAPH AT	188	256.	12.25	21.	5.	3.	.19
+	2 COMBINED AT	CP188	2517.	12.83	409.	106.	51.	11.08
+	ROUTED TO	R188	2435.	13.00	409.	106.	51.	11.08
+	HYDROGRAPH AT	207A	497.	12.42	53.	13.	6.	.50
+	2 COMBINED AT	CP207A	2469.	13.00	458.	118.	57.	11.58
+	ROUTED TO	R207A	2423.	13.08	458.	118.	57.	11.58
+	HYDROGRAPH AT	214	196.	12.25	17.	4.	2.	.16
+	2 COMBINED AT	CP214	2423.	13.08	473.	122.	59.	11.74
+	ROUTED TO	R214	2377.	13.17	473.	122.	59.	11.74
+	HYDROGRAPH AT	215A	453.	12.42	49.	12.	6.	.45
+	ROUTED TO	R215A	436.	12.50	49.	12.	6.	.45
+	HYDROGRAPH AT	215	383.	12.33	40.	10.	5.	.35
+	2 COMBINED AT	1I215	793.	12.42	88.	22.	11.	.80
+	2 COMBINED AT	2I215	2432.	13.08	554.	142.	69.	12.54
+	DIVERSION TO	1DI216	1190.	13.08	117.	29.	14.	12.54
+	HYDROGRAPH AT	3I215	1289.	13.58	438.	113.	54.	12.54
+	DIVERSION TO	2DI216	758.	13.58	244.	61.	29.	12.54
+	HYDROGRAPH AT	4I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	3DI216	0.	.00	0.	0.	0.	12.54
+	HYDROGRAPH AT	5I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	4DI216	156.	13.58	51.	13.	6.	12.54
+	HYDROGRAPH AT	CP215	376.	13.58	143.	40.	19.	12.54
+	ROUTED TO	R215	371.	12.83	143.	40.	19.	12.54
+	HYDROGRAPH AT	233	464.	12.42	52.	13.	6.	.50

+	2 COMBINED AT	CP233	722.	12.50	191.	52.	25.	13.04
+	ROUTED TO	R233	631.	12.75	191.	52.	25.	13.04
+	HYDROGRAPH AT	216	301.	12.92	56.	14.	7.	.51
+	DIVERSION TO	1OL216	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1D216I	251.	12.92	36.	9.	4.	.51
+	DIVERSION TO	2OL216	50.	12.25	13.	3.	2.	.51
+	HYDROGRAPH AT	2D216I	201.	12.92	23.	6.	3.	.51
+	DIVERSION TO	3OL216	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3D216I	151.	12.92	13.	3.	2.	.51
+	DIVERSION TO	4OL216	50.	12.67	7.	2.	1.	.51
+	HYDROGRAPH AT	4D216I	101.	12.92	6.	1.	1.	.51
+	DIVERSION TO	5OL216	50.	12.75	4.	1.	0.	.51
+	HYDROGRAPH AT	5D216I	51.	12.92	2.	0.	0.	.51
+	HYDROGRAPH AT	1D215	1190.	13.08	117.	29.	14.	12.54
+	DIVERSION TO	3D183	980.	13.08	96.	24.	12.	12.54
+	HYDROGRAPH AT	1DI186	210.	13.08	21.	5.	2.	12.54
+	2 COMBINED AT	1I216	207.	13.08	21.	5.	3.	13.58
+	DIVERSION TO	1DI217	76.	13.08	6.	1.	1.	13.58
+	HYDROGRAPH AT	1D216	131.	13.08	15.	4.	2.	13.58
+	HYDROGRAPH AT	1216I	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1DI183	980.	13.08	96.	24.	12.	12.54
+	3 COMBINED AT	2I216	1146.	13.08	129.	32.	15.	13.58
+	DIVERSION TO	4D183	825.	13.08	93.	23.	11.	13.58
+	HYDROGRAPH AT	2DI186	321.	13.08	36.	9.	4.	13.58
+	DIVERSION TO	2DI217	106.	13.08	7.	2.	1.	13.58
+	HYDROGRAPH AT	2D216	215.	13.08	29.	7.	3.	13.58
+	HYDROGRAPH AT	2216I	50.	12.25	13.	3.	2.	.51

+	HYDROGRAPH AT	2DI183	825.	13.08	93.	23.	11.	13.58
+	3 COMBINED AT	3I216	1090.	13.08	134.	34.	16.	13.58
+	DIVERSION TO	5D183	448.	13.08	55.	14.	7.	13.58
+	HYDROGRAPH AT	3DI186	642.	13.08	79.	20.	10.	13.58
+	DIVERSION TO	3DI217	0.	.00	0.	0.	0.	13.58
+	HYDROGRAPH AT	3D216	642.	13.08	79.	20.	10.	13.58
+	HYDROGRAPH AT	3216I	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3DI183	448.	13.08	55.	14.	7.	13.58
+	3 COMBINED AT	4I216	1140.	13.08	144.	36.	17.	13.58
+	HYDROGRAPH AT	2D215	758.	13.58	244.	61.	29.	12.54
+	2 COMBINED AT	2I216	1872.	13.08	387.	97.	47.	13.58
+	HYDROGRAPH AT	3D215	0.	.00	0.	0.	0.	12.54
+	2 COMBINED AT	3I216	1872.	13.08	387.	97.	47.	13.58
+	DIVERSION TO	4DI217	131.	13.08	12.	3.	1.	13.58
+	HYDROGRAPH AT	4D216	1742.	13.08	375.	94.	45.	13.58
+	HYDROGRAPH AT	4D215	156.	13.58	51.	13.	6.	12.54
+	2 COMBINED AT	5I216	1894.	13.08	425.	106.	51.	13.58
+	HYDROGRAPH AT	4216I	50.	12.67	7.	2.	1.	.51
+	2 COMBINED AT	6I216	1944.	13.08	432.	108.	52.	13.58
+	DIVERSION TO	5DI217	670.	13.08	122.	31.	15.	13.58
+	HYDROGRAPH AT	5D216	1274.	13.08	309.	77.	37.	13.58
+	HYDROGRAPH AT	5216I	50.	12.75	4.	1.	0.	.51
+	2 COMBINED AT	7I216	1304.	13.08	313.	78.	38.	13.58
+	DIVERSION TO	6DI217	445.	13.08	95.	24.	11.	13.58
+	HYDROGRAPH AT	6D216	859.	13.08	218.	54.	26.	13.58
+	ROUTED TO	R216	846.	13.25	218.	54.	26.	13.58
+	HYDROGRAPH AT	234	280.	13.17	63.	16.	8.	.53
	2 COMBINED AT							

+		1I234	1155.	13.17	290.	72.	LABCAR 35.	1.04
+	2 COMBINED AT	CP234	1565.	13.17	467.	121.	58.	14.08
+	DIVERSION TO	1D248	689.	13.17	156.	39.	19.	14.08
+	HYDROGRAPH AT	D234	876.	13.17	311.	82.	40.	14.08
+	ROUTED TO	R234	828.	13.50	311.	82.	40.	14.08
+	HYDROGRAPH AT	207	508.	13.25	122.	31.	15.	1.00
+	DIVERSION TO	2D208	391.	13.25	94.	24.	11.	1.00
+	HYDROGRAPH AT	D207	117.	13.25	28.	7.	3.	1.00
+	ROUTED TO	R207	99.	13.92	28.	7.	3.	1.00
+	HYDROGRAPH AT	217	309.	13.00	66.	16.	8.	.49
+	HYDROGRAPH AT	1D216	76.	13.08	6.	1.	1.	13.58
+	2 COMBINED AT	2I216	372.	13.00	69.	17.	8.	12.54
+	HYDROGRAPH AT	2D216	106.	13.08	7.	2.	1.	13.58
+	2 COMBINED AT	3I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	3D216	0.	.00	0.	0.	0.	13.58
+	2 COMBINED AT	4I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	4D216	131.	13.08	12.	3.	1.	13.58
+	2 COMBINED AT	5I216	611.	13.08	89.	22.	11.	12.54
+	HYDROGRAPH AT	5D216	670.	13.08	122.	31.	15.	13.58
+	2 COMBINED AT	6I216	1286.	13.08	212.	53.	26.	12.54
+	HYDROGRAPH AT	6D216	445.	13.08	95.	24.	11.	13.58
+	2 COMBINED AT	7I216	1733.	13.08	308.	77.	37.	12.54
+	ROUTED TO	RD216	1379.	13.42	307.	77.	37.	12.54
+	2 COMBINED AT	CP217	1415.	13.42	330.	83.	40.	14.03
+	DIVERSION TO	DI218	320.	13.42	80.	20.	10.	14.03
+	HYDROGRAPH AT	D217	1096.	13.42	249.	62.	30.	14.03
+	ROUTED TO	R217	1063.	13.75	249.	62.	30.	14.03
+	HYDROGRAPH AT	235	243.	13.17	56.	14.	7.	.47

+	2 COMBINED AT	1I235	1269.	13.75	319.	80.	39.	1.96
+	2 COMBINED AT	CP235	1956.	13.75	605.	156.	75.	16.04
+	DIVERSION TO	2D248	1030.	13.75	296.	74.	36.	16.04
+	HYDROGRAPH AT	D235	926.	13.75	309.	82.	40.	16.04
+	ROUTED TO	R235	889.	14.08	307.	82.	40.	16.04
+	HYDROGRAPH AT	D191	1339.	13.08	457.	115.	55.	12.38
+	ROUTED TO	R191	1339.	13.75	455.	115.	55.	12.38
+	HYDROGRAPH AT	208	530.	13.17	122.	31.	15.	1.00
+	2 COMBINED AT	1I208	1748.	13.33	568.	144.	69.	13.18
+	HYDROGRAPH AT	D207	391.	13.25	94.	24.	11.	1.00
+	ROUTED TO	R207	347.	13.75	94.	24.	11.	1.00
+	2 COMBINED AT	CP208	1969.	13.58	655.	166.	80.	14.18
+	DIVERSION TO	1D219	597.	13.58	275.	70.	34.	14.18
+	HYDROGRAPH AT	1D208	1372.	13.58	379.	96.	46.	14.18
+	DIVERSION TO	DI209A	1365.	13.58	378.	95.	46.	14.18
+	HYDROGRAPH AT	2D208	7.	13.58	2.	0.	0.	14.18
+	ROUTED TO	R208	7.	14.25	2.	0.	0.	14.18
+	HYDROGRAPH AT	218	498.	13.25	119.	30.	14.	1.00
+	2 COMBINED AT	1I218	476.	13.25	115.	29.	14.	15.18
+	HYDROGRAPH AT	D217	320.	13.42	80.	20.	10.	14.03
+	ROUTED TO	R217	291.	14.00	80.	20.	10.	14.03
+	2 COMBINED AT	CP218	468.	13.25	181.	46.	22.	28.21
+	DIVERSION TO	DI237	302.	13.25	130.	33.	16.	28.21
+	HYDROGRAPH AT	1D218	166.	13.25	51.	13.	6.	28.21
+	DIVERSION TO	2D219	39.	13.25	12.	3.	1.	28.21
+	HYDROGRAPH AT	2D218	127.	13.25	39.	10.	5.	28.21
+	ROUTED TO	R218	122.	14.17	39.	10.	5.	28.21

+	HYDROGRAPH AT	236	516.	13.25	128.	32.	15.	1.00
+	2 COMBINED AT	1I236	578.	13.33	163.	41.	20.	16.67
+	2 COMBINED AT	CP236	1176.	14.00	449.	119.	57.	26.34
+	DIVERSION TO	DI249	308.	14.00	81.	20.	10.	26.34
+	HYDROGRAPH AT	1D236	868.	14.00	368.	99.	47.	26.34
+	DIVERSION TO	1D250	387.	14.00	121.	30.	15.	26.34
+	HYDROGRAPH AT	2D236	481.	14.00	247.	68.	33.	26.34
+	ROUTED TO	R236	478.	14.17	247.	68.	33.	26.34
+	HYDROGRAPH AT	209A	276.	13.08	60.	15.	7.	.50
+	HYDROGRAPH AT	1D208	1365.	13.58	378.	95.	46.	14.18
+	ROUTED TO	R208	1352.	13.75	377.	95.	46.	14.18
+	2 COMBINED AT	CP209A	1479.	13.67	433.	109.	52.	14.68
+	DIVERSION TO	1D220	554.	13.67	173.	44.	21.	14.68
+	HYDROGRAPH AT	1D209A	925.	13.67	260.	65.	31.	14.68
+	DIVERSION TO	2D209	248.	13.67	67.	17.	8.	14.68
+	HYDROGRAPH AT	2D209A	677.	13.67	193.	49.	23.	14.68
+	ROUTED TO	R209A	663.	14.17	193.	49.	23.	14.68
+	HYDROGRAPH AT	2D208	597.	13.58	275.	70.	34.	14.18
+	ROUTED TO	R208	584.	14.92	257.	70.	34.	14.18
+	HYDROGRAPH AT	219	278.	13.08	60.	15.	7.	.50
+	2 COMBINED AT	1I219	591.	14.92	284.	84.	41.	14.68
+	2 COMBINED AT	2I219	1070.	14.75	476.	133.	64.	15.18
+	HYDROGRAPH AT	2D218	39.	13.25	12.	3.	1.	28.21
+	ROUTED TO	R218	37.	14.50	12.	3.	1.	28.21
+	2 COMBINED AT	CP219	1083.	14.75	476.	133.	64.	29.21
+	DIVERSION TO	DI238	756.	14.75	343.	99.	47.	29.21
+	HYDROGRAPH AT	1D219	314.	14.75	127.	32.	16.	29.21
	DIVERSION TO							

							LABCAR	
+		2D220	130.	14.75	52.	13.	6.	29.21
+	HYDROGRAPH AT	2D219	184.	14.75	75.	19.	9.	29.21
+	ROUTED TO	R219	167.	15.58	74.	19.	9.	29.21
+	HYDROGRAPH AT	1D218	302.	13.25	130.	33.	16.	28.21
+	ROUTED TO	R218	290.	14.50	126.	33.	16.	28.21
+	HYDROGRAPH AT	237	280.	13.25	68.	17.	8.	.50
+	2 COMBINED AT	1I237	397.	14.00	187.	51.	24.	16.17
+	2 COMBINED AT	2I237	420.	14.75	253.	71.	34.	17.17
+	2 COMBINED AT	CP237	856.	14.08	490.	136.	66.	27.84
+	DIVERSION TO	2D250	226.	14.08	75.	19.	9.	27.84
+	HYDROGRAPH AT	1D237	629.	14.08	415.	118.	57.	27.84
+	DIVERSION TO	1D250A	267.	14.08	124.	31.	15.	27.84
+	HYDROGRAPH AT	2D237	362.	14.08	291.	86.	42.	27.84
+	ROUTED TO	R237	361.	14.17	290.	86.	42.	27.84
+	HYDROGRAPH AT	1D192	659.	13.83	149.	38.	18.	13.38
+	ROUTED TO	R192	548.	14.25	149.	38.	18.	13.38
+	HYDROGRAPH AT	209	308.	13.08	66.	16.	8.	.50
+	2 COMBINED AT	1I209	586.	14.25	211.	53.	26.	13.68
+	HYDROGRAPH AT	2D209A	248.	13.67	67.	17.	8.	14.68
+	ROUTED TO	R209A	244.	14.08	67.	17.	8.	14.68
+	2 COMBINED AT	CP209	800.	14.17	272.	69.	33.	16.18
+	DIVERSION TO	1D221	349.	14.17	128.	33.	16.	16.18
+	HYDROGRAPH AT	1D209	451.	14.17	144.	36.	17.	16.18
+	DIVERSION TO	2D210	136.	14.17	42.	11.	5.	16.18
+	HYDROGRAPH AT	2D209	315.	14.17	101.	25.	12.	16.18
+	ROUTED TO	R209	299.	14.67	101.	25.	12.	16.18
+	HYDROGRAPH AT	1D209A	554.	13.67	173.	44.	21.	14.68
+	ROUTED TO	R209A	530.	14.58	172.	44.	21.	14.68

+	HYDROGRAPH AT	220	281.	13.08	62.	15.	7.	.50
+	2 COMBINED AT	1I220	557.	14.50	228.	58.	28.	15.18
+	2 COMBINED AT	2I220	844.	14.58	327.	83.	40.	16.68
+	HYDROGRAPH AT	2D219	130.	14.75	52.	13.	6.	29.21
+	ROUTED TO	R219	127.	14.92	52.	13.	6.	29.21
+	2 COMBINED AT	CP220	898.	14.67	360.	92.	44.	30.71
+	DIVERSION TO	DI239	600.	14.67	256.	65.	31.	30.71
+	HYDROGRAPH AT	1D220	298.	14.67	104.	26.	13.	30.71
+	DIVERSION TO	2D221	249.	14.67	90.	23.	11.	30.71
+	HYDROGRAPH AT	2D220	49.	14.67	14.	4.	2.	30.71
+	ROUTED TO	R220	40.	15.75	14.	4.	2.	30.71
+	HYDROGRAPH AT	1D219	756.	14.75	343.	99.	47.	29.21
+	ROUTED TO	R219	697.	15.33	340.	99.	47.	29.21
+	HYDROGRAPH AT	238	301.	13.17	69.	17.	8.	.50
+	2 COMBINED AT	1I238	729.	15.33	393.	118.	57.	17.17
+	2 COMBINED AT	2I238	758.	15.33	406.	121.	58.	18.67
+	2 COMBINED AT	CP238	1053.	15.33	682.	204.	98.	30.34
+	DIVERSION TO	2D250A	42.	15.33	14.	3.	2.	30.34
+	HYDROGRAPH AT	1D238	1011.	15.33	669.	201.	97.	30.34
+	DIVERSION TO	1D251	118.	15.33	38.	10.	5.	30.34
+	HYDROGRAPH AT	2D238	893.	15.33	630.	191.	92.	30.34
+	ROUTED TO	R238	876.	15.75	629.	191.	92.	30.34
+	HYDROGRAPH AT	2D192	0.	.00	0.	0.	0.	13.38
+	ROUTED TO	R192	0.	.00	0.	0.	0.	13.38
+	HYDROGRAPH AT	210	283.	13.08	61.	15.	7.	.46
+	2 COMBINED AT	1I210	270.	13.08	59.	15.	7.	13.64
+	HYDROGRAPH AT	2D209	136.	14.17	42.	11.	5.	16.18

+	ROUTED TO	R209	131.	14.50	42.	11.	5.	16.18
+	2 COMBINED AT	CP210	277.	13.08	100.	25.	12.	16.58
+	ROUTED TO	R210	246.	13.92	100.	25.	12.	16.58
+	HYDROGRAPH AT	1D209	349.	14.17	128.	33.	16.	16.18
+	ROUTED TO	R209	317.	15.58	117.	33.	16.	16.18
+	HYDROGRAPH AT	221	292.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I221	322.	15.58	157.	48.	23.	16.66
+	2 COMBINED AT	2I221	454.	15.50	255.	73.	35.	17.06
+	HYDROGRAPH AT	2D220	249.	14.67	90.	23.	11.	30.71
+	ROUTED TO	R220	242.	15.00	89.	23.	11.	30.71
+	2 COMBINED AT	CP221	579.	15.42	326.	91.	44.	31.65
+	ROUTED TO	R221	536.	16.58	325.	91.	44.	31.65
+	HYDROGRAPH AT	1D220	600.	14.67	256.	65.	31.	30.71
+	ROUTED TO	R220	577.	16.00	237.	65.	31.	30.71
+	HYDROGRAPH AT	239	300.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I239	594.	15.92	263.	83.	40.	18.65
+	2 COMBINED AT	2I239	1109.	16.33	596.	179.	86.	19.59
+	2 COMBINED AT	CP239	1863.	15.92	1195.	362.	174.	31.76
+	DIVERSION TO	2D251	1285.	15.92	698.	180.	87.	31.76
+	HYDROGRAPH AT	1D239	578.	15.92	496.	182.	88.	31.76
+	DIVERSION TO	DI252	148.	15.92	101.	26.	12.	31.76
+	HYDROGRAPH AT	2D239	430.	15.92	395.	156.	75.	31.76
+	ROUTED TO	R239	429.	16.42	395.	156.	75.	31.76
+	HYDROGRAPH AT	240	266.	13.00	54.	14.	6.	.40
+	2 COMBINED AT	CP240	544.	13.00	424.	168.	81.	32.16
+	ROUTED TO	R240	529.	13.33	423.	168.	81.	32.16
+	HYDROGRAPH AT	213	335.	12.50	41.	10.	5.	.35
	ROUTED TO							

+		R213	193.	13.42	40.	10.	LABCAR 5.	.35
+	HYDROGRAPH AT	212	268.	13.42	74.	18.	9.	.54
+	ROUTED TO	SR212	187.	13.83	46.	12.	6.	.54
+	2 COMBINED AT	CP212	289.	13.75	74.	18.	9.	37.23
+	ROUTED TO	R212	247.	14.75	71.	18.	9.	37.23
+	HYDROGRAPH AT	1D193	68.	14.00	13.	3.	2.	13.38
+	ROUTED TO	R193	9.	25.83	8.	3.	2.	13.38
+	HYDROGRAPH AT	211	300.	13.08	67.	17.	8.	.49
+	2 COMBINED AT	CP211	287.	13.08	64.	19.	9.	13.87
+	ROUTED TO	R211	203.	14.33	63.	19.	9.	13.87
+	HYDROGRAPH AT	221A	172.	13.25	43.	11.	5.	.31
+	2 COMBINED AT	1I221A	266.	14.17	106.	31.	15.	.80
+	ROUTED TO	SR221A	261.	14.33	91.	27.	13.	.80
+	2 COMBINED AT	CP221A	451.	14.67	150.	41.	20.	38.03
+	ROUTED TO	R221A	417.	15.17	147.	41.	20.	38.03
+	HYDROGRAPH AT	222	493.	13.58	156.	44.	21.	1.10
+	2 COMBINED AT	CP222	499.	15.08	270.	78.	39.	39.13
+	ROUTED TO	R222	472.	15.83	266.	78.	39.	39.13
+	HYDROGRAPH AT	226	1426.	12.33	172.	49.	24.	1.18
+	ROUTED TO	SR226	450.	12.75	166.	49.	24.	1.18
+	ROUTED TO	R226	363.	15.17	164.	49.	24.	1.18
+	HYDROGRAPH AT	201	379.	12.33	39.	10.	5.	.34
+	ROUTED TO	R201	196.	13.83	39.	10.	5.	.34
+	HYDROGRAPH AT	223	1689.	12.42	313.	105.	51.	1.26
+	2 COMBINED AT	1I223	1686.	12.42	348.	115.	55.	1.60
+	2 COMBINED AT	CP223	1534.	12.42	430.	146.	71.	54.67
+	ROUTED TO	R223	1422.	12.67	430.	145.	71.	54.67
+	HYDROGRAPH AT	224	1022.	12.33	111.	29.	14.	.80

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          2 COMBINED AT
+                        CP224      1856.   12.50        522.        170.        83.      55.47
          ROUTED TO
+                         R224      1697.   12.92        514.        170.        83.      55.47
          HYDROGRAPH AT
+                          241      1380.   12.50        169.         42.        20.       1.51
          2 COMBINED AT
+                        1I241      2140.   12.83        642.        205.       100.      56.98
          2 COMBINED AT
+                        2I241      2156.   12.83        873.        280.       137.      59.77
          2 COMBINED AT
+                        CP241      2376.   12.92       1231.        436.       214.      78.75
          ROUTED TO
+                        SR241      2382.   12.92       1230.        436.       214.      78.75
1                   SUMMARY OF DAM OVERTOPPING/BREACH ANALYSIS FOR STATION    SRWT3
                  (PEAKS SHOWN ARE FOR INTERNAL TIME STEP USED  DURING BREACH FORMATION)

     PLAN  1 ..............                INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                              ELEVATION        1174.00           1209.00          1212.10
                              STORAGE               0.              3012.             4041.
                              OUTFLOW               0.                 0.            18460.

                 RATIO     MAXIMUM      MAXIMUM     MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                   OF     RESERVOIR     DEPTH      STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                  PMF      W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS       HOURS

                 1.00      1200.41        .00       1034.        0.        .00          .00         .00

     PLAN  2 ..............                INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                              ELEVATION        1174.00           1209.00          1212.10
                              STORAGE               0.              3012.             4041.
                              OUTFLOW               0.                 0.            18460.

                 RATIO     MAXIMUM      MAXIMUM     MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                   OF     RESERVOIR     DEPTH      STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                  PMF      W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS       HOURS

                 1.00      1199.90        .00        946.        0.        .00          .00         .00

     PLAN  3 ..............                INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                              ELEVATION        1174.00           1209.00          1212.10
                              STORAGE               0.              3012.             4041.
                              OUTFLOW               0.                 0.            18460.

                 RATIO     MAXIMUM      MAXIMUM     MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                   OF     RESERVOIR     DEPTH      STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                  PMF      W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS       HOURS

                 1.00      1199.08        .00        844.        0.        .00          .00         .00

     PLAN  4 ..............                INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                              ELEVATION        1174.00           1209.00          1212.10
                              STORAGE               0.              3012.             4041.
                              OUTFLOW               0.                 0.            18460.

                 RATIO     MAXIMUM      MAXIMUM     MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                   OF     RESERVOIR     DEPTH      STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                  PMF      W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS       HOURS

                 1.00      1198.72        .00        800.        0.        .00          .00         .00

     PLAN  5 ..............                INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                              ELEVATION        1174.00           1209.00          1212.10
                              STORAGE               0.              3012.             4041.
                              OUTFLOW               0.                 0.            18460.
```

LABCAR

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	1198.42	.00	763.	0.	.00	.00	.00

*** NORMAL END OF HEC-1 ***

HEC-1 Output

Diversion North Model

(LABCARD.DAT)

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   14JUN04  TIME  14:33:19  *
*                                      *
****************************************
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LABCARD
****************************************
*                                      *
*    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

This output is from a model modified by HDR June 2004: Diversion Model

1 HEC-1 INPUT PAGE 1

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

   1          ID     LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
   2          ID     EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'
   3          ID
   4          ID     PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE
   5          ID     PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY
   6          ID     TURNED OFF) AT DI189.
   7          ID
   8          ID     THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS
   9          ID     AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY
  10          ID     HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL
  11          ID
  12          ID
  13          ID                                   REVISED BY URS     DATE: 01-14-04
  14          ID                                                      FILE: L303M1L.DAT
  15          ID       NOTES:
  16          ID       1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3,
  17          ID          2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
  18          ID       2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
  19          ID       3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC
  20          ID          GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN
  21          ID          THE WLB MODEL.
  22          ID       4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION
  23          ID          WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION
  24          ID          CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO
  25          ID          DRAINAGE REPORTS.
  26          ID       5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY.
  27          ID          GRAND.  COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115.
  28          ID          ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
  29          ID       6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
  30          ID       7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL
  31          ID          STORM.
  32          ID       8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
  33          ID       9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO
  34          ID          THE DATA FILE BY THE FCDMC.
  35          ID      10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS
  36          ID          AREAS #3 & #4) WERE ESTIMATED BY EEC.
```

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                                                                                                LABCARD
                *DIAGRAM
 37             IT       5                    600
 38             IO       5
 39             IN      15
 40             JD    4.03    .001
 41             PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 42             PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 43             PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 44             PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 45             PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 46             PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 47             PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 48             PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 49             PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 50             PC    .983    .986    .989    .992    .995    .998    1.00   1.000   1.000   1.000
 51             JD    3.79      10
 52             JD    3.51      50
 53             JD    3.39     100
 54             JD    3.29     200
                * ***************************************************************************
                * **************THE FOLLOWING SECTION IS WHITE TANKS 3**********************
                * ***************************************************************************
                * ******TRANSMISSION LOSSES REMOVED - 4/25/00 - ERE*************************
                * ***************************************************************************
                *
                * SUB BASIN LG AND UI RECORDS UPDATED PER SLOPE CHANGE TO SUB BASIN 1
                * AT REQUEST OF FCDMC ON 11-17-03
                *
1                                          HEC-1 INPUT                                          PAGE  2

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


 55             KK       1
 56             KM   SUB BASIN 1
 57             KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 58             KM    L=      3.5  Lca=      1.5   S=  527.2  Kn= .050  LAG=  40.7
 59             KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 60             BA    1.94
 61             LG     .20     .35    4.00     .52   10.00
 62             UI    160.    207.    585.    790.    939.   1135.   1427.   1996.   1720.   1386.
 63             UI   1159.    946.    776.    535.    307.    267.    194.    160.     72.     49.
 64             UI     49.     49.     49.     49.      0.      0.      0.      0.      0.      0.
 65             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 66             KK    RCP1
 67             KM        ROUTE FLOW FROM CP1 TO CP2.
 68             RS       5              -1       0
 69             RC     .06     .04     .06   17800   .0469
 70             RX    1000    1125    1300    1390    1405    1490    1590    1750
 71             RY    1440    1439    1437    1428    1428    1439    1442    1444
                *

 72             KK       2
 73             KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 2.
 74             BA    1.82
 75             LG     .18     .35    4.55     .37   12.00
 76             UI    115.    115.    259.    443.    557.    643.    728.    849.   1014.   1348.
 77             UI   1418.   1145.    985.    864.    735.    634.    545.    404.    268.    202.
 78             UI    189.    143.    115.    102.     35.     35.     35.     35.     35.     35.
 79             UI     35.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 80             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 81             KK     CP2
 82             KM        ADD HYDROGRAPHS AT CP2.
 83             HC       2    3.76

 84             KK    RCP2
 85             KM        ROUTE COMBINED HYDROGRAPHS AT CP2 TO CP3.
 86             RS       2              -1       0
 87             RC     .06    .035     .06    4500   .0111
 88             RX    1000    1100    1350    1705    1735    1780    1850    2000
 89             RY    1304    1302    1302    1298    1298    1303    1302    1305
                *

 90             KK      3A
```

```
                                                                                                LABCARD
  91          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3A
  92          BA     .29
  93          LG     .15      .35     4.30      .42      .00
  94          UI     34.      90.     165.     213.     289.     411.     312.     240.     181.     121.
  95          UI     60.      47.      32.      10.      10.      10.      10.      0.       0.       0.
  96          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

  97          KK   RCP3A
  98          KM        ROUTE FLOW FROM CP3A TO CP3
  99          RS       2               -1       0
 100          RC     .03      .03      .05     5300   .0060
 101          RX    1000     1023     1032     1046     1058     1067     1250     1540
 102          RY    1289     1288     1286     1284     1284     1286     1288     1291
              *

 103          KK       3
 104          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3.
 105          BA     .81
 106          LG     .15      .35     4.45      .38      .00
 107          UI     90.     226.     427.     550.     718.    1081.     912.     702.     537.     401.
 108          UI    208.     151.      97.      59.      28.      28.      28.      28.      0.       0.
 109          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

 110          KK   I1CP3
 111          KM        ADD HYDROGRAPHS AT I1CP3
 112          HC       2      1.1

 113          KK     CP3
 114          KM        ADD HYDROGRAPHS AT CP3.
 115          HC       2     4.86
              * PER URS FLOODPLAIN ANALYSIS BY MIKE R.
              * TURN OFF DIVERT PER CULVERT IMPROVEMENT BY 'SONORAN RIDGE REALESTATE'
              * ALSO BY DIRECTION OF MIKE DUNCAN AT FCDMC PER HIS PHONE CONVERSATION
              * WITH SONORAN RIDGE ON 2-14-02.
              *
              * PER PHONE CONVERSATION WITH FCDMC - PROPOSED 2-10'X6' BOX CULVERTS WERE
              * BACKFILLED ON 11-01-02.  THERE IS ALSO AN EXISTING 7' CMP AND AN 8' CMP
              * AT THIS LOCATION
              *

 116          KK      D3
 117          KM   DIVERT FLOWS THAT WILL OVERTOP THE BEARDSLEY CANAL AT OLIVE AVENUE.  THE
 118          KM   HEC-2 DIVERSION RATING CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS
 119          KM   INCORPORATED HERE.
              * FOLLOWING DIVERT DATA PROVIDED BY FCDMC ON 5-14-03
              * THIS INFORMATION IS BASED ON THE CULVERT STRUCTURE CONSTRUCTED PER THE
              * SONORAN RIDGE DEVELOPMENT, SEE 'S02001035' AND 'S02002033'
 120          DT   DI189
 121          DI       0     1432     2823     3000     4000
 122          DQ       0        0      622      728     1728

 123          KK    RCP3
 124          KM        ROUTE FLOW FROM CP3 TO CP10.
 125          RS       2               -1       0
 126          RC     .05      .03      .05     5280   .0083
 127          RX    1010     1015     1020     1050     1100     1275     1580     1750
 128          RY    1251     1249     1249     1245     1245     1250     1250     1254
              *
1                                          HEC-1 INPUT                                                    PAGE  4

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

 129          KK       4
 130          KM        RUNOFF HYDROGRAPH FORM SUB-BASIN 4.
 131          BA     .30
 132          LG     .20      .35     4.35      .44     9.00
 133          UI     47.     191.     286.     443.     513.     346.     237.     115.      67.      36.
 134          UI     14.      14.       0.       0.       0.       0.       0.       0.       0.       0.
 135          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
              *
```

```
136          KK       5
137          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 5.
138          BA     .72
139          LG     .20     .35    4.30     .45    9.00
140          UI    109.    433.    653.    981.   1241.    852.    594.    323.    177.    104.
141          UI     33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
142          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

143          KK     CP5
144          KM         ADD HYDROGRAPHS AT CP5.
145          HC       2    1.02

146          KK    RCP5
147          KM         ROUTE COMBINED HYDROGRAPHS AT CP5 TO CP6.
148          RS       1      -1       0
149          RC     .08     .05     .08    2400   .0833
150          RX     955     970     985    1000    1020    1035    1050    1065
151          RY    2815    2810    2805    2800    2800    2805    2810    2815
             *

152          KK       6
153          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 6.
154          BA     .45
155          LG     .20     .35    3.95     .53   10.00
156          UI    206.    627.   1145.    834.    421.    154.     53.     33.      0.      0.
157          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

158          KK     CP6
159          KM         ADD HYDROGRAPHS AT CP6.
160          HC       2    1.47

161          KK    RCP6
162          KM         ROUTE COMBINED HYDROGRAPHS AT CP6 TO CP7.
163          RS       1      -1       0
164          RC     .08     .05     .08    2400   .0833
165          RX     955     970     985    1000    1020    1035    1050    1065
166          RY    2815    2810    2805    2800    2800    2805    2810    2815
             *

167          KK       7
168          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 7.
169          BA     .31
             *     LG    0.35    0.15   7.976   0.082      20
170          LG     .20     .35    3.95     .53   10.00
171          UI    124.    383.    708.    610.    347.    132.     54.     21.      0.      0.
```



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

172          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

173          KK     CP7
174          KM         ADD HYDROGRAPHS AT CP7.
175          HC       2    1.78

176          KK    RCP7
177          KM         ROUTE COMBINED HYDROGRAPHS AT CP7 TO CP9.
178          RS       3      -1       0
179          RC     .08     .05     .08   10200  .07745
180          RX    1000    1045    1120    1195    1230    1300    1350    1450
181          RY    1910    1880    1850    1838    1838    1850    1880    1910
             *

182          KK       9
183          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 9.
184          BA    1.40
             *     LG    0.35    0.15   7.909   0.084  19.572
185          LG     .20     .35    4.00     .52   10.00
186          UI    155.    380.    725.    933.   1213.   1828.   1593.   1225.    939.    707.
187          UI    389.    261.    178.    116.     47.     47.     47.     47.      0.      0.
188          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

189          KK   I1CP9
190          KM         ADD HYDROGRAPHS AT CP9.
191          HC       2    3.18
             *
```

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 192          KK       8
 193          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 8.
 194          BA     .81
              *     LG    0.35    0.15   7.976   0.082      20
 195          LG     .20     .35    3.95     .53   10.00
 196          UI    103.    314.    536.    704.   1058.   1138.    821.    608.    420.    207.
 197          UI    147.     95.     31.     31.     31.      0.      0.      0.      0.      0.
 198          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 199          KK     CP9
 200          KM         ADD HYDROGRAPHS AT CP9.
 201          HC       2    3.99

 202          KK    RCP9
 203          KM         ROUTE COMBINED HYDROGRAPHS AT CP9 TO CP10.
 204          RS       8              -1       0
 205          RC     .06    .035     .06   19200   .0232
 206          RX    1000    1085    1310    1395    1415    1450    1630    1665
 207          RY    1317    1314    1311    1308    1308    1314    1314    1317
              *

 208          KK      10
 209          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 10.
 210          BA    2.02
              *     LG   0.347   0.248   5.124   0.254    4.52
 211          LG     .16     .35    4.55     .36    4.00
 212          UI    119.    119.    219.    428.    547.    632.    709.    813.    930.   1153.
```

1 HEC-1 INPUT PAGE 6

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

 213          UI   1500.   1391.   1155.   1006.    893.    765.    668.    577.    473.    323.
 214          UI    210.    201.    191.    119.    119.     84.     36.     36.     36.     36.
 215          UI     36.     36.     36.     36.      0.      0.      0.      0.      0.      0.
 216          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 217          KK  I1CP10
 218          KM         ADD HYDROGRAPHS AT I1CP10
 219          HC       2    6.01

 220          KK    CP10
 221          KM         ADD HYDROGRAPHS AT CP10
 222          HC       2   10.87

 223          KK    1D10
 224          KM    PER URS FLOODPLAIN STUDY BY MIKE R. AND BOB D. ON 2-14-02
 225          DT  1DI188
 226          DI       0    6483    9725
 227          DQ       0     951    1475

 228          KK    2D10
 229          KM         FLOW TO WHITE TANKS #3 UNDER NORTHERN AVE.  THE HEC-2 DIVERSION RATING
 230          KM         CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS INCORPORATED HERE.
 231          DT  2DI188
 232          DI       0    1000    3000    4497    5000    6000    8000   10000
 233          DQ       0       0     770    1277    1450    1710    2470    3240

 234          KK   RCP10
 235          KM         ROUTE FLOW AT CP10 TO CP12.
 236          RS       1              -1       0
 237          RC     .03     .03     .05    3500   .0057
 238          RX     995    1000    1020    1055    1085    1165    1250    1330
 239          RY    1221    1220    1220    1211    1211    1218    1220    1222
              *

 240          KK      12
 241          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 12.
 242          BA    1.38
 243          LG     .16     .35    4.80     .31    3.00
 244          UI    111.    129.    394.    536.    636.    759.    932.   1314.   1276.   1007.
 245          UI    850.    696.    573.    444.    263.    191.    169.    111.     91.     34.
 246          UI     34.     34.     34.     34.     34.      0.      0.      0.      0.      0.
 247          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 248          KK    CP12
```

```
 249          KM        ADD HYDROGRAPHS AT CP12.
 250          HC       2   12.25

 251          KK    RCP12
 252          KM        ROUTE COMBINED HYDROGRAPHS AT CP12 TO CPWT3
 253          RS       2            -1       0
 254          RC     .03      .03     .04    4800   .0031
 255          RX     995     1000    1020    1080    1200    1530    1665    1760
 256          RY    1211     1211    1210    1196    1196    1200    1204    1204
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 257          KK      11
 258          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 11.
 259          BA    1.56
              *     LG     0.35    0.15    7.25   0.107  13.299
 260          LG     .18      .37    5.20     .27    7.00
 261          UI    143.     245.    572.    756.    914.   1143.   1651.   1622.   1253.   1025.
 262          UI    821.     642.    392.    248.    210.    143.     85.     44.     44.     44.
 263          UI     44.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 264          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 265          KK    RCP11
 266          KM        ROUTE HYROGRAPH FROM CP11 TO CP13.
 267          RS       3            -1       0
 268          RC     .06     .035     .06   10200   .0098
 269          RX    1000     1070    1300    1480    1510    1525    1555    1600
 270          RY    1233     1232    1230    1222    1222    1230    1232    1233
              *

 271          KK      13
 272          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 13.
 273          BA    1.30
 274          LG     .15      .35    4.55     .35     .00
 275          UI    120.     210.    484.    639.    774.    972.   1415.   1334.   1039.    847.
 276          UI    674.     527.    304.    206.    167.    120.     60.     37.     37.     37.
 277          UI     37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 278          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 279          KK    CP13
 280          KM        ADD HYDROGRAPHS AT CP13.
 281          HC       2    2.86

 282          KK    RCP13
 283          KM        ROUTE COMBINED HYDROGRAPHS AT CP13 TO CP17
 284          RS       2            -1       0
 285          RC     .03      .03     .04    2400   .0042
 286          RX    1000     1025    1040    1065    1085    1110    1175    1200
 287          RY    1206     1198    1196    1194    1194    1198    1198    1201
              *

 288          KK      14
 289          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 14.
 290          BA    1.47
              *     LG     0.35    0.15   7.974   0.082  18.195
 291          LG     .20      .35    4.30     .45    9.00
 292          UI    166.     421.    789.   1018.   1340.   1997.   1636.   1264.    961.    700.
 293          UI    363.     275.    166.     93.     51.     51.     51.      0.      0.      0.
 294          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 295          KK    RCP14
 296          KM        ROUTE FLOW FROM CP14 TO CP15.
 297          RS       4            -1       0
 298          RC     .06     .035     .06    8800  .02556
 299          RX    1000     1030    1075    1200    1220    1280    1415    1480
 300          RY    1296     1295    1294    1288    1288    1294    1296    1300
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 301          KK      15
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```
 302          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 15.
 303          BA    1.26
              *     LG    0.35   0.194   6.561   0.142   15.67
 304          LG     .18     .35    4.40     .41    7.00
 305          UI    130.    282.    577.    747.    939.   1325.   1550.   1154.    918.    712.
 306          UI    517.    276.    216.    137.     92.     40.     40.     40.     40.      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          KK  I1CP15
 310          KM        ADD HYDROGRAPHS AT I1CP15
 311          HC       2    2.73
              *

 312          KK      16
 313          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 16.
 314          BA    1.13
 315          LG     .17     .35    4.65     .34   11.00
 316          UI    115.    239.    502.    650.    811.   1121.   1392.   1050.    840.    656.
 317          UI    500.    270.    194.    138.    102.     35.     35.     35.     35.      0.
 318          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 319          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 320          KK    SR16
 321          KM        STORAGE ROUTE THROUGH THE CATERPILLAR DETENTION BASIN IN SUBWATERSHED 16
 322          RS       1    STOR       0       0
 323          SV       0       1      31     114     270     502     807    1319    1388    1460
 324          SQ       0       0       0       0       0       0       0       0       0     135
 325          SE    1198    1200    1210    1220    1230    1240    1250    1260    1261    1262
              *

 326          KK    CP15
 327          KM        ADD HYDROGRAPHS AT CP15.
 328          HC       2    3.90

 329          KK   RCP15
 330          KM        ROUTE COMBINED HYDROGRAPHS AT CP15 TO CP17.
 331          RS       3              -1       0
 332          RC     .06    .035     .06    6800   .0079
 333          RX    1000    1310    1380    1540    1640    1670    1700    1910
 334          RY    1234    1232    1228    1226    1226    1228    1232    1235
              *

 335          KK      17
 336          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 17
 337          BA    1.07
 338          LG     .19     .35    4.10     .46     .00
 339          UI    115.    273.    532.    685.    876.   1316.   1252.    953.    740.    568.
 340          UI    348.    199.    154.    112.     35.     35.     35.     35.      0.      0.
 341          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

 342          KK  I1CP17
 343          KM        ADD HYDROGRAPHS AT I1CP17.
 344          HC       2    4.97

 345          KK    CP17
 346          KM        ADD HYDROGRAPHS AT CP17.
 347          HC       2    7.83

 348          KK   RCP17
 349          KM        ROUTE FLOW FROM CP17 TO CPWT3
 350          RS       2              -1       0
 351          RC     .06     .04     .04    1600   .0022
 352          RX    1000    1220    1280    1470    1530    1660    1680    1685
 353          RY    1196    1194    1190    1182    1182    1210    1211    1212
              *

 354          KK     WT3
 355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN WT3
 356          BA     .44
 357          LG     .35     .35    4.65     .30     .00
 358          UI     36.     43.    128.    174.    206.    247.    305.    432.    401.    318.
```

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                                                                                LABCARD
359          UI    268.    220.    180.    135.     79.     61.     51.     36.     25.     11.
360          UI     11.     11.     11.     11.      0.      0.      0.      0.      0.      0.
361          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

362          KK  I1CWT3
363          KM        ADD HYDROGRAPHS AT I1CPWT3
364          HC       2    8.27

365          KK   CPWT3
             * KO     1                                 21
366          KM        ADD HYDROGRAPHS AT CPWT3
367          HC       2   20.52

368          KK   SRWT3
369          KM        STORAGE ROUTE THROUGH WHITE TANKS STRUCTURE #3.
370          RS       1    STOR       0       0
371          SV       0       1      14      42      91     203     466     958    1704    2716
372          SV    3012    3325    3657    4006
373          SQ       0       0       0       0       0       0       0       0       0       0
374          SQ       0    3550    9000   17600
375          SE    1174    1176    1180    1184    1188    1192    1196    1200    1204    1208
376          SE    1209    1210    1211    1212
377          SS    1209       0       0       0
378          ST  1212.1    7667     2.2     1.5
379          SW    1000    1995    3000    4000    4988    6008    7007
380          SE  1212.1  1212.4 1212.63 1213.32 1214.72 1214.94  1214.8
             *
             * ***************************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2C WITH NEW SOILS*****
             * ***************************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE 10

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

381          KK     116
382          KM   BASIN 116
383          KM    L=      1.4  Lca=       .8   S=   14.1  Kn= .030  LAG=  27.8
384          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
385          BA     .66
386          LG     .28     .25    4.90     .33   28.00
387          UI     80.    227.    406.    527.    750.    948.    693.    525.    387.    215.
388          UI    135.     88.     49.     25.     25.     25.      0.      0.      0.      0.
389          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

390          KK  116OUT
391          KM    Divert Retention in Subbasin 116
392          DT  116RET    49.4
393          DI       0   10000
394          DQ       0   10000

395          KK    R116
396          KM        ROUTE FLOW FROM CP116 TO CP117
397          RS       4              -1       0
398          RC     .05    .022    .022    4300   .0037
399          RX    1000    1001    1002    1155    1185    1200    1240    1295
400          RY    1220    1220    1220    1218    1218  1218.5    1218    1221

401          KK     117
             *
402          KM   BASIN 117
403          KM    L=      2.0  Lca=      1.0   S=   20.6  Kn= .043  LAG=  45.2
404          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
405          BA     .92
406          LG     .31     .25    5.60     .23   26.00
407          UI     68.     68.    223.    307.    373.    433.    516.    675.    861.    722.
408          UI    596.    509.    423.    353.    283.    174.    120.    112.     74.     68.
409          UI     31.     21.     21.     21.     21.     21.      0.      0.      0.      0.
410          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

411          KK  117OUT
412          KM    Divert Retention in Subbasin 117
413          DT  117RET    68.9
414          DI       0   10000
415          DQ       0   10000
```

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 416          KK   CP117
 417          KM        Add Hydrographs at CP117
 418          HC       2    1.65

 419          KK    R117
 420          KM        ROUTE FLOW FROM CP117 TO CP125
 421          RS       5              -1       0
 422          RC    .022    .022    .025    5450   .0033
 423          RX    1000    1001    1002    1025    1060    1355    1765    1910
 424          RY    1197    1197    1197    1196    1196    1198    1200    1201
              *
1                                          HEC-1 INPUT                                                    PAGE 11

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

 425          KK     123
 426          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 123
 427          BA     .44
 428          LG     .50     .00    5.76     .32     .00
 429          UI     20.     20.     20.     51.     74.     90.    103.    114.    124.    138.
 430          UI    155.    175.    222.    259.    243.    208.    184.    167.    152.    134.
 431          UI    121.    107.     97.     81.     60.     41.     36.     34.     33.     23.
 432          UI     20.     20.     13.      6.      6.      6.      6.      6.      6.      6.
 433          UI      6.      6.      6.      0.      0.      0.      0.      0.      0.      0.
 434          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 435          KK    D123
 436          KM        DIVERT TO CP134 FROM CP123
 437          KM        Revised DQ record, old record "* DQ" is for divert to 124
 438          DT   DI134
 439          DI       0      94     177     293     448     683    1014    1440    1964    2593
              * DQ     0      94     177     293     448     448     448     448     448       4
 440          DQ       0       0       0       0       0     235     566     992    1516    2145

 441          KK    R123
 442          KM        ROUTE REMAINDER FROM CP123 TO CP124
 443          RS       4              -1       0
 444          RC    .075    .035    .035    2640   .0038
 445          RX    1000    1350    1690    2040    2130    2148    2149    2150
 446          RY    1216    1214    1212    1210    1210    1211    1211    1211
              *

 447          KK     124
 448          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 124
 449          BA     .57
 450          LG     .50     .00    5.76     .32     .00
 451          UI     20.     20.     20.     20.     50.     70.     80.     94.    102.    111.
 452          UI    118.    128.    138.    152.    163.    188.    228.    254.    257.    223.
 453          UI    201.    183.    170.    159.    146.    133.    122.    112.    102.     95.
 454          UI     82.     66.     57.     36.     36.     34.     33.     33.     21.     20.
 455          UI     20.     20.     12.      6.      6.      6.      6.      6.      6.      6.
 456          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
 457          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 458          KK   CP124
 459          KM        ADD HYDROGRAPHS AT CP124
 460          HC       2    1.65

 461          KK   1D124
 462          KM        DIVERT TO CP136 FROM CP124
 463          DT   DI136
 464          DI       0      42      84     232     605    1435    2923
 465          DQ       0      25      51     128     292     519     798
1                                          HEC-1 INPUT                                                    PAGE 12

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

 466          KK   2D124
 467          KM        DIVERT TO CP135 FROM CP124
 468          KM        Revised DQ record, old record "* DQ" is for divert to 125
 469          DT   DI135
 470          DI       0      17      33     104     313     916    2125
              * DQ     0      17      33      82     189     341     534
```

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471          DQ       0       0       0      22     124     575    1591

472          KK    R124
473          KM        ROUTE FLOW FROM CP124 TO CP125
474          RS       7              -1       0
475          RC    .025    .022    .022    5280   .0034
476          RX    1000    1220    1400    1660    1680    1708    1709    1710
477          RY    1200    1198    1196    1194    1194    1195    1195    1195
             *

478          KK     125
479          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 125
480          BA    1.00
481          LG     .35    0.33    5.00     .27     .00
482          UI     86.     123     322     430     515     626     837    1062     852     701
483          UI     572     465     369     217     148     129     86.      62      26     26.
484          UI     26.     26.     26.      0.      0.      0.      0.      0.      0.      0.
485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

486          KK   1I125
487          KM        ADD HYDROGRAPHS AT 1I125
488          HC       2    2.01

489          KK   CP125
490          KM        ADD HYDROGRAPHS AT CP125
491          HC       2    3.66

492          KK   1D125
493          KM        DIVERT TO CP137 FROM CP125
494          DT   DI137
495          DI       0      29     228     748    1285    2526    4403    6923   10115
496          DQ       0      10      76     249     428     842    1468    2308    3372

497          KK   2D125
498          KM        DIVERT TO CP138 FROM CP125
499          DT   DI138
500          DI       0      19     152     499     857    1684    2935    4615    6743
501          DQ       0      10      76     249     428     842    1468    2308    3372

502          KK    R125
503          KM        ROUTE REMAINDER FLOW FROM CP125 TO CP126
504          RS       4              -1       0
505          RC     .05     .03     .03    5280   .0038
506          RX    1000    1350    1570    1590    1630    1645    1650    1670
507          RY    1184    1182    1180    1176    1176    1180    1182    1183
             *
```



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

508          KK     118
509          KM   BASIN 118
510          KM    L=      1.0  Lca=       .4   S=   20.6  Kn= .027  LAG=  16.0
511          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
512          BA     .16
513          LG     .10     .25    4.90     .41   80.00
514          UI     55.    174.    304.    339.    202.     93.     43.     14.     10.      0.
515          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
516          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

517          KK  118OUT
518          KM    Divert Retention in Subbasin 118
519          DT  118RET    14.7
520          DI       0   10000
521          DQ       0   10000

522          KK    R118
523          KM        ROUTE FLOW FROM CP118 TO CP126
524          RS      21              -1       0
525          RC    .035    .035    .075    7500   .0045
526          RX    1000    1001    1030    1140    1260    1660    2349    2350
527          RY  1192.5  1192.5    1192    1190    1190    1191    1192    1192
             *

528          KK     126
```

```
529          KM   BASIN 126
530          KM    L=      1.8  Lca=      1.0   S=   19.3  Kn= .038  LAG=  38.5
531          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
532          BA     .95
533          LG     .30     .25    5.10     .27   25.00
534          UI     83.    127.    319.    424.    507.    623.    846.   1029.    793.    655.
535          UI    529.    428.    317.    181.    140.    107.     83.     38.     25.     25.
536          UI     25.     25.      0.      0.      0.      0.      0.      0.      0.      0.
537          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

538          KK  126OUT
539          KM    Divert Retention in Subbasin 126
540          DT  126RET    63.9
541          DI       0   10000
542          DQ       0   10000

543          KK   1I126
544          KM        ADD HYDROGRAPHS AT CP126 (R118+126)
545          HC       2    1.11

546          KK   CP126
547          KM        ADD HYDROGRAPHS AT CP126 (R118+R125+126)
548          HC       2    4.75
             * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
1                                    HEC-1 INPUT                                                    PAGE 14

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

549          KK    D126
550          KM        DIVERT TO CP139 FROM CP126
551          KM        based on a 80/20 split from WLB model
552          DT   DI139
553          DI       0     100     200     400     800    1200    1600    2000    2400    2800
554          DQ       0     100     200     400     800    1200    1600    2000    2400    2800

555          KK    R126
556          KM        ROUTE FLOW FROM CP126 TO CP138
557          RS       8              -1       0
558          RC    .035    .035    .075    5280   .0030
559          RX    1000    1001    1002    1010    1180    1560    2020    2200
560          RY    1161    1161    1161    1160    1160    1162    1164    1165
             *
             * ************************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2A WITH NEW SOILS*****
             * ************************************************************************
             *

561          KK    100A
562          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 100A
563          BA     .18
564          LG     .50     .00    4.32    0.62     .00
565          UI     15.     18.     53.     72.     85.    102.    127.    179.    163.    130.
566          UI    109.     90.     73.     54.     31.     25.     20.     15.      9.      5.
567          UI      5.      5.      5.      5.      0.      0.      0.      0.      0.      0.
568          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

569          KK   R100A
570          KM        ROUTE FLOW FROM CP100A TO CP102A
571          RS      10              -1       0
572          RC    0.04   0.035    0.04    4500  0.0036
573          RX    1000    1270    1500    1530    1570    1600    1606    1612
574          RY    1318    1316    1315  1314.5  1314.5    1315    1316    1318
             *

575          KK    102A
576          KM        RUNOFF HYDROGRAPH FROM SUB-SUBIN 102A.
577          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
578          KM    L=      1.0  Lca=      .4   S=   20.0  Kn= .071  LAG=  40.9
579          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
580          BA     .51
581          LG     .40     .25    5.00     .31     .00
582          UI     42.     53.    152.    205.    244.    294.    368.    517.    453.    364.
583          UI    305.    249.    204.    144.     83.     70.     53.     42.     21.     13.
584          UI     13.     13.     13.     13.      0.      0.      0.      0.      0.      0.
585          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
 586          KK  1I102A
 587          KM        ADD HYDROGRAPHS AT 1I102A
 588          HC       2    0.69
              *
1                                        HEC-1 INPUT                                                    PAGE 15

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

 589          KK     101
 590          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 101.
 591          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 592          KM    L=       .7  Lca=       .4   S=   21.6  Kn= .050  LAG=  24.5
 593          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 594          BA     .16
 595          LG     .35     .37    5.20     .23     .00
 596          UI     22.     76.    122.    166.    259.    205.    150.    106.     54.     34.
 597          UI     21.      7.      7.      7.      0.      0.      0.      0.      0.      0.
 598          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 599          KK    R101
 600          KM        ROUTE FLOW FROM CP101 TO CP102A
 601          RS       1              -1       0
 602          RC    0.04   0.035    0.04     600  0.0067
 603          RX    1000    1240    1290    1310    1340    1350    1410    1500
 604          RY    1326    1324    1322    1320    1320    1322    1322    1322

 605          KK  CP102A
 606          KM        ADD HYDROGRAPHS AT CP102A
 607          HC       2    0.75

 608          KK  102AOT
 609          KM        DIVERT OUT TEMPORARY RETENTION
 610          KM        RUNOFF FROM 101,102A AND 100A APPEAR TO CONCENTRATE
 611          KM        IN TEMPORARY RETENTION BASIN.
 612          DT  102ART    30.4
 613          DI       0   10000
 614          DQ       0   10000

 615          KK   R102A
 616          KM        ROUTE FLOW FROM CP102A TO CP106
 617          RS       7              -1       0
 618          RC    0.04   0.035    0.04    5280  0.0042
 619          RX    1000    1400    1730    1750    1790    1810    1816    1822
 620          RY    1308    1306    1304    1303    1303    1304    1306    1308
              *

 621          KK     106
 622          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 106.
 623          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 624          KM    L=      1.3  Lca=       .8   S=   18.9  Kn= .050  LAG=  41.8
 625          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 626          BA     .77
 627          LG     .35     .38    5.60     .20     .00
 628          UI     62.     73.    220.    300.    357.    426.    524.    739.    709.    561.
 629          UI    473.    388.    318.    245.    145.    107.     93.     62.     49.     19.
 630          UI     19.     19.     19.     19.      0.      0.      0.      0.      0.      0.
 631          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

 632          KK  106OUT
 633          KM        DIVERT OUT TEMPORARY RETENTION
 634          DT  106RET    32.8
 635          DI       0   10000
 636          DQ       0   10000
              *

 637          KK   CP106
 638          KM        ADD HYDROGRAPHS AT CP106
 639          HC       2    1.70

 640          KK    R106
```

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                                                                                LABCARD
641          KM   ***********************************************************************
642          KM           RUNOFF ROUTED FROM CP106 TO CP114 AS DIRECTED BY FCDMC PER APPROVED
643          KM    STANELY ENG. LOMR FOR FOR SUN CITY GRAND.
644          KM
645          KM           ** RX AND RY CARDS IN SCI R106 USED TEN FIELDS INSTEAD OF EIGHT (HEC-1
646          KM    MAX),THEREFORE THE RIGHT OVERBANK AREA WAS ASSUMED
647          KM   ***********************************************************************
648          KM
649          RS       8              -1       0
650          RC    0.05   0.050    0.05    6800  0.0031
651          RX    1000    1032    1040    1085    1093    1108    1240    1390
652          RY    1293    1291    1289    1288    1290    1292    1291    1295
             *

653          KK     105
654          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 105
655          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
656          KM    L=       .8  Lca=       .3   S=   30.8  Kn= .050  LAG=  21.8
657          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
658          BA     .21
659          LG     .35     .38    5.60     .20     .00
660          UI     33.    132.    198.    303.    363.    246.    169.     85.     49.     27.
661          UI     10.     10.     10.      0.      0.      0.      0.      0.      0.      0.
662          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

663          KK    R105
664          KM        ROUTE FLOW FROM CP105 TO CP112
665          RS       3              -1       0
666          RC    .022    .022     .03    5220   .0044
667          RX    1000    1001    1010    1020    1040    1050    1099    1100
668          RY    1303    1303    1303    1302    1302    1304    1305    1305
             *

669          KK     112
670          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 112
671          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
672          KM    L=      1.6  Lca=       .8   S=   22.0  Kn= .030  LAG=  26.4
673          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
674          BA     .63
675          LG     .32     .25    5.10     .30   21.00
676          UI     80.    249.    422.    557.    846.    879.    635.    468.    319.    156.
677          UI    111.     70.     25.     25.     25.      0.      0.      0.      0.      0.
1                                         HEC-1 INPUT                                          PAGE 17

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

678          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

679          KK  112OUT
680          KM        DIVERSION-RETENTION AT 112
681          DT  112RET   43.68
682          DI       0   10000
683          DQ       0   10000

684          KK   CP112
685          KM        ADD HYDROGRAPHS AT CP112.
686          HC       2    0.82
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL HAPPY TRAILS DEAD STORAGE RETENTION IN
             *       SUB-BASIN 112
             *

687          KK   1D112
688          KM        DIVERT TO CP120  FROM CP112
689          DT   DI120
690          DI       0      48     165     355     625     981    1434    1990
691          DQ       0      16      55     118     208     327     478     663

692          KK   2D112
693          KM        DIVERT TO CP121A FROM CP112
694          DT  1D121A
695          DI       0      32     110     237     417     654     956    1327
696          DQ       0      16      55     118     208     327     478     663

697          KK    R112
```

```
                                                                                                LABCARD
 698          KM        ROUTE REMAINDER FROM CP112 TO CP113A
 699          RS       6              -1       0
 700          RC    .075     .035     .035    2640    .0023
 701          RX    1000     1490     1830    2600     2770     2788     2789     2790
 702          RY    1290     1288     1286    1284     1284     1285     1285     1285
              *

 703          KK    113A
 704          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 113A
 705          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 706          KM    L=       1.4  Lca=       .8   S=   26.9  Kn= .030  LAG=  24.1
 707          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 708          BA     .50
 709          LG     .25      .25     5.80     .21   30.00
 710          UI     70.     248.     391.    540.     829.     632.     460.     319.     152.     100.
 711          UI     59.      21.      21.     21.      0.       0.       0.       0.       0.       0.
 712          UI      0.       0.       0.      0.      0.       0.       0.       0.       0.       0.
              *
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE - SUM OF ALL BELL WEST RANCH DEAD STORAGE RETENTION IN
              *       SUB-BASIN 113A
              *
1                                          HEC-1 INPUT                                          PAGE 18

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

 713          KK  113AOT
 714          KM        DIVERSION-RETENTION AT 113A
 715          DT  113ART   18.71
 716          DI       0   10000
 717          DQ       0   10000

 718          KK  CP113A
 719          KM        ADD HYDROGRAPHS AT CP113A (R106+R112+113A)
 720          HC       2    1.34

 721          KK   D113A
 722          KM        DIVERT TO CP121A FROM CP113A
 723          DT  2D121A
 724          DI       0     185     545     642     893    1913
 725          DQ       0       0       0      12      74     467

 726          KK   R113A
 727          KM        ROUTE REMAINDER FROM CP113A TO CP114
              * RY stations were increased by 2' at the ends to contain flow
 728          RS       4              -1       0
 729          RC    .035     .035     .035    2500    .0032
 730          RX    1000     1020     1199    1200     1300     1301     1320     1340
 731          RY    1282     1279     1280    1279     1279     1280     1279     1282
              *

 732          KK     114
 733          KM   BASIN 114 (revised)
 734          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 735          KM    L=       3.5  Lca=      1.9   S=   19.3  Kn= .033  LAG=  55.4
 736          BA    2.47
 737          LG     .29      .25     5.70     .23   26.00
 738          UI    150.     150.     305.    550.     710.     817.     921.    1063.    1228.    1601.
 739          UI   1921.    1626.    1371.   1209.    1047.     907.     774.     660.     482.     304.
 740          UI    259.     247.     172.    150.     127.      46.      46.      46.      46.      46.
 741          UI     46.      46.      46.      0.      0.       0.       0.       0.       0.       0.
 742          UI      0.       0.       0.      0.      0.       0.       0.       0.       0.       0.
              *
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN SUN CITY GRAND SUB-BASIN 114

 743          KK  114OUT
 744          KM        DIVERSION-RETENTION AT 114
 745          DT  114RET  192.94
 746          DI       0   10000
 747          DQ       0   10000

 748          KK   CP114
 749          KM        ADD HYDROGRAPHS AT CP114.
 750          HC       3    5.26
```

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

 751          KK    D114
 752          KM        DIVERT FLOW FROM CP114 TO CP122B
 753          DT  DI122B
 754          DI       0     105     354     622    1153    1882
 755          DQ       0       0     195     395     845    1480

 756          KK    R114
 757          KM        ROUTE REMAINER FROM CP114 TO CP115
 758          RS       6              -1       0
 759          RC    .075     .04     .04    2100   .0038
 760          RX    1000    1020    1100    1850    2030    2048    2049    2050
 761          RY    1266    1264    1262    1260    1260    1261    1261    1261
              *

 762          KK     115
 763          KM   BASIN 115  (revised)
 764          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 765          KM    L=      3.2  Lca=      1.5   S=   13.9  Kn= .033  LAG=  51.8
 766          BA    2.40
 767          LG     .28     .25    5.40     .26   27.00
 768          UI    156.    156.    375.    620.    769.    884.   1016.   1182.   1464.   1956.
 769          UI   1788.   1466.   1273.   1098.    940.    795.    661.    468.    275.    262.
 770          UI    234.    156.    156.     66.     48.     48.     48.     48.     48.     48.
 771          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 772          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN SUN CITY GRAND SUB-BASIN 115

 773          KK  115OUT
 774          KM        DIVERSION-RETENTION AT 115
 775          DT  115RET  195.39
 776          DI       0   10000
 777          DQ       0   10000

 778          KK   CP115
 779          KM        ADD HYDROGRAPHS AT CP115
 780          HC       2    7.59

 781          KK    R115
 782          KM        CHANNEL ROUTE FROM CP115 TO CP122A
 783          RS       5              -1       0
 784          RC    .021    .021    .021    5180   .0028
 785          RX    1000    1055    1110    1122    1128    1140    1145  1145.1
 786          RY    1249  1248.5    1249    1246    1246    1249    1249    1252
              *

 787          KK    122A
 788          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 122A
 789          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 790          KM    L=      1.6  Lca=       .8   S=   23.5  Kn= .030  LAG=  25.9
 791          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 792          BA   0.382
 793          LG     .24    0.21    5.30    0.19   35.00
 794          UI     50.    159.    264.    351.    546.    519.    378.    277.    180.     86.
```



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

 795          UI     62.     35.     15.     15.     15.      0.      0.      0.      0.      0.
 796          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN MOUNTAIN VISTA RANCH SUBDIVISION.
              *       SUB-BASIN 122

 797          KK  122AOT
 798          KM        DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
 799          KM        57% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
 800          DT  122ART   30.54
 801          DI       0   10000
```

```
802          DQ       0   10000

803          KK  1I122A
804          KM        ADD HYDROGRAPHS AT INTERMEDIATE POINT TO CP122A
805          HC       2    8.33
             * move to CP114 at divert 1D122

806          KK    D114
807          KM        RETRIEVE DIVERT DI122B AT CP114
808          DR  DI122B

809          KK    R114
810          KM        ROUTE DIVERTED FLOW FROM CP114 TO CP122B
             * end stations raised by 1.5' to contain flow
811          RS       5              -1       0
812          RC     .03     .03     .03    6200   .0033
813          RX     980    1000    1004    1008    1040    1044    1048    1060
814          RY  1261.0    1258    1257    1256    1256    1257    1258  1261.0
             *

815          KK    122B
816          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 122B
817          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
818          KM    L=      1.6  Lca=       .8   S=   23.2  Kn= .029  LAG=  25.2
819          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
820          BA    0.51
821          LG     .24    0.25    6.40    0.29   35.00
822          UI     68.    227.    369.    496.    781.    672.    492.    356.    202.    115.
823          UI     73.     34.     21.     21.     21.      0.      0.      0.      0.      0.
824          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

825          KK  122BOT
826          KM        DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
827          KM        43% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
828          DT  122BRT   23.04
829          DI       0   10000
830          DQ       0   10000

831          KK  CP122B
832          KM        ADD HYDROGRAPHS AT CP122B
833          HC       2    5.66
```



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

834          KK   R122B
835          KM        ROUTE FLOW FROM CP122B TO CP122A
836          RS       1              -1       0
837          RC    .035    .018    .035    1580   .0038
838          RX    1000    1010    1020  1020.1  1079.9    1080    1090    1100
839          RY    1232    1230  1229.5    1229    1229  1229.5    1230    1232

840          KK  CP122A
841          KM        ADD HYDROGRAPHS AT CP122A       (CP122A+122BOT+R115)
842          HC       2    8.49

843          KK  1R122A
844          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (new)
845          KM        This channel continues along Reemes from Green field for 1/2 mile
846          RS       2              -1       0
847          RC    .018    .035    .035    2640   .0042
848          RX    1000    1030    1060    1076    1101    1117    1118    1119
849          RY    1222    1222    1222    1218    1218    1222    1223    1224

850          KK  2R122A
851          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (WLB - original modified for
852          KM                                                 length)
853          RS       7              -1       0
854          RC     .05     .05    .075    2640   .0038
855          RX    1000    1001    1002    1015    1235    1600    2030    2220
856          RY    1219    1219    1219    1218    1218    1220    1222    1224
             *
             * ***********************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2B WITH NEW SOILS*****
             * ***********************************************************************
```

```
*

KK     111
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111.
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .26
LG     .25     .25    5.40     .26   25.00
UI     87.    280.    482.    563.    338.    161.     73.     26.     17.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
*       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
*       STORAGE - SUM OF ALL ARIZONA TRADITIONS RETENTION IN
*       SUB-BASIN 111

KK  111OUT
KM        DIVERSION-RETENTION
DT  111RET   12.46
DI       0   10000
DQ       0   10000
```



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

KK    R111
KM        ROUTE FROM CP111 TO CP111A
RS       3       -1       0
RC    .075    .035    .035    1800   .0039
RX    1000    1570    2040    2370    2440    2468    2469    2470
RY    1312    1310    1308    1306    1306    1307    1307    1307
*

KK     104
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 104
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=       .6  Lca=       .3   S=   16.2  Kn= .050  LAG=  22.1
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .15
LG     .35     .39    5.70     .19     .00
UI     23.     91.    137.    207.    259.    177.    123.     65.     36.     21.
UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK    R104
KM        ROUTE FLOW FROM CP104 TO CP111A
RS      53       -1       0
RC    .075    .075    .075    6552   .0056
RX    1000    1001    1230    1270    1750    2000    2380    2650
RY    1321    1321    1320    1318    1318    1319    1318    1320
*

KK    111A
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111A.
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=      1.5  Lca=       .9   S=   34.0  Kn= .030  LAG=  24.8
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .61
LG     .23     .26    5.30     .27   18.00
UI     83.    283.    455.    616.    968.    792.    580.    414.    220.    136.
UI     83.     31.     25.     25.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  111AOT
KM        DIVERSION-RETENTION AT 111A
DT  111ART   55.65
DI       0   10000
DQ       0   10000

KK  CP111A
KM        ADD HYDROGRAPHS AT CP111A
HC       3    0.97
```

```
                    *     ADDED R111A, BASED ON WLB OVERLAND CHANNEL ROUTES
1                                          HEC-1 INPUT                                                    PAGE 23

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

 915                KK   R111A
 916                KM          ROUTE FLOW FROM CP111A TO CP120
 917                RS      25          -1       0
 918                RC     .05      .05      .05    5700   .0028
 919                RX    1000     1001     1002    1045    1150    1570    1960    2350
 920                RY    1249     1249     1249    1248    1248    1250    1252    1254
                    *

 921                KK     119
 922                KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 119
 923                BA     .86
 924                LG     .50      .00     5.40     .38     .00
 925                UI     36.      36.      36.     58.    120.    142.    168.    185.    202.    218.
 926                UI    241.     267.     292.    350.    424.    469.    404.    355.    319.    293.
 927                UI    270.     241.     219.    197.    178.    161.    131.    103.     68.     63.
 928                UI     60.      59.      47.     36.     36.     36.     16.     11.     11.     11.
 929                UI     11.      11.      11.     11.     11.     11.     11.     11.      0.      0.
 930                UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

 931                KK    D119
 932                KM          DIVERT TO CP128 FROM CP119
 933                DT   DI128
 934                DI       0       42      139     286     485     739    1052    1425
 935                DQ       0       25       81     167     283     429     607     819

 936                KK    R119
 937                KM         ROUTE REMAINDER FROM CP119 TO CP119A
 938                RS       6               -1       0
 939                RC    .075     .035     .035    2640   .0015
 940                RX    1000     1001     1450    1800    1820    1838    1839    1840
 941                RY    1292     1292     1290    1288    1288    1289    1289    1289
                    *

 942                KK    119A
 943                KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 119A
 944                BA     .47
 945                LG     .50      .00     5.40     .38     .00
 946                UI     19.      19.      19.     29.     64.     75.     90.     98.    107.    116.
 947                UI    128.     142.     154.    181.    219.    254.    226.    197.    177.    162.
 948                UI    150.     134.     121.    111.     98.     91.     77.     59.     46.     34.
 949                UI     33.      32.      31.     19.     19.     19.     16.      6.      6.      6.
 950                UI      6.       6.       6.      6.      6.      6.      6.      6.      6.      0.
 951                UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.
 952                UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

 953                KK  CP119A
 954                KM         ADD HYDROGRAPHS AT CP119A
 955                HC       2    1.26
1                                          HEC-1 INPUT                                                    PAGE 24

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

 956                KK   D119A
 957                KM          DIVERT TO CP130 FROM CP119A
 958                DT   DI130
 959                DI       0       13       46     100     177     281     413     577     774    1007
 960                DI    1279     1600     1978
 961                DQ       0        0        0       0       0       0       0       0       0       0
 962                DQ       0        9       31

 963                KK   R119A
 964                KM         ROUTE REMAINDER FROM CP119A TO CP120
 965                RS       2       -1       0
 966                RC    .035     .035     .035    2300   .0096
 967                RX    1000     1001     1002    1180    1200    1213    1214    1215
 968                RY    1278     1278     1278    1276    1276    1277    1277    1277
                    *

 969                KK     120
```

```
 970          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 120
 971          BA     .54
 972          LG     .50     .00    7.30     .17     .00
 973          UI     21.     21.     21.     23.     69.     79.     94.    105.    115.    123.
 974          UI    134.    148.    161.    179.    212.    257.    277.    239.    211.    191.
 975          UI    176.    164.    147.    133.    124.    109.    101.     88.     70.     57.
 976          UI     37.     37.     35.     35.     28.     21.     21.     21.     13.      6.
 977          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
 978          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 979          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 980          KK   1I120
 981          KM        ADD HYDROGRAPHS AT 1I120
 982          HC       3    2.88

 983          KK   1D112
 984          KM        RETURN DIVERT AT CP112
 985          DR   DI120

 986          KK    R112
 987          KM        ROUTE FLOW FROM CP112 TO CP120
 988          RS       8              -1       0
 989          RC    .035    .035    .075    5270   .0044
 990          RX    1000    1001    1002    1020    1040    1340    1820    2030
 991          RY    1281    1281    1281    1280    1280    1282    1284    1286

 992          KK   CP120
 993          KM        ADD HYDROGRAPHS AT CP120.
 994          HC       2    3.58

 995          KK    R120
 996          KM        ROUTE FLOWS FROM CP120 TO CP130
 997          RS       5              -1       0
 998          RC     .03     .03     .06    5280   .0032
 999          RX    1000    1001    1002    1020    1040    1090    1520    1830
1000          RY    1261    1261    1261    1260    1260    1262    1264    1266
```



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

1001          KK    D119
1002          KM        RETURN DIVERT AT CP119
1003          DR   DI128

1004          KK    R119
1005          KM        ROUTE FLOW CP119 TO CP128
1006          RS       4              -1       0
1007          RC    .035    .035     .06    2640   .0015
1008          RX    1000    1001    1002    1010    1045    1085    1460    1710
1009          RY    1287    1287    1287    1286    1286    1288    1290    1292
              *

1010          KK     128
1011          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 128
1012          BA     .41
1013          LG     .50     .00    4.90     .47     .00
1014          UI     22.     22.     25.     73.     90.    106.    120.    133.    151.    170.
1015          UI    206.    264.    270.    223.    195.    175.    155.    136.    119.    105.
1016          UI     89.     64.     41.     38.     36.     29.     22.     22.     14.      7.
1017          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
1018          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1019          KK   CP128
1020          KM        ADD HYDROGRAPHS AT CP128
1021          HC       2    1.27

1022          KK    R128
1023          KM        ROUTE FLOW FROM CP128 TO CP130
1024          RS      38              -1       0
1025          RC    .075    .075    .075    6240   .0062
1026          RX    1000    1400    1770    2240    3260    3468    3469    3470
1027          RY    1272    1270    1268    1266    1266    1267    1267    1267

1028          KK   D119A
1029          KM        RETURN DIVERT AT CP119A
```

```
1030          DR   DI130

1031          KK   R119A
1032          KM        ROUTE FLOW FROM CP119A TO CP130
1033          RS       5              -1       0
1034          RC     .08      .08     .08     6318   .0062
1035          RX    1000     1400    1770     2240    3260    3468    3469    3470
1036          RY    1272     1270    1268     1266    1266    1267    1267    1267
              *

1037          KK     130
1038          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 130
1039          BA    1.00
1040          LG     .50      .00    5.40      .38     .00
1041          UI     37.      37.     37.      37.    108.    133.    156.    177.    194.    210.
1042          UI    225.     244.    269.     289.    327.    397.    453.    482.    418.    371.
1043          UI    338.     312.    291.     264.    241.    221.    202.    184.    170.    142.
1044          UI    108.      85.     66.      65.     61.     61.     46.     37.     37.     37.
1045          UI     25.      11.     11.      11.     11.     11.     11.     11.     11.     11.
1                                          HEC-1 INPUT                                                    PAGE 26

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

1046          UI     11.      11.     11.      11.      0.      0.      0.      0.      0.      0.
1047          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

1048          KK   1I130
1049          KM        ADD HYDROGRAPHS AT 1I130
1050          HC       3    3.77
              *

1051          KK     129
1052          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 129
1053          BA     .43
1054          LG     .42      .05    4.32      .59    4.00
1055          UI     28.      28.     72.     116.    143.    164.    189.    222.    287.    360.
1056          UI    312.     259.    226.     192.    164.    139.    109.     71.     50.     47.
1057          UI     36.      28.     23.       9.      9.      9.      9.      9.      9.      9.
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          KK    R129
1061          KM        ROUTE FLOW FROM CP129 TO CP130
1062          RS       9              -1       0
1063          RC    .075      .04     .04     5280    .006
1064          RX    1000     1250    1450     2070    2080    2098    2099    2100
1065          RY    1270     1268    1266     1264    1264    1265    1265    1265

1066          KK   CP130
1067          KM        ADD HYDROGRAPHS AT CP130.
1068          HC       3    5.37

1069          KK    D130
1070          KM        DIVERT TO CP144 FROM CP130
1071          DT   DI144
1072          DI       0       37     124      257     440     743    1487    2233    3928    6436
1073          DQ       0        0       0        0       0     196     657    1133    2198    3747

1074          KK    R130
1075          KM        ROUTE REMAINDER FROM CP130 TO CP131A
1076          RS       8              -1
1077          RC    .075      .04     .04     2640   .0057
1078          RX    1000     1001    1640     2050    2290    2328    2329    2330
1079          RY    1234     1234    1232     1230    1230    1231    1231    1231
              *

1080          KK    131A
1081          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131A
1082          BA     .49
1083          LG     .50      .00    5.00      .45     .00
1084          UI     22.      22.     22.      48.     77.     93.    106.    119.    129.    142.
1085          UI    159.     175.    208.     256.    285.    243.    212.    191.    174.    158.
1086          UI    141.     128.    112.     103.     86.     64.     45.     39.     36.     36.
1087          UI     27.      22.     22.      19.      7.      7.      7.      7.      7.      7.
1088          UI      7.       7.      7.       7.      7.      0.      0.      0.      0.      0.
1089          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.
```

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

1090          KK  CP131A
1091          KM        ADD HYDROGRAPHS AT CP131A
1092          HC       2    5.87

1093          KK   R131A
1094          KM        ROUTE FLOW FROM CP131A TO R131
1095          RS       8              -1
1096          RC    .075     .04     .04    2640   .0051
1097          RX    1000    1001    1640    2050    2290    2328    2329    2330
1098          RY    1234    1234    1232    1230    1230    1231    1231    1231
              *

1099          KK     131
1100          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131
1101          BA     .49
1102          LG     .50     .00    5.00     .45     .00
1103          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
1104          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
1105          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
1106          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
1107          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
1108          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1109          KK   1I131
1110          KM        ADD HYDROGRAPHS AT CP131
1111          HC       2    9.57

1112          KK   2D112
1113          KM        RETURN DIVERT AT CP112
1114          DR  1D121A

1115          KK    R112
1116          KM        ROUTE FLOW FROM CP112 TO CP121A
1117          RS       6              -1       0
1118          RC     .05    .022     .05    6700   .0034
1119          RX    1000    1180    1205    1225    1295    1320    1345    1670
1120          RY    1265    1264    1262    1260    1260    1262    1264    1265
              *

1121          KK    121A
1122          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121A
1123          BA     .50
1124          LG     .46     .09    5.76     .28     .00
1125          UI     26.     26.     30.     89.    109.    129.    146.    161.    183.    205.
1126          UI    248.    317.    331.    274.    238.    214.    190.    166.    147.    129.
1127          UI    109.     80.     52.     46.     43.     37.     26.     26.     19.      8.
1128          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
1129          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1130          KK  1I121A
1131          KM        ADD HYDROGRAPHS AT 1I121A
1132          HC       2    1.34

1133          KK   D113A
1134          KM        RETURN DIVERT AT CP113A
1135          DR  2D121A

1136          KK   R113A
1137          KM        ROUTE FLOW FROM CP113A TO CP121A
1138          RS       6              -1       0
1139          RC     .05    .025     .05    5280   .0047
1140          RX    1000    1001    1002    1020    1170    1200    1290    1500
1141          RY    1278    1278    1278    1276    1276    1278    1279    1280

1142          KK  CP121A
1143          KM        ADD HYDROGRAPHS AT CP121A
1144          HC       2    3.54
```

```
1145          KK   R121A
1146          KM        ROUTE FLOW FROM CP121A TO CP121
1147          RS       2              -1        0
1148          RC    .035    .035    .035    2640   .0096
1149          RX    1000    1001    1002    1180    1200    1213    1214    1215
1150          RY    1278    1278    1278    1276    1276    1277    1277    1277
              *

1151          KK     121
1152          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121
1153          BA     .50
1154          LG     .46     .09    5.52     .31     .00
1155          UI     26.     26.     31.     90.    110.    130.    147.    163.    185.    209.
1156          UI    253.    325.    328.    272.    237.    213.    189.    165.    145.    127.
1157          UI    107.     77.     49.     46.     44.     35.     26.     26.     16.      8.
1158          UI      8.      8.      8.      8.      8.      8.      8.      0.      0.      0.
1159          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1160          KK   CP121
1161          KM        ADD HYDROGRAPHS AT CP121
1162          HC       2    4.03

1163          KK    R121
1164          KM        ROUTE FLOW FROM CP121 TO CP131
1165          RS       7              -1        0
1166          RC    .035    .035    .075    5280   .0055
1167          RX    1000    1001    1002    1050    1115    1450    1910    1570
1168          RY    1239    1239    1239    1238    1238    1239    1240    1242

1169          KK   CP131
1170          KM        ADD HYDROGRAPHS AT CP131.
1171          HC       2   10.47
```



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

1172          KK    D131
1173          KM        DIVERT TO CP145 FROM CP131
1174          DT   DI145
1175          DI       0      60     608    1900    3801    6042    9665
1176          DQ       0      39     491    1546    2353    4171    6841

1177          KK    R131
1178          KM        ROUTE REMAINDER FROM CP131 TO CP132
1179          RS       4              -1        0
1180          RC    .075    .035    .035    2150   .0028
1181          RX    1000    1370    1760    2150    2165    2173    2174    2175
1182          RY    1224    1222    1220    1218    1218    1219    1219    1219
              *

1183          KK     132
1184          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 132
1185          BA     .41
1186          LG     .50     .00    4.32     .62     .00
1187          UI      19      19      19      49      70      86      98     108     118     132
1188          UI     147     169     212     248     223     191     170     155     140     124
1189          UI     112      98      89      70      55      34      34      32      30      19
1190          UI      19      19       8       6       6       6       6       6       6       6
1191          UI       6       6       0       0       0       0       0       0       0       0
1192          UI       0       0       0       0       0       0       0       0       0       0

1193          KK   CP132
1194          KM        ADD HYDROGRAPHS AT CP132
1195          HC       2    9.97

1196          KK    R132
1197          KM        ROUTE FLOW FROM CP132 TO CP133
1198          RS       5              -1        0
1199          RC     .08     .04     .04    2640    .003
1200          RX    1000    1400    1670    2050    2230    2258    2259    2260
1201          RY    1218    1216    1214    1212    1212    1213    1213    1213
              *

1202          KK     133
```

```
1203    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 133
1204    KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1205    KM    L=      1.1  Lca=       .6   S=   30.4  Kn= .097  LAG=  61.2
1206    KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1207    BA     .50
1208    LG     .44      .25     4.65      .48     8.00
1209    UI     27.      27.      39.      95.     118.     139.     156.     174.     201.     229.
1210    UI    295.     352.     309.     261.     231.     207.     178.     158.     137.     116.
1211    UI     86.      56.      48.      45.      37.      27.      27.      15.       8.       8.
1212    UI      8.       8.       8.       8.       8.       8.       0.       0.       0.       0.
1213    UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
```



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

1214    KK  133OUT
1215    KM        DIVERSION-RETENTION
1216    DT  133RET    9.36
1217    DI       0   10000
1218    DQ       0   10000

1219    KK   1I133
1220    KM        ADD HYDROGRAPHS AT 1I133
1221    HC       2   11.37

1222    KK   CP133
1223    KM        ADD HYDROGRAPHS AT CP133
1224    HC       2   15.93

1225    KK   1D133
1226    KM        DIVERT TO CP146 FROM CP133
1227    DT   DI146
1228    DI       0      80     341    1081    2600    4587    7337
1229    DQ       0      32     136     432    1040    1835    2935

1230    KK   2D133
1231    KM        DIVERT TO CP147 FROM CP133
1232    DT   1D147
1233    DI       0      48     205     649    1560    2752    4402
1234    DQ       0      16      68     216     520     917    1467

1235    KK    R133
1236    KM        ROUTE REMAINDER FROM CP133 TO CP134
1237    RS       4              -1       0
1238    RC     .06     .035    .035    2640   .0049
1239    RX    1000    1340    1600    1815    1860    1888    1889    1890
1240    RY    1206    1204    1202    1200    1200    1203    1203    1203
        *

1241    KK     134
1242    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 134
1243    BA     .50
1244    LG     .50      .00     4.74      .51      .00
1245    UI     22.      22.      22.      49.      79.      95.     108.     122.     132.     145.
1246    UI    162.     178.     213.     261.     291.     248.     216.     195.     178.     161.
1247    UI    143.     131.     114.     105.      88.      65.      46.      39.      37.      37.
1248    UI     27.      22.      22.      20.       7.       7.       7.       7.       7.       7.
1249    UI      7.       7.       7.       7.       7.       0.       0.       0.       0.       0.
1250    UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1251    KK    D123
1252    KM        RETURN DIVERT AT CP123
1253    DR   DI134
```



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

1254    KK    R123
1255    KM        ROUTE DIVERT FROM CP123 TO CP134
1256    RS       6              -1       0
1257    RC     .04     .04     .075    5280   .0038
1258    RX    1000    1001    1002    1045    1150    1570    1960    2350
1259    RY    1209    1209    1209    1208    1208    1210    1212    1214
```

```
1260          KK   CP134
1261          KM        ADD HYDROGRAPHS AT CP134
1262          HC       3   16.87

1263          KK    D134
1264          KM        DIVERT TO CP147 FROM CP134
1265          DT   2D147
1266          DI       0      26     162     614    1050    2192    3494    6483   10967
1267          DQ       0       0      62     352     697    1575    2539    4742    8027

1268          KK    R134
1269          KM        ROUTE REMAINDER FROM CP134 TO CP135
1270          RS       2              -1       0
1271          RC     .06     .03     .03    2640   .0045
1272          RX    1000    1490    1950    2015    2040    2048    2049    2050
1273          RY    1194    1192    1190    1188    1188    1189    1189    1189

1274          KK   1D124
1275          KM        RETURN DIVERT AT CP124
1276          DR   DI135

1277          KK    R124
1278          KM        ROUTE RUNOFF FROM CP124 TO CP135
1279          RS      10              -1       0
1280          RC    .035    .035    .075    5280   .0042
1281          RX    1000    1001    1002    1020    1070    1360    1800    2190
1282          RY    1195    1195    1195    1194    1194    1196    1198    1200
              *

1283          KK     135
1284          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 135
1285          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1286          KM    L=      1.2  Lca=       .6   S=   27.1  Kn= .076  LAG=  50.9
1287          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1288          BA     .49
1289          LG     .38     .25    4.65     .45   15.00
1290          UI     32.     32.     81.    132.    162.    187.    215.    252.    324.    410.
1291          UI    356.    296.    258.    219.    187.    159.    126.     81.     57.     53.
1292          UI     41.     32.     27.     10.     10.     10.     10.     10.     10.     10.
1293          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1294          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

1295          KK  135OUT
1296          KM        DIVERSION-RETENTION
1297          DT  135RET   18.00
1298          DI       0   10000
1299          DQ       0   10000

1300          KK   CP135
1301          KM        ADD HYDROGRAPHS AT CP135
1302          HC       3   17.92

1303          KK    D135
1304          KM        DIVERT TO CP148 FROM CP135
1305          DT   DI148
1306          DI       0      24     136     323     849    1809    2524    4155    6589    8820
1307          DQ       0       0       0      21     135     427     747    1477    2566    3013

1308          KK    R135
1309          KM        ROUTE REMAINDER FROM CP135 TO CP136
1310          RS       4              -1       0
1311          RC    .075    .035    .035    2640   .0038
1312          RX    1000    1430    1790    2250    2275    2298    2299    2300
1313          RY    1182    1180    1178    1176    1176    1177    1177    1177

1314          KK   2D124
1315          KM        RETURN DIVERT AT CP124
1316          DR   DI136

1317          KK    R124
1318          KM        ROUTE FLOW FROM CP124 TO CP136
1319          RS      50              -1       0
```

```
1320          RC     .07     .07     .07    6084   .0053
1321          RX    1000    1001    1002    1260    2160    2448    2449    2450
1322          RY    1193    1193    1193    1192    1192    1193    1193    1193
              *

1323          KK     136
1324          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 136
1325          BA     .46
1326          LG     .50     .00    4.82     .49     .00
1327          UI     21.     21.     21.     45.     73.     88.    100.    112.    122.    134.
1328          UI    150.    165.    198.    243.    268.    227.    198.    179.    164.    147.
1329          UI    131.    120.    105.     96.     79.     59.     40.     36.     34.     34.
1330          UI     24.     21.     21.     17.      6.      6.      6.      6.      6.      6.
1331          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
1332          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1333          KK   1I136
1334          KM        ADD HYDROGRAPHS AT 1I136
1335          HC       2    1.03
1                                   HEC-1 INPUT                                                PAGE 33

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

1336          KK   CP136
1337          KM        ADD HYDROGRAPHS AT CP136
1338          HC       2   18.33

1339          KK    R136
1340          KM        ROUTE FLOW FROM CP136 TO CP137
1341          RS       5              -1       0
1342          RC     .08    .035    .035    2640   .0042
1343          RX    1000    1370    1790    3210    3270    3298    3299    3300
1344          RY    1170    1168    1166    1164    1164    1165    1165    1165

1345          KK   1D125
1346          KM        RETURN DIVERT AT CP125
1347          DR   DI137

1348          KK    R125
1349          KM        ROUTE FLOW FROM CP125 TO CP137
1350          RS       8              -1       0
1351          RC    .035    .035    .075    5280   .0047
1352          RX    1000    1001    1002    1030    1175    1640    2135    2600
1353          RY    1171    1171    1171  1169.5    1170    1172    1174    1176
              *

1354          KK     137
1355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 137
1356          BA     .54
1357          LG     .50     .00    5.10     .43     .00
1358          UI     18.     18.     18.     18.     37.     61.     70.     82.     89.     98.
1359          UI    104.    111.    120.    131.    141.    153.    179.    210.    240.    227.
1360          UI    200.    180.    166.    154.    145.    134.    121.    113.    104.     94.
1361          UI     88.     79.     67.     53.     41.     32.     32.     30.     30.     27.
1362          UI     18.     18.     18.     18.     10.      6.      6.      6.      6.      6.
1363          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
1364          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1365          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1366          KK   CP137
1367          KM        ADD HYDROGRAPHS AT CP137 (137 + DR137 FROM 125 + 136)
1368          HC       3    21.6

1369          KK   1D137
1370          KM        DIVERT FROM CP137 TO CP149
1371          DT   DI149
1372          DI       0       6     169     684    1659    3199    5400    8353   12141
1373          DQ       0       2      56     228     553    1066    1800    2784    4047

1374          KK   2D137
1375          KM        DIVERT FROM CP137 TO CP153
1376          DT   DI153
1377          DI       0       4     113     456    1106    2133    3600    6553    8094
1378          DQ       0       2      56     228     553    1066    1800    2784    4047
1                                   HEC-1 INPUT                                                PAGE 34
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1379          KK    R137
1380          KM        ROUTE FLOW FROM CP137 TO CP138
1381          RS      22              -1       0
1382          RC     .08     .03     .03    2640   .0021
1383          RX    1000    2200    2310    2320    2340    2368    2369    2370
1384          RY    1162    1156  1156.5    1156    1156    1157    1157    1157

1385          KK   2D125
1386          KM        RETURN DIVERT AT CP125
1387          DR   DI138

1388          KK    R125
1389          KM        ROUTE FLOW FROM CP125 TO CP138
1390          RS      50              -1       0
1391          RC    .075    .075    .075    7500   .0048
1392          RX    1000    1050    1100    1200    2020    2198    2250    2300
1393          RY    1171  1170.5  1170.5    1170    1170  1170.5  1170.5    1171
              *

1394          KK     138
1395          KM   BASIN 138
1396          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1397          KM    L=      1.0  Lca=       .5   S=   28.0  Kn= .120  LAG=  70.5
1398          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1399          BA     .54
1400          LG     .50     .25    5.00     .43     .00
1401          UI     26.     26.     26.     70.     96.    119.    133.    147.    162.    182.
1402          UI    201.    239.    298.    336.    285.    247.    221.    202.    178.    159.
1403          UI    142.    126.    109.     83.     59.     46.     43.     42.     31.     26.
1404          UI     26.     17.      8.      8.      8.      8.      8.      8.      8.      8.
1405          UI      8.      8.      0.      0.      0.      0.      0.      0.      0.      0.
1406          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1407          KK   1I138
1408          KM        ADD HYDROGRAPHS AT CP138
1409          HC       2   22.08

1410          KK   CP138
1411          KM        ADD HYDROGRAPHS AT CP138 (137 + 138)
1412          HC       2   22.08

1413          KK    R138
1414          KM        ROUTE REMAINDER FROM CP138 TO CP138A
1415          RS      22              -1       0
1416          RC     .08     .03     .03    2640   .0021
1417          RX    1000    2200    2310    2320    2340    2368    2369    2370
1418          RY    1162    1156  1156.5    1156    1156    1157    1157    1157
              *
```



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

1419          KK    138A
1420          KM   BASIN 138A
1421          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1422          KM    L=      1.3  Lca=       .6   S=   24.0  Kn= .030  LAG=  21.4
1423          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1424          BA     .46
1425          LG     .25     .25    4.90     .32   30.00
1426          UI     75.    299.    448.    701.    781.    527.    357.    169.    100.     51.
1427          UI     22.     22.      0.      0.      0.      0.      0.      0.      0.      0.
1428          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1429          KK  138AOT
1430          KM        DIVERSION-RETENTION
1431          DT  138ART   34.44
1432          DI       0   10000
1433          DQ       0   10000

1434          KK  1I138A
1435          KM        ADD HYDROGRAPHS AT CP138 (138 + 138A)
```

```
1436        HC       2   23.70

1437        KK  2I138A
1438        KM        ADD HYDROGRAPHS AT CP138 (138 + 126)
1439        HC       2   24.81
            *
            * ***********************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2D WITH NEW SOILS*****
            * ***********************************************************************
            *

1440        KK   2D137
1441        KM        RETURN DIVERT AT CP137
1442        DR   DI153

1443        KK    R137
1444        KM        ROUTE FLOW FROM CP137 TO CP153
1445        RS      51              -1       0
1446        RC    .075    .075    .075    5600   .0018
1447        RX     900    1000    1200    1450    1800    2000    2300    2450
1448        RY  1156.5    1156    1155  1154.7  1154.7    1155    1156  1156.5
            *

1449        KK     153
1450        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 153
1451        BA     .20
1452        LG     .50     .00    5.76    0.32     .00
1453        UI      7.      7.      7.      7.     17.     24.     28.     33.     35.     39.
1454        UI     41.     44.     48.     53.     56.     65.     79.     87.     91.     79.
1455        UI     71.     65.     60.     56.     52.     47.     43.     40.     36.     33.
1456        UI     29.     24.     20.     13.     12.     12.     12.     12.      8.      7.
1457        UI      7.      7.      5.      2.      2.      2.      2.      2.      2.      2.
1458        UI      2.      2.      2.      2.      2.      2.      0.      0.      0.      0.
1459        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1460        KK   CP153
1461        KM        ADD HYDROGRAPHS AT CP153
1462        HC       2   21.92

1463        KK  CP138A
1464        KM        ADD HYDROGRAPHS AT CP138A
1465        HC       2   23.68

1466        KK   D138A
1467        KM        DIVERT TO CP154 FROM CP138A
1468        DT   DI154
1469        DI       0      44     392    1366    3326    6347   10546   16046
1470        DQ       0      30     268     874    1974    3682    6100    9324

1471        KK   R138A
1472        KM        ROUTE REMAINDER FROM CP138A TO CP157
1473        RS      15              -1       0
1474        RC    .075     .04    .075    6708   .0051
1475        RX    1000    1001    1580    2290    2450    2710    2799    2800
1476        RY    1140    1140    1138    1136    1136    1138    1140    1140

1477        KK   D138A
1478        KM        RETURN DIVERT AT CP138A
1479        DR   DI154
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1480        KK    RLLE
1481        KM    ROUTE REMAINDER FROM CP138A TO CP157
1482        RS       1              -1       0
1483        RC    0.03    0.03    0.03    2020   0.004
1484        RX       0       4       8      12      20    41.5    51.1    82.3
1485        RY      10       8       6       4       0       0     4.8      10
            * KK R138A
            * KM        ROUTE FLOW FROM CP138A TO CP154
            * RS    15              -1       0
            * RC   .08     .08     .08    2640   .0026
            * RX  1000    1001    1002    1025    1160    1840    2099    2100
```

```
                                                                                LABCARD
          * RY  1145    1145    1145    1144    1144    1146    1148    1148
          *

1486      KK     154
1487      KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 154
1488      BA     .17
1489      LG     .50     .00    5.88     .30     .00
1490      UI     12.     12.     36.     53.     64.     74.     87.    106.    146.    142.
1491      UI    114.     98.     82.     69.     58.     43.     27.     21.     19.     12.
1492      UI     12.      5.      4.      4.      4.      4.      4.      4.      0.      0.
1493      UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
          * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
          * KK CP154
          * KM      ADD HYDROGRAPHS AT CP154
          * HC     2   24.19
1                                   HEC-1 INPUT                                          PAGE 37

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

1494      KK    LLE1
1495      KM        ADD HYDROGRAPHS AT CP154
1496      HC       2    0.33
          * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1497      KK   RLLE1
1498      KM        ROUTE FLOW FROM CP154 TO CP157
1499      RS     4.7              -1       0
1500      RC    0.03    0.03    0.03    4950  0.0039
1501      RX       0      30      38      54    76.5     104     139     154
1502      RY      10       4       4       0       0       0       7      10
          *

1503      KK     157
1504      KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 157
1505      KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1506      KM    L=      1.3  Lca=       .6   S=   26.8  Kn= .084  LAG=  59.9
1507      KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1508      BA     .89
1509      LG     .40     .25    5.20     .36   12.00
1510      UI     50.     50.     78.    175.    219.    257.    289.    326.    373.    435.
1511      UI    560.    646.    535.    458.    407.    359.    312.    272.    238.    189.
1512      UI    133.     89.     84.     82.     51.     50.     43.     15.     15.     15.
1513      UI     15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
1514      UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1515      KK  157OUT
1516      KM    Divert Retention in Subbasin 157
1517      DT  157RET   26.96
1518      DI       0   10000
1519      DQ       0   10000

1520      KK   1I157
1521      KM        ADD HYDROGRAPHS AT 1I157
1522      HC       2   25.08

1523      KK   2I157
1524      KM        ADD HYDROGRAPHS AT 2I157
1525      HC       2   25.08
          *

1526      KK     127
1527      KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 127
1528      BA     .22
1529      LG     .12     .18    7.00     .14   20.00
1530      UI     90.    276.    510.    430.    243.     91.     37.     15.      0.      0.
1531      UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1532      KK    R127
1533      KM        ROUTE FLOW FROM CP127 TO CP139
1534      RS     29              -1       0
1535      RC    .08     .08     .08    3744   .0032
1536      RX   1000    1001    1002    1410    1820    2410    2860    3000
1537      RY   1155    1155    1155    1154    1154    1156    1158    1159
          *
1                                   HEC-1 INPUT                                          PAGE 38
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1538          KK     139
1539          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 139
1540          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1541          KM    L=      1.0  Lca=      .5    S=   17.0  Kn= .039  LAG=  24.5
1542          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1543          BA     .47
1544          LG     .27      .24     6.20      .19    26.00
1545          UI     65.     224.     357.     488.     760.     602.     440.     311.     158.     100.
1546          UI     63.      20.      20.      20.      0.       0.       0.       0.       0.       0.
1547          UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

1548          KK  139OUT
1549          KM    Divert Retention in Subbasin 139
1550          DT  139RET   29.95
1551          DI       0   10000
1552          DQ       0   10000

1553          KK   1I139
1554          KM        ADD HYDROGRAPHS AT 1I139
1555          HC       2     .69

1556          KK    D126
1557          KM        RETURN DIVERT AT CP126
1558          DR   DI139

1559          KK     RLE
1560          KM        ROUTE FLOW FROM CP126 TO CP139
1561          RS     5.1              -1       0
1562          RC    0.03     0.03     0.03     3852  0.0047
1563          RX       0       48       56       64      73       85       98      146
1564          RY      12        0        0        0       0        0        0       12

1565          KK   2I139
1566          KM        ADD HYDROGRAPHS AT 2I139
1567          HC       2    7.04
              *

1568          KK     140
1569          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 140
1570          BA     .18
1571          LG     .50      .00     5.64      .34       8
1572          UI     13.      13.      35.      53.      65.      75.      88.     104.     142.     155.
1573          UI    123.     105.      90.      76.      64.      52.      33.      22.      21.      16.
1574          UI     13.       9.       4.       4.       4.       4.       4.       4.       0.       0.
1575          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1576          KK     LE1
1577          KM        ADD HYDROGRAPHS AT CP139
1578          HC       2    0.88
              *
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
```



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

1579          KK    RLE1
1580          KM        ROUTE FLOW FROM CP139 TO CP156
1581          RS     1.3              -1       0
1582          RC    0.03     0.03     0.03     1743  0.0028
1583          RX       0       48       56       64      73       85       98      146
1584          RY      12        0        0        0       0        0        0       12
              *

1585          KK     156
1586          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156
1587          BA     .30
1588          LG     .35      .09     5.00      .41     8.00
1589          UI     18.      18.      33.      64.      82.      94.     106.     121.     139.     173.
1590          UI    223.     206.     171.     149.     132.     113.      99.      85.      69.      47.
1591          UI     31.      30.      28.      18.      18.      12.       5.       5.       5.       5.
```

```
                                                                                LABCARD
1592        UI      5.      5.      5.      5.      0.      0.      0.      0.      0.      0.
1593        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1594        KK     LE2
1595        KM        ADD HYDROGRAPHS AT CP156
1596        HC       2    1.18
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1597        KK    RLE2
1598        KM        ROUTE FLOW FROM CP156 TO CP157
1599        RS     4.3          -1       0
1600        RC    0.03    0.03    0.03    6848  0.0038
1601        RX       0      48      56      64      73      85      98     146
1602        RY      12       0       0       0       0       0       0      12
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1603        KK     LE3
1604        KM        ADD HYDROGRAPHS AT CP157
1605        HC       2    1.65
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1606        KK   1RLE3
1607        KM        ROUTE FLOW FROM CP157 TO CP172
1608        RS       1          -1       0
1609        RC    0.03    0.03    0.03     750  0.0044
1610        RX       0      48      56      64      73      85      98     146
1611        RY      12       0       0       0       0       0       0      12

1612        KK   2RLE3
1613        KM        ROUTE FLOW FROM CP157 TO CP172
1614        RS       1          -1       0
1615        RC    0.03    0.03    0.03     100  0.0044
1616        RX       0      48      56      64      73      85      98     146
1617        RY      12       0       0       0       0       0       0      12
            *
```



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

1618        KK     172
1619        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 172
1620        BA     .12
1621        LG     .50     .00    4.58     .55     .00
1622        UI      9.      9.     28.     39.     47.     55.     66.     82.    112.     96.
1623        UI     79.     68.     56.     47.     39.     26.     16.     15.     11.      9.
1624        UI      6.      3.      3.      3.      3.      3.      3.      0.      0.      0.
1625        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1626        KK     LE4
1627        KM        ADD HYDROGRAPHS AT CP172
1628        HC       2    1.77

1629        KK    R172
1630        KM        ROUTE FLOW FROM CP172 TO CP173
1631        RS       4          -1       0
1632        RC    .075     .03    .075    4500   .0042
1633        RX    1000    1200    1360    1380    1430    1470    1639    1640
1634        RY    1111    1110    1108    1106    1106    1108    1110    1110
            *

1635        KK     173
1636        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173
1637        BA     .31
1638        LG     .50     .00    4.00     .74     6.3
1639        UI     15.     15.     15.     43.     57.     71.     79.     87.     96.    109.
1640        UI    121.    146.    184.    191.    160.    139.    125.    114.    100.     90.
1641        UI     79.     71.     57.     43.     27.     26.     25.     22.     15.     15.
1642        UI     14.      5.      5.      5.      5.      5.      5.      5.      5.      5.
1643        UI      5.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1644        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1645        KK   CP173
1646        KM        ADD HYDROGRAPHS AT CP173
```

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                                                                                LABCARD
1647        HC       2    2.08
            *
            * ************************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2E WITH NEW SOILS*****
            * ************************************************************************
            *

1648        KK    156A
1649        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156A
1650        BA     .31
1651        LG     .12      .25     4.38      .46    20.00
1652        UI     82.     276.     434.     664.     443.     275.     114.      65.      18.      18.
1653        UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
1654        UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
1                                          HEC-1 INPUT                                                          PAGE 41

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

1655        KK   R156A
1656        KM        ROUTE FLOW FROM CP156A TO CP158
1657        RS      34              -1        0
1658        RC     .07      .07      .07     5400    .0030
1659        RX    1000     1001     1002     1380     2200     2838     2839     2840
1660        RY    1117     1117     1117     1116     1116     1118     1118     1118
            *

1661        KK     158
1662        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 158
1663        KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1664        KM    L=       1.4  Lca=       .7    S=    20.7  Kn= .034  LAG=  27.3
1665        KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1666        BA     .97
1667        LG     .27      .26     4.20      .48    25.00
1668        UI    120.     350.     615.     802.    1158.    1393.    1004.     753.     547.     280.
1669        UI    196.     120.      54.      37.      37.      37.       0.       0.       0.       0.
1670        UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1671        KK  158OUT
1672        KM    Divert Retention in Subbasin 158
1673        DT  158RET   61.74
1674        DI       0   10000
1675        DQ       0   10000

1676        KK   CP158
1677        KM        ADD HYDROGRAPHS AT CP158
1678        HC       2    1.28

1679        KK    R158
1680        KM        ROUTE FLOW FROM CP158 TO CP173B
1681        RS       6              -1        0
1682        RC     .07      .04      .07     4524    .0035
1683        RX    1000     1001     1240     1360     1440     1500     1650     1750
1684        RY    1113     1113     1112     1110     1110     1112     1114     1115
            *

1685        KK    173B
1686        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173B
1687        BA     .20
1688        LG     .46      .11     3.50     0.89      .00
1689        UI     12.      12.      21.      42.      53.      61.      69.      78.      90.     109.
1690        UI    143.     141.     116.     101.      89.      77.      67.      58.      49.      35.
1691        UI     22.      20.      19.      13.      12.      11.       4.       4.       4.       4.
1692        UI      4.       4.       4.       4.       0.       0.       0.       0.       0.       0.
1693        UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1694        KK  CP173B
1695        KM        ADD HYDROGRAPHS AT CP173B
1696        HC       2    1.48
1                                          HEC-1 INPUT                                                          PAGE 42

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

1697        KK   AFR2E
1698        KM        ADD HYDROGRAPHS AT RCP173
```

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                                                                                LABCARD
1699        HC       2   30.12

1700        KK   RR173
1701        KM        RIVER ROUTE FLOW FROM RCP173 TO RCP173A
1702        RS       1            -1       0
1703        RC    .035    .035    .035    1650   .0050
1704        RX    1000    1001    1002    1042    2042    2082    2083    2084
1705        RY    1101    1101    1101    1091    1091    1101    1101    1101
            *
            * ***************************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2F WITH NEW SOILS*****
            * ***************************************************************************
            *

1706        KK     171
1707        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 171
1708        BA     .70
1709        LG     .50     .00    5.40     .38     8.5
1710        UI     24.     24.     24.     24.     47.     78.     91.    106.    115.    126.
1711        UI    135.    143.    154.    169.    181.    197.    229.    271.    307.    296.
1712        UI    260.    235.    215.    200.    188.    174.    157.    147.    137.    122.
1713        UI    114.    105.     90.     68.     56.     42.     42.     39.     39.     38.
1714        UI     24.     24.     24.     24.     15.      7.      7.      7.      7.      7.
1715        UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      0.
1716        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1717        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1718        KK    R171
1719        KM        ROUTE FLOW FROM CP171 TO CP173A
1720        RS       3            -1       0
1721        RC    .075     .04     .04    2100   .0076
1722        RX    1000    1001    1170    1940    2005    2048    2049    2050
1723        RY    1105    1105    1104    1102    1102    1103    1103    1103
            *

1724        KK    173A
1725        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173A
1726        BA     .20
1727        LG     .50     .00    4.32     .62     9.4
1728        UI     12.     12.     26.     46.     58.     67.     76.     88.    102.    133.
1729        UI    158.    130.    110.     97.     83.     73.     62.     52.     37.     22.
1730        UI     21.     20.     12.     12.      8.      4.      4.      4.      4.      4.
1731        UI      4.      4.      0.      0.      0.      0.      0.      0.      0.      0.
1732        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1733        KK  CP173A
1734        KM        ADD HYDROGRAPHS AT CP173A
1735        HC       2     .90
1                                   HEC-1 INPUT                                          PAGE 43

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

1736        KK  AFR2F1
1737        KM        ADD HYDROGRAPHS AT RCP173A
1738        HC       2   31.02

1739        KK  RR173A
1740        KM        RIVER ROUTE FLOW FROM RCP173A TO RCP187
1741        RS       3            -1       0
1742        RC    .035    .035    .035    5600   .0050
1743        RX    1000    1001    1002    1042    2042    2082    2083    2084
1744        RY    1092    1092    1092    1082    1082    1092    1092    1092
            *

1745        KK     186
1746        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 186
1747        BA     .33
1748        LG     .50     .00    4.90     .47     .00
1749        UI     12.     12.     12.     12.     35.     44.     51.     58.     64.     69.
1750        UI     74.     80.     88.     95.    108.    131.    149.    159.    138.    123.
1751        UI    112.    103.     96.     87.     80.     73.     67.     61.     56.     47.
1752        UI     36.     29.     22.     21.     20.     20.     15.     12.     12.     12.
1753        UI      9.      4.      4.      4.      4.      4.      4.      4.      4.      4.
1754        UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
1755        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
1756          KK    R186
1757          KM        ROUTE FLOW FROM CP186 TO CP187
1758          RS       5              -1       0
1759          RC     .08     .04     .04    1950   .0035
1760          RX    1000    1001    1200    1320    1690    1828    1829    1830
1761          RY    1097    1097    1096  1094.5  1094.5    1095    1095    1095
              *

1762          KK     187
1763          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 187
1764          BA     .35
1765          LG     .46    0.10    4.58     .48     .00
1766          UI     66.    147.     37.      5.      0.      0.      0.      0.      0.      0.
1767          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1768          KK   CP187
1769          KM        ADD HYDROGRAPHS AT CP187
1770          HC       2     .68

1771          KK  AFR2F2
1772          KM        ADD HYDROGRAPHS AT RCP187
1773          HC       2   31.70

1774          KK   RR187
1775          KM        RIVER ROUTE FLOW FROM RCP187 TO RCP200
1776          RS       3              -1       0
1777          RC    .035    .035    .035    5460   .0050
1778          RX    1000    1001    1002    1042    2042    2082    2083    2084
1779          RY    1080    1080    1080    1070    1070    1080    1080    1080
              *
```



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

1780          KK     199
1781          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 199
1782          BA     .11
1783          LG     .50     .00    4.90     .47     .00
1784          UI      5.      5.      5.     11.     17.     21.     24.     27.     29.     32.
1785          UI     36.     40.     48.     59.     64.     54.     47.     43.     39.     35.
1786          UI     31.     28.     25.     23.     18.     14.      9.      9.      8.      8.
1787          UI      5.      5.      5.      4.      2.      2.      2.      2.      2.      2.
1788          UI      2.      2.      2.      2.      0.      0.      0.      0.      0.      0.
1789          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1790          KK    R199
1791          KM        ROUTE FLOW FROM CP199 TO CP200
1792          RS       9              -1       0
1793          RC     .08     .08     .08    2180   .0138
1794          RX    1000    1001    1002    1150    1700    1948    1949    1950
1795          RY    1077    1077    1077    1076    1076    1077    1077    1077
              *

1796          KK     200
1797          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 200
1798          BA     .29
1799          LG     .43     .18    4.90     .38     .00
1800          UI     19.     19.     44.     74.     92.    105.    121.    140.    172.    230.
1801          UI    220.    179.    155.    135.    115.     98.     82.     59.     36.     32.
1802          UI     30.     19.     19.     11.      6.      6.      6.      6.      6.      6.
1803          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1804          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1805          KK   CP200
1806          KM        ADD HYDROGRAPHS AT CP200
1807          HC       2     .40

1808          KK  AFR2F3
1809          KM        ADD HYDROGRAPHS AT RCP200
1810          HC       2   32.10

1811          KK   RR200
1812          KM        RIVER ROUTE FLOW FROM RCP200 TO RCP206
1813          RS       2              -1       0
```

```
                                                                                LABCARD
1814        RC    .035    .035    .035    2960   .0050
1815        RX    1000    1001    1002    1042    2042    2082    2083    2084
1816        RY    1070    1070    1070    1060    1060    1070    1070    1070
            *
            * ***********************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2G WITH NEW SOILS*****
            * ***********************************************************************
            *
1                                   HEC-1 INPUT                                                    PAGE 45

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

1817        KK     141
1818        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141
1819        BA     .47
1820        LG     .35     .34    4.20     .39     .00
1821        UI     52.    126.    241.    310.    403.    607.    538.    413.    317.    239.
1822        UI    135.     88.     61.     41.     16.     16.     16.     16.      0.      0.
1823        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1824        KK    R141
1825        KM        ROUTE FLOW FROM CP141 TO CP141A
1826        RS       1              -1       0
1827        RC    .025    .022    .022    1650   .0091
1828        RX    1000    1580    2170    2200    2230    2248    2249    2250
1829        RY    1194    1192    1190    1188    1188    1189    1189    1189
            *

1830        KK    141A
1831        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141A
1832        BA     .15
1833        LG     .35     .35    4.32     .37     .00
1834        UI     35.    122.    188.    302.    213.    138.     62.     34.     13.      8.
1835        UI      8.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1836        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1837        KK  CP141A
1838        KM        ADD HYDROGRAPHS AT CP141A
1839        HC       2     .62

1840        KK   R141A
1841        KM        ROUTE FLOW FROM CP141A TO CP142
1842        RS       2              -1       0
1843        RC     .06    .035    .035    2640   .0079
1844        RX    1000    1620    2100    2220    2250    2268    2269    2270
1845        RY    1276    1274    1272    1270    1270    1271    1271    1271
            *

1846        KK     142
1847        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 142
1848        BA     .51
1849        LG     .50     .00    4.20     .66     .00
1850        UI     24.     24.     24.     59.     86.    105.    119.    132.    144.    161.
1851        UI    180.    203.    258.    300.    281.    241.    213.    194.    176.    155.
1852        UI    140.    124.    112.     94.     70.     48.     42.     39.     39.     26.
1853        UI     24.     24.     16.      7.      7.      7.      7.      7.      7.      7.
1854        UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1855        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1856        KK   CP142
1857        KM        ADD HYDROGRAPHS AT CP142
1858        HC       2    1.13
1                                   HEC-1 INPUT                                                    PAGE 46

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

1859        KK    R142
1860        KM        ROUTE FLOW FROM CP142 TO CP143
1861        RS       8              -1       0
1862        RC     .07    .022    .022    2640   .0075
1863        RX    1000    1800    2235    2250    2275    2288    2289    2290
1864        RY    1250    1245    1247    1246    1246    1247    1247    1247
            *
```

```
1865          KK     143
1866          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 143
1867          BA     .50
1868          LG     .50      .00     4.28      .64      .00
1869          UI     23.      23.      23.      57.      83.     101.     116.     128.     140.     155.
1870          UI    174.     196.     248.     289.     279.     237.     210.     190.     174.     153.
1871          UI    138.     123.     110.      94.      71.      50.      41.      39.      38.      28.
1872          UI     23.      23.      18.       7.       7.       7.       7.       7.       7.       7.
1873          UI      7.       7.       7.       0.       0.       0.       0.       0.       0.       0.
1874          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1875          KK   CP143
1876          KM        ADD HYDROGRAPHS AT CP143
1877          HC       2    1.63

1878          KK    R143
1879          KM        ROUTE FLOW FROM CP143 TO CP144
1880          RS       2               -1       0
1881          RC     .07      .03      .03     2640   .0072
1882          RX    1000     1490     2250     2370     2380     2394     2398     2400
1883          RY    1238     1236     1234     1232     1232     1233     1233     1233

1884          KK    D130
1885          KM        RETURN DIVERT AT CP130
1886          DR   DI144

1887          KK    R130
1888          KM        ROUTE FLOW FROM CP130 TO CP144
1889          RS       7               -1       0
1890          RC    .035     .035     .075     5280   .0049
1891          RX    1000     1001     1002     1020     1110     1570     2080     2370
1892          RY    1239     1239     1239     1238     1238     1240     1242     1244
              *

1893          KK     144
1894          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 144
1895          BA     .51
1896          LG     .50      .00     4.74      .51      .00
1897          UI     23.      23.      23.      58.      85.     103.     118.     130.     142.     159.
1898          UI    178.     200.     253.     294.     285.     242.     215.     194.     177.     156.
1899          UI    141.     125.     112.      96.      72.      51.      42.      39.      39.      28.
1900          UI     23.      23.      18.       7.       7.       7.       7.       7.       7.       7.
1901          UI      7.       7.       7.       0.       0.       0.       0.       0.       0.       0.
1902          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
```



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

1903          KK   1I144
1904          KM        ADD HYDROGRAPHS AT CP144
1905          HC       2    6.05

1906          KK   CP144
1907          KM        ADD HYDROGRAPHS AT CP144
1908          HC       2    7.68

1909          KK    D144
1910          KM        DIVERT TO CP164A FROM CP144
1911          DT  DI164A
1912          DI       0      407     1451     2130     3746     6248     9200    13452
1913          DQ       0        0      123      241      602     1278     1864     3217

1914          KK    R144
1915          KM        ROUTE FLOW FROM CP144 TO CP145A
1916          RS       7               -1       0
1917          RC    .075      .04      .04     2640   .0045
1918          RX    1000     1001     1630     2095     2150     2198     2199     2200
1919          RY    1220     1216     1216     1214     1214     1215     1215     1215
              *

1920          KK    145A
1921          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145A
1922          BA     .49
1923          LG     .50      .00     4.44      .59      .00
1924          UI     21.      21.      21.      41.      73.      87.     101.     113.     122.     134.
```

```
                                                                                                LABCARD
1925          UI    149.    163.    188.    234.    270.    255.    219.    195.    178.    163.
1926          UI    146.    131.    119.    106.     96.     78.     61.     39.     37.     35.
1927          UI     35.     25.     21.     21.     19.      6.      6.      6.      6.      6.
1928          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
1929          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1930          KK  CP145A
1931          KM        ADD HYDROGRAPHS AT CP145A
1932          HC       2    8.17

1933          KK   R145A
1934          KM        ROUTE REMAINDER FROM CP145A TO CP145
1935          RS       7              -1       0
1936          RC    .075     .04     .04    2640   .0045
1937          RX    1000    1001    1630    2095    2150    2198    2199    2200
1938          RY    1220    1216    1216    1214    1214    1215    1215    1215

1939          KK    D131
1940          KM        RETURN DIVERT AT CP131
1941          DR   DI145

1942          KK    R131
1943          KM        ROUTE FLOW FROM CP131 TO CP145
1944          RS       8              -1       0
1945          RC     .04     .04    .075    5280   .0043
1946          RX    1000    1001    1002    1020    1050    1820    2210    2230
1947          RY    1213    1213    1213    1212    1212    1214    1216    1218
              *
```



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

1948          KK     145
1949          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145
1950          BA     .48
1951          LG     .50     .00    4.66     .53     .00
1952          UI     21.     21.     21.     47.     76.     91.    104.    117.    126.    139.
1953          UI    156.    171.    204.    251.    279.    238.    208.    187.    171.    155.
1954          UI    138.    125.    110.    101.     84.     63.     44.     38.     36.     35.
1955          UI     26.     21.     21.     19.      7.      7.      7.      7.      7.      7.
1956          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
1957          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1958          KK   1I145
1959          KM        ADD HYDROGRAPHS AT CP145
1960          HC       2     9.0

1961          KK   CP145
1962          KM        ADD HYDROGRAPHS AT CP145
1963          HC       2   11.63

1964          KK   1D145
1965          KM        DIVERT TO CP164 FROM CP145
1966          DT   DI164
1967          DI       0      37     218     475    1177    1902    3592    5561    8738
1968          DQ       0       0       0      34     193     517    1285    1864    3181

1969          KK   2D145
1970          KM        DIVERT TO CP165 FROM CP145
1971          DT   DI165
1972          DI       0      37     218     441     984    1385    2307    3697    5557
1973          DQ       0       0       0     111     383     584    1044    1740    2690
              *
              * THE FOLLOWING DATA WAS TAKEN FROM THE "OFF SITE FLOW ANALYSIS FOR
              * RANCHO GABRIELA PHASES 3 & 4" BY DAVID EVANS & ASSOCIATES, 7-2001
              *

1974          KK   R145B
              * KO      1
1975          KM   ROUTE FLOW FROM CP145 TO DIVERSION ALONG CACTUS
1976          RS       3              -1       0
1977          RC    0.75   0.035   0.035    2200  0.0056
1978          RX    1000    1420    1425    1430    1435    1469    1487    1507
1979          RY    1192    1191    1188    1188    1189    1191    1190    1191
```

```
1980          KK   3D145
1981          KM   DIVERT INTO FIELD SOUTH
1982          DT  DI165B
1983          DI       0     100     200     500     700     955
1984          DQ       0     2.3    66.3   347.4   545.1   792.8
```



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

1985          KK   R145C
1986          KM   ROUTE REMAINDER FROM CP145 TO 4D145
1987          RS       2              -1       0
1988          RC   0.035   0.035   0.035    1650   .0056
1989          RX    1000    1007    1012    1019    1029    1043    1056    1078
1990          RY    1180    1178    1175    1175    1177    1177    1177    1177

1991          KK   4D145
1992          KM   DIVERT INTO FIELD TO SOUTH
1993          DT  DI165C
1994          DI       0    97.7   133.7   152.6   154.9   162.2
1995          DQ       0    16.3    47.9    66.7    68.8    78.2

1996          KK   R145D
1997          KM   ROUTE REMAINDER FROM CP145 TO CP146
1998          RS       1              -1       0
1999          RC   0.035   0.035   0.035    1000  0.0056
2000          RX    1000    1007    1012    1019    1029    1043    1056    1078
2001          RY    1180    1178    1175    1175    1177    1177    1177    1177

2002          KK   1D133
2003          KM        RETURN DIVERT AT CP133
2004          DR   DI146

2005          KK    R133
2006          KM        ROUTE FLOW FROM CP133 TO CP146
2007          RS       8              -1       0
2008          RC    .035    .035    .075    5280   .0068
2009          RX    1000    1001    1002    1015    1080    1440    1740    2130
2010          RY    1187    1187    1187    1186    1186    1188    1190    1192
              *

2011          KK     146
2012          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 146
2013          BA     .90
2014          LG     .50     .00    4.90     .47     .00
2015          UI     36.     36.     36.     47.    119.    138.    166.    182.    199.    215.
2016          UI    233.    260.    281.    323.    399.    452.    449.    386.    344.    314.
2017          UI    290.    266.    238.    217.    197.    178.    161.    132.    104.     70.
2018          UI     64.     61.     59.     52.     36.     36.     36.     25.     11.     11.
2019          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
2020          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2021          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2022          KK   1I146
2023          KM        ADD HYDROGRAPHS AT CP146
2024          HC       2   15.02

2025          KK   CP146
2026          KM        ADD HYDROGRAPHS AT CP146
2027          HC       2   18.49
              *
              * REPLACED PER DAVID EVANS AND ASSOCIATES "OFF-SITE FLOW ANALYSIS, RANCHO
              * GABRIELLA PHASES 3 &4", 7-2001
              *
```



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

2028          KK    D146
2029          KM        DIVERT TO CP166 FROM CP146
2030          DT   1D166
2031          DI       0     100     200     300     400     500     737
2032          DQ       0       0       0      38     161     182     252
```

```
2033          KK   R146A
2034          KM        ROUTE FLOW FROM CP146 TO CP165
2035          RS       1            -1       0
2036          RC   0.035    0.02   0.035    1300  0.0047
2037          RX    1000    1012    1012    1031    1050    1050    1056    1062
2038          RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2039          KK   4D145
2040          KM   RETURN DIVERT AT 4D145
2041          DR  DI165C

2042          KK   R145E
2043          KM   ROUTE FLOW FROM 4D145 TO 1D165
2044          RS       7            -1       0
2045          RC    0.08    0.08    0.08    1450  0.0069
2046          RX    1000    1001    1420    1730    2220    2470    2999    3000
2047          RY    1177    1177    1176    1175    1175    1176    1177    1177

2048          KK   1D165
2049          KM   ADD HYDROGRAPHS AT 1D165
2050          HC       2   18.49

2051          KK   D146B
2052          KM   DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABREILA PROJECT
2053          DT   DIRB1
2054          DI       0     517     600
2055          DQ     178     178     178

2056          KK   R146B
2057          KM   ROUTE FLOW FROM 1D165 TO 2D165
2058          RS       1            -1       0
2059          RC   0.035    0.02   0.035    1350  0.0047
2060          RX    1000    1012    1012    1031    1050    1050    1056    1062
2061          RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2062          KK   3D145
2063          KM   RETURN DIVERT AT 3D145
2064          DR  DI165B

2065          KK   R145F
2066          KM   ROUTE FLOW FROM 3D145 TO 2D165
2067          RS      11            -1       0
2068          RC    0.08    0.08    0.08    3850  0.0069
2069          RX    1000    1001    1420    1730    2220    2470    2999    3000
2070          RY    1177    1177    1176    1175    1175    1176    1177    1177
```



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

2071          KK   2D165
2072          KM   ADD HYDROGRAPHS AT 2D165
2073          HC       2   18.49

2074          KK   D146C
2075          KM   DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABRIELA PROJECT
2076          DT   DIRB2
2077          DI       0     983    1000
2078          DQ       0     496     505

2079          KK   R146C
2080          KM   ROUTE FLOW FROM 1D165 TO 2D165
2081          RS     1.4            -1       0
2082          RC   0.035    0.02   0.035    2600  0.0047
2083          RX    1000    1012    1012    1031    1050    1050    1056    1062
2084          RY     4.1     1.1     0.6       0     0.6     1.1     2.6     4.1
              *
              * END DEA MODIFICATIONS
              *

2085          KK     159
2086          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 159
2087          BA     .58
2088          LG     .35     .34    4.15     .40     .00
2089          UI     66.    169.    316.    407.    539.    797.    641.    495.    375.    269.
2090          UI    139.    105.     66.     33.     20.     20.     20.      0.      0.      0.
```

```
                                                                                                LABCARD
2091        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2092        KK    R159
2093        KM        ROUTE FLOW FROM CP159 TO CP160
2094        RS       1              -1       0
2095        RC    .022    .022    .025     830   .0036
2096        RX    1000    1001    1002    1020    1060    1150    1320    1440
2097        RY    1265    1265    1265    1264    1264    1266    1268    1270
            *
2098        KK     160
2099        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 160
2100        BA     .39
2101        LG     .35     .33    4.58     .32     .00
2102        UI     41.     92.    184.    238.    301.    435.    474.    354.    279.    216.
2103        UI    150.     79.     64.     41.     22.     13.     13.     13.     13.      0.
2104        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2105        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2106        KK   CP160
2107        KM        ADD HYDROGRAPHS AT CP160
2108        HC       2     .97
1                                        HEC-1 INPUT                                                PAGE 52
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
2109        KK    R160
2110        KM        ROUTE FLOW FROM CP160 TO CP161
2111        RS       3              -1       0
2112        RC    .075     .04     .04    2650   .0072
2113        RX    1000    1001    1210    1630    1670    1688    1689    1690
2114        RY    1259    1259    1258    1256    1256    1257    1257    1257
            *
2115        KK     161
2116        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 161
2117        BA     .50
2118        LG     .49     .03    4.44     .56     .00
2119        UI     24.     24.     24.     70.     92.    114.    127.    140.    155.    176.
2120        UI    195.    236.    297.    307.    258.    225.    202.    184.    161.    145.
2121        UI    127.    115.     93.     70.     43.     42.     40.     36.     24.     24.
2122        UI     23.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2123        UI      7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2124        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2125        KK   CP161
2126        KM        ADD HYDROGRAPHS AT CP161
2127        HC       2    1.47
2128        KK    R161
2129        KM        ROUTE FLOW FROM CP161 TO CP163
2130        RS       6              -1       0
2131        RC     .08     .04     .04    5280   .0074
2132        RX    1000    1500    1910    2455    2470    2488    2489    2490
2133        RY    1226    1224    1222    1220    1220    1221    1221    1221
            *
2134        KK     162
2135        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 162
2136        BA     .25
2137        LG     .50     .00    4.74     .51     .00
2138        UI     22.     35.     86.    114.    137.    169.    233.    270.    206.    170.
2139        UI    138.    110.     78.     44.     37.     26.     22.      7.      7.      7.
2140        UI      7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
2141        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2142        KK    R162
2143        KM        ROUTE FLOW FROM CP162 TO CP163
2144        RS       8              -1       0
2145        RC     .08     .04     .04    5460   .0062
2146        RX    1000    1500    1910    2455    2470    2488    2489    2490
2147        RY    1226    1224    1222    1220    1220    1221    1221    1221
            *
2148        KK     163
```

```
                                                                                LABCARD
2149          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 163
2150          BA     .75
2151          LG     .50      .00     4.58      .55      .00
2152          UI     37.      37.      37.     107.     140.     173.     193.     212.     235.     267.
2153          UI    296.     361.     456.     458.     383.     336.     303.     274.     240.     216.
1                                              HEC-1 INPUT                                                PAGE 53

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

2154          UI    187.     170.     133.     101.      65.      63.      60.      51.      37.      37.
2155          UI     30.      11.      11.      11.      11.      11.      11.      11.      11.      11.
2156          UI     11.       0.       0.       0.       0.       0.       0.       0.       0.       0.
2157          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2158          KK   1I163
2159          KM        ADD HYDROGRAPHS AT CP163
2160          HC       2     1.0

2161          KK   CP163
2162          KM        ADD HYDROGRAPHS AT CP163
2163          HC       2    2.47

2164          KK    D163
2165          KM        DIVERT TO CP176A FROM CP163
2166          DT  DI176A
2167          DI       0       72      427     1229     2615     4708     5777     6545     8336    11092
2168          DQ       0        0        0        0        0        0        9       95      329      762

2169          KK    R163
2170          KM        ROUTE REMAINDER FROM CP163 TO CP164A
2171          RS       2               -1        0
2172          RC     .06     .035     .035     2640    .0078
2173          RX    1000     1410     1900     2110     2150     2168     2169     2170
2174          RY    1188     1186     1184     1182     1182     1183     1183     1183

2175          KK    D144
2176          KM        RETURN DIVERT AT CP144
2177          DR  DI164A

2178          KK    R144
2179          KM        ROUTE FLOW FROM CP144 TO  CP164A
2180          RS      46               -1        0
2181          RC     .07      .07      .07     6400    .0058
2182          RX    1000     1001     1002     1400     1910     2610     2669     2670
2183          RY    1203     1203     1203     1202     1202     1204     1205     1205
              *

2184          KK    164A
2185          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164A
2186          BA     .49
2187          LG     .50      .00     4.74      .51      .00
2188          UI     22.      22.      22.      51.      79.      96.     110.     122.     133.     147.
2189          UI    164.     182.     220.     273.     282.     238.     209.     189.     174.     154.
2190          UI    138.     124.     111.      98.      78.      60.      39.      39.      36.      35.
2191          UI     22.      22.      22.      11.       7.       7.       7.       7.       7.       7.
2192          UI      7.       7.       7.       7.       0.       0.       0.       0.       0.       0.
2193          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2194          KK  1I164A
2195          KM        ADD HYDROGRAPHS AT CP164A
2196          HC       2    8.17
1                                              HEC-1 INPUT                                                PAGE 54

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

2197          KK  CP164A
2198          KM        ADD HYDROGRAPHS AT CP164A
2199          HC       2   10.64

2200          KK   R164A
2201          KM        ROUTE FLOW FROM CP164A TO CP164
2202          RS       2               -1        0
2203          RC     .06     .035     .035     2640    .0072
2204          RX    1000     1410     1900     2110     2150     2168     2169     2170
2205          RY    1188     1186     1184     1182     1182     1183     1183     1183
```

```
*

KK     164
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164
BA     .49
LG     .50     .00    4.90     .47     .00
UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   1I164
KM        ADD HYDROGRAPHS AT CP164
HC       2   11.13

KK   1D145
KM        RETURN DIVERT AT CP145
DR   DI164

KK    R145
KM        ROUTE FLOW FROM CP145 TO CP164
RS       7              -1       0
RC    .035    .035    .075    5280   .0058
RX    1000    1001    1002    1040    1170    1520    1910    2190
RY    1185    1185    1185    1184    1184    1186    1188    1190

KK   CP164
KM        ADD HYDROGRAPHS AT CP164
HC       2   15.08

KK    D164
KM        DIVERT TO CP177 FROM CP164
DT   DI177
DI       0     295    1091    2467    4521    7345   11030
DQ       0      22     124     352     743    1329    2143

KK    R164
KM        ROUTE REMAINDER FROM CP164 TO CP165
RS       7              -1       0
RC     .04     .04    .075    4900   .0043
RX    1000    1250    1730    2220    2320    2338    2339    2340
RY    1164    1162    1160    1158    1158    1159    1159    1159
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK   2D145
KM        RETURN DIVERT AT CP145
DR   DI165

KK    R145
KM        ROUTE FLOW FROM CP145 TO CP165
RS      38              -1       0
RC     .08     .08     .08    7500   .0069
RX    1000    1001    1420    1730    2220    2470    2999    3000
RY    1177    1177    1176    1175    1175    1176    1177    1177
*

KK     165
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 165
BA     .90
LG     .50     .00    4.82     .49     .00
UI     35.     35.     35.     38.    115.    131.    156.    173.    191.    204.
UI    223.    244.    267.    295.    349.    422.    463.    401.    353.    320.
UI    294.    274.    246.    223.    206.    184.    169.    149.    120.     99.
UI     62.     62.     59.     58.     49.     35.     35.     35.     25.     11.
UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK   1I165
KM        ADD HYDROGRAPHS AT CP165
HC       2   12.53
```

```
2265          KK   2I165
2266          KM        ADD HYDROGRAPHS AT CP165
2267          HC       2   15.98

2268          KK   CP165
2269          KM        ADD HYDROGRAPHS AT CP165
2270          HC       2   22.84

2271          KK    D165
2272          KM        DIVERT TO CP180 FROM CP165
2273          DT   DI180
2274          DI       0    1000    5000
2275          DQ       0       0    4000

2276          KK    R165
2277          KM        ROUTE FLOW FROM CP165 TO CP179
2278          RS       7              -1       0
2279          RC    .022    .022     .04    5280   .0038
2280          RX    1000    1001    1002    1030    1075    1090    1250    2000
2281          RY    1135    1135    1135    1134    1134    1135    1133    1137
```



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

2282          KK    D163
2283          KM        RETURN DIVERT AT CP163
2284          DR  DI176A

2285          KK    R163
2286          KM        ROUTE FLOW FROM CP163 TO CP176A
2287          RS       6              -1       0
2288          RC    .035    .035    .075    5280   .0040
2289          RX    1000    1001    1002    1010    1025    1320    1620    1845
2290          RY    1197    1197    1197    1196    1196    1198    1200    1202
              *

2291          KK    176A
2292          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176A
2293          BA     .62
2294          LG     .50     .00    4.32     .62       1
2295          UI     24.     24.     24.     24.     79.     89.    106.    118.    131.    139.
2296          UI    151.    166.    182.    200.    236.    283.    318.    279.    245.    221.
2297          UI    203.    189.    171.    155.    142.    129.    117.    105.     87.     69.
2298          UI     46.     43.     41.     40.     37.     24.     24.     24.     21.      7.
2299          UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2300          UI      7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2301          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2302          KK  CP176A
2303          KM        ADD HYDROGRAPHS AT CP176A
2304          HC       2    3.09

2305          KK   D176A
2306          KM        DIVERT TO CP191 FROM CP176A
2307          DT   DI191
2308          DI       0      47     164     349     497    1107    2599    4968    8289
2309          DQ       0       0       0       0       0      60     278     719    1444

2310          KK   R176A
2311          KM        ROUTE REMAINDER FROM CP176A TO CP177A
2312          RS       4              -1       0
2313          RC    .075     .04     .04    2640   .0064
2314          RX    1000    1200    1545    2020    2145    2168    2169    2170
2315          RY    1173    1172    1170    1168    1168    1169    1169    1169
              *

2316          KK    177A
2317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177A
2318          BA     .49
2319          LG     .50     .00    4.38     .60     .00
2320          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
2321          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
2322          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
2323          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
```

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                                                                                                LABCARD
2324        UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2325        UI      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

2326        KK  CP177A
2327        KM        ADD HYDROGRAPHS AT CP177A
2328        HC       2    3.58

2329        KK   R177A
2330        KM        ROUTE FLOW FROM CP177A TO CP177
2331        RS       8              -1       0
2332        RC    .075     .04     .04    2640   .0064
2333        RX    1000    1200    1545    2020    2145    2168    2169    2170
2334        RY    1173    1172    1170    1168    1168    1169    1169    1169
            *

2335        KK     177
2336        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177
2337        BA     .49
2338        LG     .50     .00    4.32     .62     .00
2339        UI     22.     22.     22.     51.     79.     96.    110.    122.    133.    147.
2340        UI    164.    182.    220.    273.    282.    238.    209.    189.    174.    154.
2341        UI    138.    124.    111.     98.     78.     60.     39.     39.     36.     35.
2342        UI     22.     22.     22.     11.      7.      7.      7.      7.      7.      7.
2343        UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2344        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2345        KK   1I177
2346        KM        ADD HYDROGRAPHS AT CP177
2347        HC       2    4.07

2348        KK    D164
2349        KM        RETURN DIVERT AT CP164
2350        DR   DI177

2351        KK    R164
2352        KM        ROUTE FLOW FROM CP164 TO CP177
2353        RS      11              -1       0
2354        RC    .035    .035     .07    5280   .0032
2355        RX    1000    1001    1002    1020    1040    1290    1540    1810
2356        RY    1159    1159    1159    1158    1158    1160    1162    1164

2357        KK   CP177
2358        KM        ADD HYDROGRAPHS AT CP177
2359        HC       2   16.68

2360        KK    R177
2361        KM        ROUTE FLOW FROM CP177 TO CP178
2362        RS       3              -1       0
2363        RC     .07     .04     .04    2250   .0067
2364        RX    1000    1170    1550    2020    2060    2078    2079    2080
2365        RY    1149    1148    1146    1144    1144    1145    1145    1145
            *
1                                          HEC-1 INPUT                                                    PAGE 58

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

2366        KK     178
2367        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 178
2368        BA     .44
2369        LG     .50     .00    4.66     .53     .00
2370        UI     20.     20.     20.     46.     71.     86.     98.    109.    119.    131.
2371        UI    147.    162.    196.    244.    253.    214.    188.    170.    156.    139.
2372        UI    124.    112.    100.     89.     71.     55.     35.     35.     33.     32.
2373        UI     20.     20.     20.     11.      6.      6.      6.      6.      6.      6.
2374        UI      6.      6.      6.      6.      0.      0.      0.      0.      0.      0.
2375        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2376        KK   CP178
2377        KM        ADD HYDROGRAPHS AT CP178
2378        HC       2   17.12
```

```
2379          KK    R178
2380          KM        ROUTE FLOW FROM CP178 TO CP179
2381          RS       5          -1       0
2382          RC    .075      .04      .04    2640   .0034
2383          RX    1000     1040     1560    2110    2320    2348    2349    2350
2384          RY    1137     1136     1134    1132    1132    1133    1133    1133
              *

2385          KK     179
2386          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 179
2387          BA     .46
2388          LG     .50      .00     5.00     .45     .00
2389          UI     20.      20.      20.     41.     70.     84.     97.    109.    117.    129.
2390          UI    144.     158.     184.    225.    264.    234.    203.    181.    165.    152.
2391          UI    135.     122.     109.     98.     86.     68.     52.     36.     35.     33.
2392          UI     32.      20.      20.     20.     12.      6.      6.      6.      6.      6.
2393          UI      6.       6.       6.      6.      6.      0.      0.      0.      0.      0.
2394          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

2395          KK   1I179
2396          KM        ADD HYDROGRAPHS AT CP179
2397          HC       2   17.58

2398          KK   CP179
2399          KM        ADD HYDROGRAPHS AT CP179
2400          HC       2   25.34

2401          KK   1D179
2402          KM        DIVERT TO CP193 FROM CP179
2403          DT   DI193
2404          DI       0     480    2000    5000
2405          DQ       0       0    1000    1000

2406          KK   2D179
2407          KM        DIVERT TO CP194A FROM CP179
2408          DT  DI194A
2409          DI       0     240    1000    4000
2410          DQ       0       0     240     240
```



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

2411          KK    R179
2412          KM        ROUTE REMAINDER FROM CP179 TO CP180
2413          RS       4          -1       0
2414          RC     .07     .022     .022    5280   .0025
2415          RX    1000    1320     1700    1820    1840    1868    1869    1870
2416          RY    1124    1122     1120    1118    1118    1119    1119    1119
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2H WITH NEW SOILS*****
              * ************************************************************************
              *

2417          KK     180
2418          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 180
2419          BA     .99
2420          LG     .50      .00     4.90     .47     .00
2421          UI     35.      35.      35.     35.     84.    120.    138.    163.    176.    191.
2422          UI    203.     220.     238.    261.    280.    321.    391.    430.    449.    390.
2423          UI    350.     319.     296.    277.    255.    231.    214.    196.    178.    166.
2424          UI    146.     120.     101.     66.     62.     60.     57.     57.     41.     35.
2425          UI     35.      35.      26.     11.     11.     11.     11.     11.     11.     11.
2426          UI     11.      11.      11.     11.     11.     11.      0.      0.      0.      0.
2427          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

2428          KK   1I180
2429          KM        ADD HYDROGRAPHS AT CP180
2430          HC       2   26.33

2431          KK   2D133
2432          KM        RETURN DIVERT AT CP133
2433          DR   1D147

2434          KK    R133
```

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                                                                                LABCARD
2435          KM        ROUTE FLOW FROM CP133 TO CP147
2436          RS      55              -1       0
2437          RC     .07     .07     .07    6552   .0063
2438          RX    1000    1001    1720    1900    2290    2460    2619    2620
2439          RY    1189    1189    1188  1187.5  1187.5    1188    1189    1189
              *

2440          KK     147
2441          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 147
2442          BA     .50
2443          LG     .50     .00    4.82     .49     .00
2444          UI     23.     23.     23.     57.     84.    102.    116.    128.    140.    156.
2445          UI    175.    197.    249.    289.    278.    237.    210.    190.    174.    153.
2446          UI    138.    123.    110.     94.     70.     50.     41.     39.     38.     27.
2447          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
2448          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
2449          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

2450          KK   1I147
2451          KM        ADD HYDROGRAPHS AT CP147
2452          HC       2   14.62

2453          KK    D134
2454          KM        RETURN DIVERT AT CP134
2455          DR   2D147

2456          KK    R134
2457          KM        ROUTE FLOW FROM CP134 TO CP147
2458          RS       7              -1       0
2459          RC     .05     .05     .15    5280   .0053
2460          RX    1000    1001    1002    1020    1190    1580    2180    2700
2461          RY    1187    1187    1187    1186    1186    1188    1190    1192

2462          KK  CP147
2463          KM        ADD HYDROGRAPHS AT CP147
2464          HC       2   15.92

2465          KK    D147
2466          KM        DIVERT TO CP166 FROM CP147
2467          DT   2D166
2468          DI       0     108    1147    2026    4338    8063   13066
2469          DQ       0     108    1129    1961    3822    6531   10041

2470          KK    R147
2471          KM        ROUTE REMAINDER FROM CP147 TO CP148
2472          RS       4              -1       0
2473          RC    .075     .04     .04    2640   .0038
2474          RX    1000    1420    1800    2230    2340    2368    2369    2370
2475          RY    1164    1162    1160    1158    1158    1159    1159    1159
              *

2476          KK     148
2477          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 148
2478          BA     .48
2479          LG     .50     .00    4.82     .49     .00
2480          UI     22.     22.     22.     51.     78.     95.    109.    120.    131.    145.
2481          UI    162.    181.    222.    270.    274.    232.    204.    185.    169.    150.
2482          UI    135.    120.    108.     94.     74.     56.     39.     38.     36.     32.
2483          UI     22.     22.     22.      9.      7.      7.      7.      7.      7.      7.
2484          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2486          KK   1I148
2487          KM        ADD HYDROGRAPHS AT CP148
2488          HC       2   16.40

2489          KK    D135
2490          KM        RETURN DIVERT AT CP135
2491          DR   DI148
1                                          HEC-1 INPUT                                                          PAGE 61

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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2492          KK    R135
2493          KM        ROUTE FLOW FROM CP135 TO CP148
2494          RS      10              -1       0
2495          RC    .035     .035     .075    5280    .0049
2496          RX    1000     1001     1002    1070    1130    1400    1780    2250
2497          RY    1171     1171     1171    1170    1170    1172    1174    1176

2498          KK   CP148
2499          KM        ADD HYDROGRAPHS AT CP148
2500          HC       2   17.46

2501          KK    D148
2502          KM        DIVERT TO CP150 FROM CP148
2503          DT   DI150
2504          DI       0       3     104     399     807    1777    2687    5053    8363
2505          DQ       0       1      16      60     106     241     472    1000    1788

2506          KK    R148
2507          KM        ROUTE REMAINDER FROM CP148 TO CP166
2508          RS       6              -1       0
2509          RC     .04      .04     .075    5280    .0030
2510          RX    1000     1001     1002    1045    1330    2030    2380    2700
2511          RY    1153     1153     1153    1152    1152    1154    1156    1157

2512          KK    D147
2513          KM        RETURN DIVERT AT CP147
2514          DR   2D166

2515          KK    R147
2516          KM        ROUTE FLOW FROM CP147 TO CP166
2517          RS      29              -1       0
2518          RC     .08      .08      .08    6240    .0042
2519          RX    1000     1001     1220    1720    2460    2998    2999    3000
2520          RY    1155     1155     1154    1152    1152  1153.5  1153.5  1153.5
              *

2521          KK     166
2522          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 166
2523          BA     .98
2524          LG     .50      .00     4.74     .51     .00
2525          UI     34.      34.      34.     34.     81.    118.    135.    160.    172.    188.
2526          UI    199.     215.     233.    256.    273.    312.    378.    420.    447.    390.
2527          UI    348.     317.     294.    275.    255.    230.    213.    197.    177.    165.
2528          UI    148.     123.      99.     71.     61.     60.     57.     57.     44.     34.
2529          UI     34.      34.      31.     11.     11.     11.     11.     11.     11.     11.
2530          UI     11.      11.      11.     11.     11.     11.     11.      0.      0.      0.
2531          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

2532          KK    D146
2533          KM        RETURN DIVERT AT CP146
2534          DR   1D166
```



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

2535          KK    R146
2536          KM        ROUTE FLOW FROM CP146 TO CP166
2537          RS       8              -1       0
2538          RC    0.07     0.07     0.07    7470  0.0041
2539          RX    1000     1001     1220    1720    2460    2998    2999    3000
2540          RY    1155     1155     1154    1152    1152  1153.5  1153.5  1153.5

2541          KK   1I166
2542          KM        ADD HYDROGRAPHS AT CP166
2543          HC       2   19.47

2544          KK   2I166
2545          KM        ADD HYDROGRAPHS AT CP166
2546          HC       2   21.45

2547          KK   CP166
2548          KM        ADD HYDROGRAPHS AT CP166
2549          HC       2   22.45
```

```
2550          KK    D166
2551          KM        DIVERT TO CP167 FROM CP166
2552          DT   DI167
2553          DI       0      67     296     813    1921    3730    6346    9869
2554          DQ       0      67     296     765    1709    3184    5250    7966

2555          KK    R166
2556          KM        ROUTE REMAINDER FROM CP166 TO CP180
2557          RS      11              -1       0
2558          RC    .035    .035    .075    5280   .0051
2559          RX    1000    1001    1002    1020    1060    1420    2010    2320
2560          RY    1125    1125    1125    1124    1124    1126    1128    1130

2561          KK    D165
2562          KM        RETURN DIVERT AT CP165
2563          DR   DI180

2564          KK    R165
2565          KM        ROUTE FLOW FROM CP165 TO CP180
2566          RS       8              -1       0
2567          RC    0.07    0.07    0.07    7470  0.0043
2568          RX    1000    1001    1470    1820    2510    2910    3299    3300
2569          RY    1133    1133    1132    1131    1131    1132    1133    1133

2570          KK   1I180
2571          KM        ADD HYDROGRAPHS AT CP180
2572          HC       2   30.29

2573          KK   CP180
2574          KM        ADD HYDROGRAPHS AT CP180
2575          HC       2   30.29
```



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


2576          KK    D180
2577          KM        DIVERT TO CP195 FROM CP180
2578          DT   1D195
2579          DI       0       6     234     802    1724    3040    4789
2580          DQ       0       6     206     687    1448    2510    3899

2581          KK    R180
2582          KM        ROUTE REMAINDER FROM CP180 TO CP181
2583          RS       7              -1       0
2584          RC    .075     .04     .04    1350   .0007
2585          RX    1000    1001    1410    2240    2270    2298    2299    2300
2586          RY    1116    1116    1114    1112    1112    1113    1113    1113
              *

2587          KK     181
2588          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 181
2589          BA     .37
2590          LG     .50     .00    4.58     .55     .00
2591          UI     19.     19.     20.     65.     79.     93.    106.    117.    132.    148.
2592          UI    177.    224.    248.    206.    178.    159.    143.    124.    111.     97.
2593          UI     83.     63.     44.     34.     32.     31.     19.     19.     18.      6.
2594          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
2595          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2596          KK   CP181
2597          KM        ADD HYDROGRAPHS AT CP181
2598          HC       2   30.66

2599          KK    D181
2600          KM        DIVERT TO CP195 FROM CP181
2601          DT   2D195
2602          DI       0     100     200     328     500    1251    3000    6011
2603          DQ       0     100     200     328     500    1026    2250    4208

2604          KK    R181
2605          KM        ROUTE REMAINDER FROM CP181 TO CP182
2606          RS       7              -1       0
2607          RC    .075     .04     .04    2900   .0024
2608          RX    1000    1190    1640    2305    2340    2358    2359    2360
```

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                                                                                LABCARD
2609        RY    1111    1110    1108    1106    1106    1107    1107    1107
            *
            * ***********************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2I WITH NEW SOILS*****
            * ***********************************************************************
            *

2610        KK     182
2611        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 182
2612        BA     .24
2613        LG     .50     .00    4.44     .58     .00
2614        UI     15.     15.     32.     56.     71.     83.     93.    108.    127.    167.
2615        UI    190.    154.    131.    116.     99.     85.     73.     60.     40.     26.
2616        UI     25.     22.     15.     15.      7.      5.      5.      5.      5.      5.
2617        UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
1                                          HEC-1 INPUT                                          PAGE 64

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

2618        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2619        KK   1I182
2620        KM        ADD HYDROGRAPHS AT CP182
2621        HC       2    30.9

2622        KK    D148
2623        KM        RETURN DIVERT AT CP148
2624        DR   DI150

2625        KK    R148
2626        KM        ROUTE FLOW FROM CP148 TO CP150
2627        RS       7      -1       0
2628        RC    .075    .035    .035    2640   .0026
2629        RX    1000    1350    1830    2240    2340    2368    2369    2370
2630        RY    1158    1156    1154    1152    1152    1153    1153    1153
            *

2631        KK     150
2632        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 150
2633        BA     .23
2634        LG     .50     .00    4.90     .47     .00
2635        UI     14.     14.     27.     50.     65.     74.     84.     96.    110.    144.
2636        UI    175.    154.    129.    113.     99.     85.     74.     64.     47.     32.
2637        UI     24.     23.     18.     14.     14.      5.      4.      4.      4.      4.
2638        UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
2639        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2640        KK   CP150
2641        KM        ADD HYDROGRAPHS AT CP150
2642        HC       2   17.69

2643        KK    R150
2644        KM        ROUTE FLOW FROM CP150 TO CP151
2645        RS       6      -1       0
2646        RC    .075    .035    .035    2640   .0030
2647        RX    1000    1250    1720    2110    2300    2348    2349    2350
2648        RY    1149    1148    1146    1144    1144    1145    1145    1145
            *

2649        KK     151
2650        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 151
2651        BA     .25
2652        LG     .50     .00    4.90     .47     .00
2653        UI     15.     15.     27.     53.     67.     78.     87.    100.    114.    140.
2654        UI    184.    173.    143.    125.    111.     95.     83.     72.     60.     41.
2655        UI     26.     25.     24.     15.     15.     11.      4.      4.      4.      4.
2656        UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
2657        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

2658        KK   1I151
2659        KM        ADD HYDROGRAPHS AT CP151
2660        HC       2   17.94
```

```
2661          KK   1D137
2662          KM        RETURN DIVERT AT CP137
2663          DR   DI149

2664          KK    R137
2665          KM        ROUTE FLOW FROM CP137 TO CP149
2666          RS       4              -1       0
2667          RC    .035    .035     .08    2640   .0038
2668          RX    1000    1001    1002    1015    1070    1470    1830    2350
2669          RY    1157    1157    1157    1156    1156    1158    1160    1162
              *

2670          KK     149
2671          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 149
2672          BA    .48
2673          LG    .50     .00    4.66     .53     .00
2674          UI    21.     21.     21.     43.     73.     88.    101.    114.    122.    134.
2675          UI   150.    164.    192.    235.    275.    245.    211.    189.    173.    158.
2676          UI   140.    127.    114.    102.     90.     71.     54.     37.     36.     34.
2677          UI    33.     21.     21.     21.     13.      6.      6.      6.      6.      6.
2678          UI     6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
2679          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2680          KK   CP149
2681          KM        ADD HYDROGRAPHS AT CP149
2682          HC       2   22.20

2683          KK    R149
2684          KM        ROUTE FLOW FROM CP149 TO CP151
2685          RS       5              -1       0
2686          RC    .035    .035     .07    2640   .0038
2687          RX    1000    1001    1002    1030    1200    2050    2315    2350
2688          RY    1143    1143    1143    1142    1142    1144    1146    1147

2689          KK   CP151
2690          KM        ADD HYDROGRAPHS AT CP151
2691          HC       2   23.66

2692          KK   1D151
2693          KM        DIVERT TO CP168 FROM CP151
2694          DT   1D168
2695          DI       0      22      73     360     833    1579    2881    4702    7044
2696          DQ       0       0      17     113     270     519     953    1560    2341

2697          KK   2D151
2698          KM        DIVERT TO CP152 FROM CP151
2699          DT   DI152
2700          DI       0      22      56     247     563    1060    1928    3142    4703
2701          DQ       0       0      17     113     270     519     953    1560    2341
```



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

2702          KK    R151
2703          KM        ROUTE REMAINDER FROM CP151 TO CP167
2704          RS      11              -1       0
2705          RC    .035    .035     .07    5280   .0030
2706          RX    1000    1001    1002    1015    1085    1500    1770    2400
2707          RY    1129    1129    1129    1128    1128    1130    1132    1134
              *

2708          KK     167
2709          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 167
2710          BA    .97
2711          LG    .50     .00    4.90     .47     .00
2712          UI    34.     34.     34.     34.     80.    117.    133.    158.    170.    186.
2713          UI   197.    213.    231.    253.    270.    309.    374.    415.    443.    386.
2714          UI   344.    314.    291.    272.    252.    227.    211.    195.    175.    163.
2715          UI   146.    122.     98.     71.     60.     59.     56.     56.     44.     34.
2716          UI    34.     34.     31.     10.     10.     10.     10.     10.     10.     10.
2717          UI    10.     10.     10.     10.     10.     10.     10.      0.      0.      0.
2718          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2719          KK   1I167
```

```
2720          KM        ADD HYDROGRAPHS AT CP167
2721          HC       2   24.63

2722          KK    D166
2723          KM        RETURN DIVERT AT CP166
2724          DR   DI167

2725          KK    R166
2726          KM        ROUTE FLOW FROM CP166 TO CP167
2727          RS       5       -1       0
2728          RC     .08    .025    .025    5280   .0028
2729          RX    1000    1510    2000    2250    2290    2318    2319    2320
2730          RY    1136    1134    1132    1130    1130    1131    1131    1131

2731          KK   CP167
2732          KM        ADD HYDROGRAPHS AT CP167
2733          HC       2   25.61

2734          KK   1D167
2735          KM        DIVERT TO CP183 FROM CP167
2736          DT   1D183
2737          DI       0     274    1281    3337    6703   11624   18322
2738          DQ       0       0     335    1021    2143    3783    6016

2739          KK   2D167
2740          KM        DIVERT TO CP168 FROM CP167
2741          DT   2D168
2742          DI       0     274     946    2316    4560    7841   12306
2743          DQ       0       0      64     250     587    1107    1838
```



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

2744          KK    R167
2745          KM        ROUTE REMAINDER FROM CP167 TO CP181A
2746          RS       4              -1       0
2747          RC    .035    .035     .08    2400   .0046
2748          RX    1000    1001    1002    1020    1080    1740    2169    2170
2749          RY    1119    1119    1119    1118    1118    1120    1119    1119
              *

2750          KK    181A
2751          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 181A
2752          BA     .39
2753          LG     .50     .00    4.58     .55     .00
2754          UI     16.     16.     16.     28.     55.     65.     77.     85.     93.    100.
2755          UI    111.    123.    136.    162.    199.    212.    181.    159.    144.    133.
2756          UI    121.    108.     98.     89.     80.     71.     57.     45.     29.     29.
2757          UI     27.     27.     19.     16.     16.     16.      5.      5.      5.      5.
2758          UI      5.      5.      5.      5.      5.      5.      5.      5.      0.      0.
2759          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2760          KK  CP181A
2761          KM        ADD HYDROGRAPHS AT CP181A
2762          HC       2    26.0

2763          KK   D181A
2764          KM        DIVERT TO CP183 FROM CP181A
2765          DT   2D183
2766          DI       0     133     491    1117    1637    2812    4542    6810    9620
2767          DQ       0      12      77     241     451     927    1631    2557    3709

2768          KK   R181A
2769          KM        ROUTE REMAINDER FROM CP181A TO CP182
2770          RS       5              -1       0
2771          RC     .04     .04     .08    2870   .0031
2772          RX    1000    1001    1002    1015    1075    1570    1880    2100
2773          RY    1109    1109    1109    1108    1108    1110    1112    1113

2774          KK   CP182
2775          KM        ADD HYDROGRAPHS AT CP182
2776          HC       2   38.46

2777          KK    D182
2778          KM        DIVERT TO CP196 FROM CP182
```

```
2779          DT   DI196
2780          DI       0     173     611    1337    2388    3802
2781          DQ       0      88     310     659    1212    1929

2782          KK    R182
2783          KM        ROUTE REMAINDER FROM CP182 TO CP184
2784          RS      14              -1       0
2785          RC    .075     .04     .04    5280   .0023
2786          RX    1000    1001    1700    2340    2450    2463    2464    2465
2787          RY    1104    1104    1102    1100    1100    1101    1101    1101
```



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

2788          KK   2D151
2789          KM        RETURN DIVERT AT CP151
2790          DR   DI152

2791          KK    R151
2792          KM        ROUTE FLOW FROM CP151 TO CP152
2793          RS       6              -1       0
2794          RC     .08    .035    .035    2600   .0027
2795          RX    1000    1090    1710    2160    2240    2268    2269    2270
2796          RY    1141    1140    1138    1136    1136    1137    1137    1137
              *

2797          KK     152
2798          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 152
2799          BA     .35
2800          LG     .50     .00    5.10     .43     .00
2801          UI     17.     17.     17.     54.     69.     83.     94.    103.    114.    129.
2802          UI    147.    187.    221.    206.    175.    155.    140.    124.    110.     97.
2803          UI     86.     74.     56.     39.     31.     29.     29.     18.     17.     17.
2804          UI      7.      5.      5.      5.      5.      5.      5.      5.      5.      5.
2805          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2806          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2807          KK   CP152
2808          KM        ADD HYDROGRAPHS AT CP152
2809          HC       2   24.01

2810          KK   1D152
2811          KM        DIVERT TO CP169 FROM CP152
2812          DT   1D169
2813          DI       0     334     482    1536    3508    6291    9848   14192
2814          DQ       0       0      49     400    1058    1986    3171    4619

2815          KK   2D152
2816          KM        DIVERT TO CP155 FROM CP152
2817          DT   DI155
2818          DI       0     334     433    1136    2450    4305    6677    9573
2819          DQ       0       0      49     400    1058    1986    3171    4619

2820          KK    R152
2821          KM        ROUTE REMAINDER FROM CP152 TO CP168
2822          RS      10              -1       0
2823          RC    .035    .035    .075    5280   .0034
2824          RX    1000    1001    1002    1020    1110    1450    1880    2100
2825          RY    1123    1123    1123    1122    1122    1124    1126    1127

2826          KK   1D151
2827          KM        RETURN DIVERT AT CP151
2828          DR   1D168
```



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

2829          KK    R151
2830          KM        ROUTE FLOW FROM CP151 TO CP168
2831          RS      56              -1       0
2832          RC    .075    .075    .075    5928   .0042
2833          RX    1000    1001    1002    1180    2100    2458    2459    2460
2834          RY    1135    1135    1135    1134    1134    1135    1135    1135
              *
```

```
2835          KK     168
2836          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 168
2837          BA     .51
2838          LG     .50      .00     5.00      .45      .00
2839          UI     21.      21.      21.      37.      73.      86.     101.     111.     122.     132.
2840          UI    145.     162.     179.     213.     262.     277.     236.     208.     188.     173.
2841          UI    158.     141.     128.     116.     104.      92.      73.      58.      38.      38.
2842          UI     35.      35.      24.      21.      21.      20.       7.       7.       7.       7.
2843          UI      7.       7.       7.       7.       7.       7.       7.       0.       0.       0.
2844          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2845          KK   1I168
2846          KM        ADD HYDROGRAPHS AT CP168
2847          HC       2   24.17

2848          KK   2D167
2849          KM        RETURN DIVERT AT CP167
2850          DR   2D168

2851          KK    R167
2852          KM        ROUTE FLOW FROM CP167 TO CP168
2853          RS      10                -1        0
2854          RC    .075      .04      .04     2600    .0035
2855          RX    1000     1060     1460     2050     2315     2328     2329     2330
2856          RY    1125     1124     1122     1120     1120     1121     1121     1121

2857          KK   2I168
2858          KM        ADD HYDROGRAPHS AT CP168
2859          HC       2   26.12

2860          KK   CP168
2861          KM        ADD HYDROGRAPHS AT CP168
2862          HC       2   26.47

2863          KK    D168
2864          KM        DIVERT TO CP169 FROM CP168
2865          DT   2D169
2866          DI       0        4      282     1072     2510     4582     7322    10770
2867          DQ       0        0       59      334      981     1974     3330     5068

2868          KK    R168
2869          KM        ROUTE REMAINDER FROM CP168 TO CP183
2870          RS       5                -1        0
2871          RC     .04      .04     .075     2400    .0029
2872          RX    1000     1001     1002     1010     1030     1480     2259     2260
2873          RY    1113     1113     1113     1112     1112     1114     1116     1116
```



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

2874          KK   1D167
2875          KM        RETURN DIVERT AT CP167
2876          DR   1D183

2877          KK    R167
2878          KM        ROUTE FLOW FROM CP167 TO CP183
2879          RS      19                -1        0
2880          RC    .075     .075     .075     2250    .0071
2881          RX    1000     1001     1002     1210     2310     2558     2559     2560
2882          RY    1115     1115     1115     1114     1114     1115     1115     1115
              *

2883          KK     183
2884          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 183
2885          BA     .21
2886          LG     .50      .00     4.32      .62      .00
2887          UI     20.      38.      84.     109.     134.     172.     247.     206.     164.     131.
2888          UI    104.      74.      40.      33.      22.      16.       6.       6.       6.       6.
2889          UI      6.       0.       0.       0.       0.       0.       0.       0.       0.       0.
2890          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2891          KK   1I183
2892          KM        ADD HYDROGRAPHS AT CP183
2893          HC       2   25.82
```

```
2894          KK   D181A
2895          KM        RETURN DIVERT AT CP181A
2896          DR   2D183

2897          KK   R181A
2898          KM        ROUTE FLOW FROM CP181A TO CP183
2899          RS       3          -1       0
2900          RC     .08     .04     .04    1250   .0040
2901          RX    1000    1001    1420    1850    1870    1888    1889    1890
2902          RY    1114    1114    1112    1110    1110    1111    1111    1111

2903          KK   2I183
2904          KM        ADD HYDROGRAPHS AT CP183
2905          HC       2   26.21

2906          KK   CP183
2907          KM        ADD HYDROGRAPHS AT CP183
2908          HC       2   27.07

2909          KK    R183
2910          KM        ROUTE FLOW FROM CP183 TO CP184
2911          RS      28          -1       0
2912          RC     .08     .08     .08    4520   .0035
2913          RX    1000    1001    1215    1910    2630    3250    3499    3500
2914          RY    1101    1101    1100    1098    1098    1100    1101    1101
              *
```



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

2915          KK     184
2916          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 184
2917          BA     .79
2918          LG     .50     .00    4.74     .51     .00
2919          UI     33.     33.     33.     53.    110.    130.    154.    170.    186.    200.
2920          UI    221.    245.    268.    321.    389.    431.    371.    326.    293.    269.
2921          UI    248.    221.    201.    182.    164.    148.    121.     94.     63.     58.
2922          UI     55.     54.     43.     33.     33.     33.     15.     10.     10.     10.
2923          UI     10.     10.     10.     10.     10.     10.     10.     10.      0.      0.
2924          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2925          KK   1I184
2926          KM        ADD HYDROGRAPHS AT CP184
2927          HC       2   27.86

2928          KK   2I184
2929          KM        ADD HYDROGRAPHS AT CP184
2930          HC       2   40.32

2931          KK    D152
2932          KM        RETURN DIVERT AT CP152
2933          DR   DI155

2934          KK    R152
2935          KM        ROUTE FLOW FROM CP152 TO CP155
2936          RS      14          -1       0
2937          RC    .075     .04     .04    2640   .0019
2938          RX    1000    1040    1580    2090    2360    2363    2364    2365
2939          RY  1135.2    1134    1132    1130    1130    1131    1131    1131
              *

2940          KK     155
2941          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 155
2942          BA     .26
2943          LG     .50     .00    7.30     .17     .00
2944          UI     15.     15.     29.     56.     72.     83.     93.    107.    122.    156.
2945          UI    195.    177.    147.    129.    113.     98.     85.     73.     57.     39.
2946          UI     27.     26.     23.     15.     15.      8.      5.      5.      5.      5.
2947          UI      5.      5.      5.      0.      0.      0.      0.      0.      0.      0.
2948          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2949          KK   CP155
2950          KM        ADD HYDROGRAPHS AT CP155
2951          HC       2   24.27
```

```
2952          KK    R155
2953          KM        ROUTE FLOW FROM CP155 TO CP169
2954          RS      17            -1       0
2955          RC     .04      .04     .07    5280   .0036
2956          RX    1000     1001    1002    1020    1690    2220    2269    2270
2957          RY    1117     1117    1117    1116    1116    1118    1119    1119
1                                            HEC-1 INPUT                                                          PAGE 72

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


2958          KK    D152
2959          KM        RETURN DIVERT AT CP152
2960          DR   1D169

2961          KK    R152
2962          KM        ROUTE FLOW FROM CP152 TO CP169
2963          RS       7            -1       0
2964          RC     .08      .08     .08    5928   .0040
2965          RX    1000     1001    1002    1190    2510    2898    2899    2900
2966          RY    1121     1121    1121    1120    1120    1121    1121    1121
              *

2967          KK     169
2968          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 169
2969          BA     .51
2970          LG     .50      .00    7.30     .17     .00
2971          UI     21.      21.     21.     35.     72.     84.    100.    110.    120.    130.
2972          UI    143.     159.    174.    209.    253.    278.    239.    210.    189.    174.
2973          UI    160.     142.    130.    117.    106.     95.     77.     61.     39.     38.
2974          UI     35.      35.     27.     21.     21.     21.      9.      7.      7.      7.
2975          UI      7.       7.      7.      7.      7.      7.      7.      7.      0.      0.
2976          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

2977          KK   1I169
2978          KM        ADD HYDROGRAPHS AT CP169
2979          HC       2   24.52

2980          KK   2I169
2981          KM        ADD HYDROGRAPHS AT CP169
2982          HC       2   25.13

2983          KK    D168
2984          KM        RETURN DIVERT AT CP168
2985          DR   2D169

2986          KK    R168
2987          KM        ROUTE FLOW FROM CP168 TO CP169
2988          RS       9            -1       0
2989          RC     .08     .035    .035    2640   .0023
2990          RX    1000     1001    1440    1890    2100    2148    2149    2150
2991          RY    1116     1116    1114    1112    1112    1113    1113    1113

2992          KK   CP169
2993          KM        ADD HYDROGRAPHS AT CP169
2994          HC       2   27.24

2995          KK    R169
2996          KM        ROUTE FLOW FROM CP169 TO CP184
2997          RS      10            -1       0
2998          RC     .08      .04     .04    5280   .0032
2999          RX    1000     1001    1002    1020    1100    1670    2099    2100
3000          RY    1111     1111    1111    1110    1110    1112    1113    1113
1                                            HEC-1 INPUT                                                          PAGE 73

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


3001          KK   CP184
3002          KM        ADD HYDROGRAPHS AT CP184
3003          HC       2   41.09

3004          KK   1D184
3005          KM        DIVERT TO CP197 FROM CP184
3006          DT   DI197
```

```
3007          DI       0     350    1274    2834    4789    7664
3008          DQ       0     140     509    1134    1916    3066

3009          KK   2D184
3010          KM        DIVERT TO CP198 FROM CP184
3011          DT   DI198
3012          DI       0     210     765    1700    2873    4598
3013          DQ       0     140     509    1134    1911    3066

3014          KK    R184
3015          KM        ROUTE REMAINDER FROM CP184 TO CP185
3016          RS       8              -1       0
3017          RC    .075     .04     .04    1400   .0007
3018          RX    1000    1001    1170    1970    2260    2308    2309    2310
3019          RY    1095    1095    1094    1092    1092    1093    1093    1093
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2J WITH NEW SOILS*****
              * ***********************************************************************
              *

3020          KK     170
3021          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 170
3022          BA     .29
3023          LG     .41     .04    7.30     .16    5.00
3024          UI     19.     19.     48.     77.     95.    110.    126.    148.    189.    242.
3025          UI    212.    175.    153.    130.    112.     94.     76.     49.     34.     32.
3026          UI     25.     19.     17.      6.      6.      6.      6.      6.      6.      6.
3027          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3028          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3029          KK    R170
3030          KM        ROUTE FLOW FROM CP170 TO CP185
3031          RS      16              -1       0
3032          RC    .035    .035    .035    5280   .0032
3033          RX    1000    1001    1002    2100    2280    2338    2339    2340
3034          RY    1101    1101    1101    1100    1100    1101    1101    1101
              *

3035          KK     185
3036          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 185
3037          BA     .69
3038          LG     .50     .00    5.10     .43     .00
3039          UI     30.     30.     30.     62.    105.    126.    145.    163.    176.    193.
3040          UI    216.    236.    277.    338.    395.    352.    304.    272.    248.    227.
3041          UI    202.    183.    164.    147.    129.    101.     78.     53.     52.     50.
3042          UI     48.     30.     30.     30.     19.      9.      9.      9.      9.      9.
```



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

3043          UI      9.      9.      9.      9.      9.      0.      0.      0.      0.      0.
3044          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3045          KK   1I185
3046          KM        ADD HYDROGRAPHS AT CP185
3047          HC       2     .98

3048          KK   CP185
3049          KM        ADD HYDROGRAPHS AT CP185
3050          HC       2   44.55

3051          KK    R185
3052          KM        ROUTE FLOW FROM CP185 TO CP198
3053          RS       9              -1       0
3054          RC    .075    .075    .075    5450   .0022
3055          RX    1000    1001    1090    1410    1950    2190    2219    2220
3056          RY    1086    1086    1084    1083    1083    1084    1085    1085

3057          KK   2D184
3058          KM        RETURN DIVERT AT CP184
3059          DR   DI198

3060          KK    R184
3061          KM        ROUTE FLOW FROM CP184 TO CP198
3062          RS      55              -1       0
```

```
3063          RC    .075    .075    .075    6630   .0020
3064          RX    1000    1001    1025    1220    1990    2010    2099    2100
3065          RY    1085    1085    1084    1083    1083    1084    1085    1085
              *

3066          KK     198
3067          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 198
3068          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3069          KM    L=      1.3  Lca=       .6   S=   10.3  Kn= .091  LAG=  77.1
3070          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3071          BA     .90
3072          LG     .42     .09    4.80     .44   12.00
3073          UI     39.     39.     39.     80.    137.    165.    189.    213.    229.    252.
3074          UI    281.    308.    360.    441.    515.    461.    398.    356.    325.    298.
3075          UI    264.    239.    215.    192.    169.    133.    103.     70.     69.     65.
3076          UI     63.     39.     39.     39.     25.     12.     12.     12.     12.     12.
3077          UI     12.     12.     12.     12.     12.     12.      0.      0.      0.      0.
3078          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3079          KK  198OUT
3080          KM        DIVERSION-RETENTION
3081          DT  198RET   14.60
3082          DI       0   10000
3083          DQ       0   10000
```



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

3084          KK   1I198
3085          KM        ADD HYDROGRAPHS AT CP198
3086          HC       2   41.97

3087          KK   2I198
3088          KM        ADD HYDROGRAPHS AT CP198
3089          HC       2   42.95

3090          KK   1D184
3091          KM        RETURN DIVERT AT CP184
3092          DR   DI197

3093          KK    R184
3094          KM        ROUTE REMAINDER FROM CP184 TO CP197
3095          RS      18              -1       0
3096          RC     .04     .04     .08    5280   .0025
3097          RX    1000    1001    1002    1015    1870    2300    2699    2700
3098          RY    1087    1087    1087    1086    1086    1088    1089    1089
              *

3099          KK     197
3100          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 197
3101          BA    1.00
3102          LG     .50     .00    4.66     .53     .00
3103          UI     32.     32.     32.     32.     46.    106.    119.    135.    152.    164.
3104          UI    177.    187.    200.    216.    235.    250.    276.    318.    371.    423.
3105          UI    402.    355.    321.    296.    276.    259.    242.    222.    204.    191.
3106          UI    175.    161.    151.    133.    112.     93.     68.     57.     57.     53.
3107          UI     53.     52.     32.     32.     32.     32.     27.     10.     10.     10.
3108          UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
3109          UI     10.     10.      0.      0.      0.      0.      0.      0.      0.      0.
3110          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3111          KK   CP197
3112          KM        ADD HYDROGRAPHS AT CP197
3113          HC       2   42.06

3114          KK    R197
3115          KM        ROUTE FLOW FROM CP197 TO CP203
3116          RS       8              -1       0
3117          RC    .035    .035    .015    2650   .0004
3118          RX    1000    1001    1002    1030    1200    1350    1809    1810
3119          RY    1078    1078    1078  1077.5  1077.5    1078    1080    1080
              *

3120          KK     203
3121          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 203
```

```
3122          BA     .11
3123          LG     .35     .38    4.82     .29     .00
3124          UI     16.     60.     92.    131.    189.    135.     96.     62.     29.     19.
3125          UI      9.      5.      5.      0.      0.      0.      0.      0.      0.      0.
3126          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

3127          KK  203OUT
3128          KM        DIVERSION-RETENTION
3129          DT  203RET    6.65
3130          DI       0   10000
3131          DQ       0   10000

3132          KK   CP203
3133          KM        ADD HYDROGRAPHS AT CP203
3134          HC       2   42.17

3135          KK   CP198
3136          KM        ADD HYDROGRAPHS AT CP198
3137          HC       2   44.06

3138          KK    R198
3139          KM        ROUTE FLOW FROM CP198 TO CP204
3140          RS       2              -1       0
3141          RC     .03    .025     .03    3120   .0029
3142          RX    1000    1050    1070    1090    1190    1220    1230    1270
3143          RY    1083    1082    1078    1076    1076    1078    1080    1083
              *
              * ***************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2K WITH NEW SOILS*****
              * ***************************************************************************
              *

3144          KK     204
3145          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 204
3146          BA     .27
3147          LG     .35     .37    4.82     .29     .00
3148          UI     42.    172.    257.    396.    462.    312.    214.    105.     61.     33.
3149          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3150          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3151          KK   1I204
3152          KM        ADD HYDROGRAPHS AT CP204
3153          HC       2   44.33
              *

3154          KK     174
3155          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 174
3156          BA     .45
3157          LG     .35     .33    4.58     .32     .00
3158          UI     62.    218.    346.    474.    735.    574.    418.    294.    145.     94.
3159          UI     57.     19.     19.     19.      0.      0.      0.      0.      0.      0.
3160          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3161          KK    R174
3162          KM        ROUTE FLOW FROM CP174 TO CP176
3163          RS       7              -1       0
3164          RC    .025    .025    .025    7020   .0073
3165          RX    1000    1040    1100    1200    1600    1620    1630    1750
3166          RY    1223    1222    1220    1218    1218    1220    1222    1224
              *
```



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

3167          KK     175
3168          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175
3169          BA     .28
3170          LG     .35     .33    4.66    0.31     .00
3171          UI     38.    128.    207.    279.    440.    364.    267.    192.    103.     63.
3172          UI     38.     15.     12.     12.      0.      0.      0.      0.      0.      0.
3173          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
3174          KK    D175
3175          KM        DIVERT TO CP175A FROM CP175
3176          DT   DI175A
3177          DI       0      53     200     459     854    1367    2544    4308    6658    9613
3178          DQ       0      53     200     459     854    1047    1478    2105    2915    3906

3179          KK    R175
3180          KM        ROUTE REMAINDER FROM CP175 TO CP176
3181          RS       5              -1       0
3182          RC    .025    .022    .022    6500   .0074
3183          RX    1000    1100    1300    1420    1470    1558    1559    1560
3184          RY    1226    1224    1222    1220    1220    1222    1222    1222
              *

3185          KK     176
3186          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176
3187          BA     .67
3188          LG     .35     .34    4.20     .39     .00
3189          UI     66.    128.    279.    362.    449.    588.    817.    642.    515.    407.
3190          UI    319.    208.    115.     99.     66.     37.     20.     20.     20.     20.
3191          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3192          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3193          KK   1I176
3194          KM        ADD HYDROGRAPHS AT CP176
3195          HC       2     .95

3196          KK   CP176
3197          KM        ADD HYDROGRAPHS AT CP176
3198          HC       2    1.40

3199          KK    R176
3200          KM        ROUTE FLOW FROM CP176 TO CP191
3201          RS       5              -1       0
3202          RC    .035    .035    .075    5540   .0067
3203          RX    1000    1001    1002    1025    1100    1400    1720    2050
3204          RY    1163    1163    1163    1162    1162    1164    1166    1168

3205          KK    D175
3206          KM        RETURN DIVERT AT CP175
3207          DR   DI175A
```



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

3208          KK    R175
3209          KM        ROUTE FLOW FROM CP175 TO CP175A
3210          RS       2              -1       0
3211          RC    .022    .022    .025    1560   .0013
3212          RX    1000    1001    1002    1020    1055    1150    1190    1390
3213          RY    1136    1136    1136    1134    1134    1136    1138    1140
              *

3214          KK    175A
3215          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175A
3216          BA     .47
3217          LG     .35     .33    4.20     .39     .00
3218          UI     42.     66.    162.    215.    258.    317.    439.    507.    388.    320.
3219          UI    258.    207.    147.     82.     69.     48.     41.     13.     13.     13.
3220          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3221          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3222          KK  CP175A
3223          KM        ADD HYDROGRAPHS AT CP175A
3224          HC       2     .75

3225          KK   R175A
3226          KM        ROUTE FLOW FROM CP175A TO CP189
3227          RS      11              -1       0
3228          RC    .022    .022    .025    3300   .0009
3229          RX    1000    1001    1002    1020    1035    1170    1460    1720
3230          RY    1233    1233    1233    1232    1232    1234    1236    1238

3231          KK     CP3
```

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                                                                                                                LABCARD
3232          KM        RETURN DIVERTED HYDROGRAPH AT CP3 (FROM  HEC-1 MODEL)
3233          DR   DI189

3234          KK      R3
3235          KM        ROUTE FLOW AT CP3 TO CP189
3236          RS       5              -1       0
3237          RC     .05     .035     .05    4500   .0038
3238          RX    1000     1040    1175    1250    1275    1350    1430    1750
3239          RY    1261     1260  1260.5    1258    1258  1260.5    1258    1261

3240          KK   1I189
3241          KM        ADD HYDROGRAPHS AT CP189
3242          HC       2    5.81
              *

3243          KK     189
3244          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 189
3245          BA     .51
3246          LG     .35      .35    4.44     .34     .00
3247          UI     52.     110.    229.    298.    372.    516.    631.    471.    376.    293.
3248          UI    219.     118.     88.     59.     43.     16.     16.     16.     16.      0.
3249          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
3250          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                                HEC-1 INPUT                                                    PAGE 79

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

3251          KK   CP189
3252          KM        ADD HYDROGRAPHS AT CP189
3253          HC       2    6.32

3254          KK    R189
3255          KM        ROUTE FLOW FROM CP189 TO CP190
3256          RS       8              -1       0
3257          RC     .08     .035    .035    6900   .0057
3258          RX    1000     1270    1700    2040    2090    2118    2119    2120
3259          RY    1212     1210    1208    1206    1206    1207    1207    1207
              *

3260          KK     190
3261          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 190
3262          BA     .86
3263          LG     .50      .00    4.44     .74     .00
3264          UI     44.      44.     44.    141.    176.    209.    238.    261.    292.    331.
3265          UI    381.     482.    570.    492.    422.    374.    339.    297.    264.    232.
3266          UI    207.     167.    124.     77.     76.     72.     59.     44.     44.     31.
3267          UI     13.      13.     13.     13.     13.     13.     13.     13.     13.      0.
3268          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
3269          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

3270          KK   CP190
3271          KM        ADD HYDROGRAPHS AT CP190
3272          HC       2    7.18

3273          KK    R190
3274          KM        ROUTE FLOW FROM CP190 TO CP191
3275          RS       5              -1
3276          RC    .075     .035    .035    5280   .0076
3277          RX    1000     1260    2080    2310    2330    2358    2359    2360
3278          RY    1182     1180    1178    1176    1176    1177    1177    1177

3279          KK   D176A
3280          KM        RETURN DIVERT AT CP176A
3281          DR   DI191

3282          KK   R176A
3283          KM        ROUTE FLOW FROM CP176A TO CP191
3284          RS       4              -1       0
3285          RC    .035     .035     .08    5280   .0062
3286          RX    1000     1001    1002    1025    1100    1400    1720    2050
3287          RY    1163     1163    1163    1162    1162    1164    1166    1168

3288          KK   1I191
3289          KM        ADD HYDROGRAPHS AT CP191
3290          HC       3   11.39
```

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                    *
1                                          HEC-1 INPUT                                                          PAGE 80

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

3291          KK     191
3292          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 191
3293          BA     .99
3294          LG     .50      .00     4.66      .53      .00
3295          UI     39.      39.      39.      40.     127.     144.     170.     189.     210.     223.
3296          UI    243.     267.     293.     322.     381.     459.     509.     443.     389.     353.
3297          UI    324.     301.     272.     247.     227.     204.     186.     166.     135.     111.
3298          UI     70.      68.      65.      63.      56.      39.      39.      39.      30.      12.
3299          UI     12.      12.      12.      12.      12.      12.      12.      12.      12.      12.
3300          UI     12.       0.       0.       0.       0.       0.       0.       0.       0.       0.
3301          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

3302          KK   CP191
3303          KM        ADD HYDROGRAPHS AT CP191
3304          HC       2   12.38

3305          KK    D191
3306          KM        DIVERT TO CP208 FROM CP191
3307          DT   1D208
3308          DI       0       80      468     1339     2000     3000     4000     5000     6000
3309          DQ       0       80      468     1339     1339     1339     1339     1339     1339

3310          KK    R191
3311          KM        ROUTE REMAINDER FROM CP191 TO CP192A
3312          RS       5                -1        0
3313          RC     .08      .04      .04     2640    .0045
3314          RX    1000     1350     1800     2200     2225     2278     2279     2280
3315          RY    1148     1146     1144     1142     1142     1143     1143     1143
              *

3316          KK    192A
3317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192A
3318          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3319          KM    L=       1.1  Lca=       .6   S=   31.3  Kn= .098  LAG=  61.4
3320          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3321          BA     .50
3322          LG     .45      .07     4.30      .60     5.00
3323          UI     27.      27.      38.      94.     116.     137.     153.     171.     197.     224.
3324          UI    289.     345.     306.     259.     229.     205.     177.     157.     136.     116.
3325          UI     86.      57.      48.      44.      38.      27.      27.      17.       8.       8.
3326          UI      8.       8.       8.       8.       8.       8.       0.       0.       0.       0.
3327          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

3328          KK  192AOT
3329          KM        DIVERSION-RETENTION
3330          DT  192ART    5.33
3331          DI       0   10000
3332          DQ       0   10000
1                                          HEC-1 INPUT                                                          PAGE 81

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

3333          KK  CP192A
3334          KM        ADD HYDROGRAPHS AT CP192A
3335          HC       2   12.68

3336          KK   R192A
3337          KM        ROUTE REMAINDER FROM CP192A TO CP192
3338          RS       9                -1        0
3339          RC     .08      .04      .04     2640    .0045
3340          RX    1000     1350     1800     2200     2225     2278     2279     2280
3341          RY    1148     1146     1144     1142     1142     1143     1143     1143
              *

3342          KK     192
3343          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192
3344          BA     .50
3345          LG     .50      .00     4.05      .72      .00
3346          UI     22.      22.      22.      51.      80.      96.     110.     123.     134.     147.
```

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                                                                                                LABCARD
3347          UI    165.    182.    219.    270.    290.    245.    215.    193.    178.    159.
3348          UI    142.    129.    114.    104.     83.     64.     41.     40.     37.     37.
3349          UI     24.     22.     22.     16.      7.      7.      7.      7.      7.      7.
3350          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3351          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3352          KK   CP192
3353          KM        ADD HYDROGRAPHS AT CP192
3354          HC       2   13.38

3355          KK   1D192
3356          KM        DIVERT TO CP209 FROM CP192
3357          DT   1D209
3358          DI       0     126     480     965    3703    6169    9453
3359          DQ       0     126     419     853    3404    5491    8154

3360          KK   2D192
3361          KM        DIVERT TO CP210 FROM CP192
3362          DT   1D210
3363          DI       0      61     112     299     678    1299    2208
3364          DQ       0       0       0       0       0     433     736

3365          KK    R192
3366          KM        ROUTE REMAINDER FROM CP192 TO MIDSECTION LINE
3367          RS       5              -1       0
3368          RC     .08    .025    .022    2475   .0044
3369          RX    1000    1380    1800    2160    2195    2230    2275    2310
3370          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3371          KK   1D193
3372          KM        DIVERT AT MIDSECTION OF 193 TO CP211
3373          DT   DI211
3374          DI       0     100     200     400     600     800    1000    2000
3375          DQ       0      80     160     320     480     640     800    1600
```



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

3376          KK   R192
3377          KM        ROUTE REMAINDER FROM D193 TO CP193
3378          RS       5              -1       0
3379          RC     .08    .025    .022    2475   .0044
3380          RX    1000    1380    1800    2160    2195    2230    2275    2310
3381          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3382          KK     193
3383          KM        RUNOFF FROM SUBBASIN 193
3384          BA     .91
3385          LG     .50     .00    4.66     .53     .00
3386          UI     36.     36.     36.     38.    117.    133.    158.    175.    193.    206.
3387          UI    225.    247.    270.    299.    353.    426.    468.    405.    357.    324.
3388          UI    297.    277.    249.    226.    209.    186.    170.    151.    122.    100.
3389          UI     63.     63.     59.     58.     50.     36.     36.     36.     25.     11.
3390          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
3391          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3392          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3393          KK   1I193
3394          KM        ADD HYDROGRAPHS AT CP193
3395          HC       2   14.29

3396          KK   1D179
3397          KM        RETURN DIVERT AT CP179
3398          DR   DI193

3399          KK    R179
3400          KM        ROUTE FLOW FROM CP179 TO CP193
3401          RS       7              -1       0
3402          RC    .022    .022     .06    5280   .0040
3403          RX    1000    1001    1002    1010    1050    1070    1150    1970
3404          RY    1113    1113    1113    1112    1112    1113    1112    1118

3405          KK   CP193
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                                                                                LABCARD
3406          KM        ADD HYDROGRAPHS AT CP193
3407          HC       2    39.17
              * DI212 HAS BEEN REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM       DIVERT TO CP212 FROM CP193
              * DT DI212
              * DI     0     500     520     580     650    1000    1500    2000    2347    30
              * DQ     0       0       4      27      67     332     768    1219    1535    21

3408          KK    R193
3409          KM        ROUTE REMAINDER FROM CP193 TO CP194
3410          RS       7      -1       0
3411          RC     .05    .020    .022    2640   .0015
3412          RX    1000    1940    1995    2020    2040    2050    2069    2070
3413          RY    1104    1100    1101    1098    1098    1100    1101    1101
1                                         HEC-1 INPUT                                                    PAGE 83

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

3414          KK   2D179
3415          KM        RETURN DIVERT AT CP179
3416          DR  DI194A

3417          KK    R179
3418          KM        ROUTE FLOW FROM CP179 TO CP194A
3419          RS       8       -1       0
3420          RC    .075    .075    .075    7500   .0039
3421          RX    1000    1001    1002    1360    2780    2998    2999    3000
3422          RY    1109    1109    1109    1108    1108    1109    1109    1109
              *

3423          KK    194A
3424          KM   BASIN 194A
3425          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3426          KM    L=       .7  Lca=       .4   S=   26.8  Kn= .120  LAG=  54.8
3427          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3428          BA     .25
3429          LG     .50     .00    3.75     .46     .00
3430          UI     15.     15.     32.     57.     73.     84.     95.    110.    128.    167.
3431          UI    198.    162.    138.    122.    104.     91.     77.     65.     46.     28.
3432          UI     26.     25.     15.     15.     10.      5.      5.      5.      5.      5.
3433          UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
3434          UI      0.      0.      0.      0.      0.      0.      0.      0.

3435          KK  CP194A
3436          KM        ADD HYDROGRAPHS AT CP194A
3437          HC       2   36.84
              *

3438          KK    194B
3439          KM   BASIN 194B
3440          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3441          KM    L=       .7  Lca=       .4   S=   23.9  Kn= .120  LAG=  56.0
3442          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3443          BA     .25
3444          LG     .50     .00    3.75     .46     .00
3445          UI     15.     15.     30.     55.     71.     81.     91.    105.    121.    158.
3446          UI    191.    167.    140.    123.    108.     92.     80.     69.     51.     34.
3447          UI     26.     25.     19.     15.     15.      5.      5.      5.      5.      5.
3448          UI      5.      5.      5.      0.      0.      0.      0.      0.      0.      0.
3449          UI      0.      0.      0.      0.      0.      0.      0.      0.

3450          KK  CP194B
              * KO     1                                 21
3451          KM        ADD HYDROGRAPHS AT CP194B
3452          HC       3   36.84

3453          KK  SR194B
              * KO     1                                 21
3454          KM        STORAGE ROUTE THROUGH 74-ACRE DETENTION BASIN 1 AT CP194B
3455          KM        BASIN MODIFIED TO INCORPORATE GOLF COURSE ROUGH GEOMETRY (SFC 3/31/95)
3456          KM        1 - 6' X 6' BOX CULVERT - INLET ELEVATION = 1089.85
3457          KM        DISCHARGES TO DYSART DRAIN
1                                         HEC-1 INPUT                                                    PAGE 84
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                                                                                LABCARD
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3458          RS       1    STOR       0       0
3459          SV       0    13.5   41.42   83.54  133.61  216.27  563.72
3460          SQ       0      67     110     160     211     300     555
3461          SE  1089.9  1092.5  1093.5  1094.5  1095.5    1097    1102

3462          KK   R194B
3463          KM        ROUTE DETENTION BASIN FLOWS FROM CP194B TO CP194C
3464          RS       7              -1       0
3465          RC    .016    .016    .016    2640   .0011
3466          RX    2000    2007    2013    2020    2030    2037    2043    2050
3467          RY  1099.5  1096.2  1092.8  1089.5  1089.5  1092.8  1096.2  1099.5
              *

3468          KK    194C
3469          KM   BASIN 194C
3470          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3471          KM    L=        1.1  Lca=        .6   S=   20.5  Kn= .120  LAG=  81.5
3472          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3473          BA     .49
3474          LG     .50     .00    3.75     .46     .00
3475          UI     20.     20.     20.     32.     68.     80.     95.    104.    114.    123
3476          UI    136.    150.    164.    195.    236.    267.    232.    203.    183.    167
3477          UI    155.    138.    126.    114.    102.     94.     78.     58.     42.     36
3478          UI     34.     33.     29.     20.     20.     20.     12.      6.      6.      6
3479          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0
3480          UI      0.      0.      0.      0.      0.      0.      0.      0.
              *

3481          KK  CP194C
3482          KM        ADD HYDROGRAPHS AT CP194
3483          HC       2   37.33

3484          KK   R194C
3485          KM        ROUTE FLOW FROM CP194C TO CP195
3486          RS       2              -1       0
3487          RC    .016    .016    .016    3750   .0011
3488          RX    2000    2007    2013    2020    2030    2037    2043    2050
3489          RY  1094.5  1091.2  1087.8  1084.5  1084.5  1087.8  1091.2  1094.5

3490          KK    D180
3491          KM        RETURN DIVERT AT CP180
3492          DR   1D195

3493          KK    R180
3494          KM        ROUTE FLOW FROM CP180 TO CP195
3495          RS      40              -1       0
3496          RC     .08     .08     .08    7050   .0031
3497          RX    1000    1001    1002    1350    2300    2448    2449    2450
3498          RY    1101    1101    1100    1099    1099    1100    1101    1101
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3499          KK     195
3500          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 195
3501          BA     .49
3502          LG     .50     .00    4.82     .49     .00
3503          UI     16.     16.     16.     16.     27.     53.     61.     70.     77.     84.
3504          UI     90.     95.    102.    110.    121.    128.    145.    172.    193.    215.
3505          UI    190.    169.    154.    143.    133.    126.    115.    106.     98.     91.
3506          UI     83.     77.     70.     60.     46.     38.     29.     29.     27.     26.
3507          UI     26.     17.     16.     16.     16.     13.      5.      5.      5.      5.
3508          UI      5.      5.      5.      5.      5.      5.      5.      5.      5.      5.
3509          UI      5.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3510          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3511          KK   1I195
3512          KM        ADD HYDROGRAPHS AT CP195
3513          HC       2   33.41

3514          KK    D181
3515          KM        RETURN DIVERT AT CP181
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3516          DR   2D195

3517          KK    R181
3518          KM        ROUTE FLOW FROM CP181 TO CP195
3519          RS       4        -1        0
3520          RC    .022    .022     .07    6400   .0033
3521          RX    1000    1001    1002    1040    1055    1080    1899    1900
3522          RY    1103    1103    1103    1098    1098    1102    1103    1103

3523          KK   CP195
3524          KM        ADD HYDROGRAPHS AT CP195
3525          HC       3   41.02

3526          KK    R195
3527          KM        ROUTE FLOW FROM CP195 TO CP196
3528          RS       1        -1        0
3529          RC    .016    .016    .016    2800   .0011
3530          RX    1000    1006    1013    1020    1030    1037    1043    1050
3531          RY    1085    1082    1078    1074    1074    1078    1082    1085

3532          KK    D182
3533          KM        RETURN DIVERT AT CP182
3534          DR   DI196

3535          KK    R182
3536          KM        ROUTE FLOW FROM CP182 TO CP196
3537          RS      13        -1        0
3538          RC    .025    .025     .04    5280   .0034
3539          RX    1000    1001    1002    1030    1060    1115    1220    1750
3540          RY    1097    1097    1097    1096    1096  1096.5  1095.5    1097
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3541          KK     196
3542          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 196
3543          BA    .47
3544          LG    .46     .03    4.58     .53    2.00
3545          UI    21.     21.     21.     50.     76.     92.    106.    117.    128.    142.
3546          UI   159.    176.    215.    264.    269.    227.    200.    181.    166.    147.
3547          UI   132.    118.    106.     93.     73.     56.     38.     37.     35.     32.
3548          UI    21.     21.     21.      9.      7.      7.      7.      7.      7.      7.
3549          UI     7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3550          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3551          KK   1I196
3552          KM        ADD HYDROGRAPHS AT CP196
3553          HC       2   38.90

3554          KK   CP196
3555          KM        ADD HYDROGRAPHS AT CP196
3556          HC       2   51.58

3557          KK    R196
3558          KM        ROUTE FLOW FROM CP196 TO CP202
3559          RS       2        -1        0
3560          RC     .02    .016     .02    5460   .0015
3561          RX    1000    1001    1008    1020    1030    1042    1074    1075
3562          RY    1085    1078    1076    1070    1070    1076    1078    1085
              *
3563          KM           flow diversion of 201 and 226 to  202 per HDR

3564          KK     226
3565          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 226
3566          BA   1.18
3567          LG    .15     .26    4.82     .36   17.00
3568          UI   134.    343.    641.    827.   1094.   1619.   1306.   1008.    765.    549.
3569          UI   283.    214.    134.     68.     41.     41.     41.      0.      0.      0.
3570          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3571          KM          KK SR226
3572          KM        STORAGE ROUTE THROUGH CP226 Removed by HDR 6/14/02
3573          KM         RS     1    STOR       0       0
3574          KM         SV     0    0.24     3.34   18.04   51.44  102.84  171.74
3575          KM         SQ     0       0       21     136     428     875    1487
```

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                                                                                                LABCARD
3576        KM        SE1075.2  1075.5    1076  1076.5    1077  1077.5    1078
3577        KM       R226
3578        KM       ROUTE REMAINDER FROM CP226 TO CP223
3579        KM       RS    26              -1       0
3580        KM       RC  .05     .05     .05    7840   .0011
3581        KM       RX  1000    1200    1300    1500    1600    1800    1900    2000
3582        KM       RY  1100  1074.5    1074    1073    1073    1074  1074.5    1100
            *
1                                          HEC-1 INPUT                                                    PAGE 87

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

3583        KK     201
3584        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 201
3585        BA     .34
3586        LG     .35     .35    4.82     .29     .00
3587        UI     38.     96.    180.    233.    304.    457.    381.    294.    225.    166.
3588        UI     86.     64.     40.     24.     12.     12.     12.      0.      0.      0.
3589        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3590        KM
3591        KM       flow diversion of 201 and 226 to  202 per HDR
3592        KM

3593        KK     202
3594        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 202
3595        BA     .48
3596        LG     .50     .00    4.82     .49     .00
3597        UI     16.     16.     16.     16.     28.     52.     60.     69.     76.     83.
3598        UI     89.     95.    102.    110.    120.    128.    146.    175.    193.    209.
3599        UI    184.    165.    150.    139.    130.    122.    111.    103.     95.     88.
3600        UI     80.     75.     66.     55.     46.     33.     28.     28.     26.     26.
3601        UI     23.     16.     16.     16.     16.      9.      5.      5.      5.      5.
3602        UI      5.      5.      5.      5.      5.      5.      5.      5.      5.      5.
3603        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3604        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3605        KK   CP202
3606        KM      flow diversion of 201 and 226 to  202 per HDR  added 2 HCs
3607        KM        ADD HYDROGRAPHS AT CP202 added 1.52 sq. mi to account for 201 and 226 di
3608        KM
3609        HC       4   53.58

3610        KK    R202
3611        KM       ROUTE FLOW FROM CP202 TO CP204
3612        RS       2              -1       0
3613        RC    .022    .016    .022    4200   .0009
3614        RX    1000    1001    1008    1020    1030    1042    1074    1075
3615        RY    1093    1083    1079    1073    1073    1079    1083    1093

3616        KK   CP204
3617        KM       ADD HYDROGRAPHS AT CP204
3618        HC       2   57.76

3619        KK    R204
3620        KM       ROUTE FLOW FROM CP204 TO CP205
3621        RS       1              -1       0
3622        RC    .022    .016    .022    1050  0.0009
3623        RX    1000    1001    1008    1020    1030    1042    1074    1075
3624        RY    1080    1080    1073    1067    1067    1073    1073    1078
            *
1                                          HEC-1 INPUT                                                    PAGE 88

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

3625        KK     205
3626        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 205
3627        BA     .06
3628        LG     .35     .36    4.28     .38     .00
3629        UI     40.    117.    176.     90.     28.      9.      5.      0.      0.      0.
3630        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3631        KK   CP205
3632        KM       ADD HYDROGRAPHS AT CP205
3633        HC       2   57.82
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3634          KK    R205
3635          KM        ROUTE FLOW FROM CP205 TO CP206
3636          RS       1              -1       0
3637          RC    .022    .016    .022    1100    .0009
3638          RX    1000    1001    1008    1020    1030    1042    1074    1075
3639          RY    1080    1080    1072    1066    1066    1072    1080    1080
              *

3640          KK     206
3641          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 206
3642          BA     .12
3643          LG     .35     .35    4.50     .33     .00
3644          UI     30.    102.    159.    252.    175.    112.     49.     27.     10.      7.
3645          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3646          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3647          KK   CP206
3648          KM        ADD HYDROGRAPHS AT CP206
3649          HC       2   58.31

3650          KK  RCP206
3651          KM        ADD HYDROGRAPHS AT RCP206
3652          HC       2   68.69

3653          KK   RR206
3654          KM        RIVER ROUTE RCP206 TO RCP228A
3655          RS       1              -1       0
3656          RC    .035    .035    .035    2500   .0036
3657          RX    1000    1001    1002    1042    2042    2082    2083    2084
3658          RY    1070    1070    1070    1060    1060    1070    1070    1070
              *

3659          KK    228A
3660          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 228A
3661          BA     .08
3662          LG     .35     .35    4.32     .37       6
3663          UI     27.     86.    150.    170.    102.     47.     22.      7.      5.      0.
3664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3665          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

3666          KK   AFR2K
3667          KM        ADD HYDROGRAPHS AT RCP228A
3668          HC       2   68.77

3669          KK   R228A
3670          KM        RIVER ROUTE RCP228A TO RCP245
3671          RS      11              -1       0
3672          RC    .035    .035    .035   10560   .0025
3673          RX    1000    1001    1002    1042    2042    2082    2083    2084
3674          RY    1066    1066    1066    1050    1050    1066    1066    1066
              * Sam Hanna 2/1/01
              * KK2R228A
              * KM      THIS IS AN ARTIFICALLY DIVERTED HYDROGRAPH TO BE RETRIEVED LATER
              * DTDR228A
              * DI     0    1000    2000    4000    6000    8000
              * DQ     0    1000    2000    4000    6000    8000
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 3  WITH NEW SOILS*****
              * ************************************************************************
              *
              * 1D10 AND 2D10 ARE MODIFICATIONS PER FLOODPLAIN ANALYSIS BY URS

3675          KK    1D10
3676          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3677          DR  1DI188

3678          KK    2D10
3679          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3680          DR  2DI188
```

```
3681          KK   1I188
3682          KM   ADD ORIGINAL DIVERT 2DI188 (DI188) WITH ADDED DIVERT 1DI188
3683          HC       2   11.08

3684          KK     R10
3685          KM        ROUTE FLOW AT CP10 TO CP188
3686          RS       1             -1       0
3687          RC     .06     .04     .06    1000   .0044
3688          RX    1000    1050    1150    1240    1300    1350    1400    1405
3689          RY    1228  1227.5    1226    1225    1225    1226  1227.5    1228
              *

3690          KK     188
3691          KM        RUNOFFF HYDROGRAPH FROM SUB-BASIN 188
3692          BA     .19
3693          LG     .35     .33    4.44     .34     .00
3694          UI     29.    120.    179.    274.    326.    221.    152.     76.     44.     24.
3695          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
3696          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                          HEC-1 INPUT                                          PAGE 90

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

3697          KK   CP188
3698          KM        ADD HYDROGRAPHS AT CP188
3699          HC       2   11.08

3700          KK    R188
3701          KM        ROUTE FLOW FROM CP188 TO CP207A
3702          RS       3             -1
3703          RC    .025    .022    .025    5460   .0079
3704          RX    1000    1100    1200    1210    1230    1335    1355    1510
3705          RY    1240    1214    1212    1210    1210    1212    1214    1240
              *

3706          KK    207A
3707          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207A
3708          BA     .50
3709          LG     .35     .34    4.15     .40     .00
3710          UI     53.    124.    244.    314.    400.    593.    595.    448.    350.    270.
3711          UI    176.     93.     76.     53.     20.     16.     16.     16.      0.      0.
3712          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3713          KK  CP207A
3714          KM        ADD HYDROGRAPHS AT CP207A
3715          HC       2   11.58

3716          KK   R207A
              * KO     1                                21
3717          KM        ROUTE FLOW FROM CP207A TO CP214
3718          RS       2             -1
3719          RC    .022    .022    .025    3200   .0069
3720          RX    1000    1020    1030    1045    1065    1085    1325    1490
3721          RY    1179    1176    1172    1170    1170    1172    1174    1176
              *

3722          KK     214
              * KO     1                                21
3723          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 214
3724          BA     .16
3725          LG     .35     .35    4.16     .40     .00
3726          UI     22.     81.    127.    176.    267.    201.    146.    100.     47.     31.
3727          UI     18.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3728          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3729          KK   CP214
              * KO     1                                21
3730          KM        ADD HYDROGRAPHS AT CP214
3731          HC       2   11.74

3732          KK    R214
3733          KM        ROUTE FLOW FROM CP214 TO CP215
3734          RS       1             -1
3735          RC    .022    .022    .025    2250   .0049
3736          RX    1000    1010    1030    1045    1070    1150    1190    1310
```

```
                                                                                LABCARD
3737          RY    1061    1060    1058    1056    1056    1058    1060    1062
              *
1                                          HEC-1 INPUT                                                          PAGE 91

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

3738          KK    215A
3739          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215A
3740          BA     .45
3741          LG     .35     .33    4.32     .37     .00
3742          UI     47.    103.    209.    271.    341.    487.    551.    410.    325.    252.
3743          UI    178.     95.     77.     47.     29.     14.     14.     14.     14.      0.
3744          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3745          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3746          KK   R215A
3747          KM        ROUTE FLOW FROM CP215A TO CP215
3748          RS       2      -1
3749          RC    .025     .02    .025    2800   .0046
3750          RX    1000    1190    1425    1435    1455    1478    1479    1480
3751          RY    1158    1156    1154    1152    1152    1159    1159    1159
              *

3752          KK     215
3753          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215
3754          BA     .35
3755          LG     .35     .34    4.66     .31     .00
3756          UI     39.     95.    181.    233.    303.    457.    398.    306.    235.    177.
3757          UI     98.     65.     45.     29.     12.     12.     12.     12.      0.      0.
3758          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *
              * THE FOLLOWING DIVERSIONS ARE SPECIFIC TO EXISTING SUB BASIN BOUDNARIES AS
              * WELL AS THE 100-YEAR 24-HOUR STORM EVENT.  ANY FUTURE  MODELS BASED
              * ON THIS ADMP UPDATE MUST RE-EVALUATE ALL OF THE DIVERSIONS ASSOCIATED WITH
              * PERRYVILLE ROAD AND 185TH AVENUE FOLLOWING BELOW.
              *

3759          KK   1I215
3760          KM        ADD HYDROGRAPHS AT CP215
3761          HC       2     .80

3762          KK   2I215
3763          KM        ADD HYDROGRAPHS AT CP215
3764          HC       2   12.54

3765          KK   3I215
3766          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3767          DT  1DI216
3768          DI       0    1297    2784    4733
3769          DQ       0       0    1559    2741

3770          KK   4I215
3771          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3772          DT  2DI216
3773          DI       0      52    1225    1992
3774          DQ       0       0     722    1150
1                                          HEC-1 INPUT                                                          PAGE 92

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

3775          KK   5I215
3776          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3777          DT  3DI216
3778          DI       0     190     503     842
3779          DQ       0       0       0       0

3780          KK   CP215
3781          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3782          DT  4DI216
3783          DI       0      51     516     842
3784          DQ       0       0     154     194

3785          KK    R215
3786          KM        ROUTE FLOW FROM CP215 TO CP233
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```
3787          RS       3              -1
3788          RC     .02     .02    .025    5280   .0032
3789          RX    1000    1010    1020    1030    1050    1070    1190    1540
3790          RY    1043    1042    1040    1038    1038    1040    1042    1044
              *

3791          KK     233
3792          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 233
3793          BA     .50
3794          LG     .35     .35    4.10     .41     .00
3795          UI     49.     94.    206.    267.    331.    430.    604.    483.    386.    306.
3796          UI    242.    163.     86.     76.     49.     31.     15.     15.     15.     15.
3797          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3798          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3799          KK   CP233
3800          KM        ADD HYDROGRAPHS AT CP233
3801          HC       2   13.04

3802          KK    R233
3803          KM        ROUTE FLOW FROM CP233 TO CP234
3804          RS       2              -1
3805          RC    .075    .035    .035    2640   .0057
3806          RX    1000    1200    1540    1930    1965    1980    2009    2010
3807          RY    1031    1030    1028    1026    1026    1028    1029    1029
              *

3808          KK     216
3809          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 216
3810          BA     .51
3811          LG     .46     .09    4.10     .63     .00
3812          UI     26.     26.     27.     88.    108.    128.    145.    160.    180.    203.
3813          UI    240.    304.    342.    285.    246.    220.    198.    172.    154.    134.
3814          UI    117.     89.     63.     47.     44.     43.     27.     26.     26.      9.
3815          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
3816          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * SPLIT SUB BASIN 216 INTO OVERLAND FLOW SEGMENTS FOR COMBINATION AT EACH DIVERT
              * LOCATION ALONG 183RD AVENUE
```



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

3817          KK  1D216I
3818          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3819          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3820          DT  1OL216
3821          DI       0      50    1000
3822          DQ       0      50      50

3823          KK  2D216I
3824          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3825          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3826          DT  2OL216
3827          DI       0      50    1000
3828          DQ       0      50      50

3829          KK  3D216I
3830          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3831          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3832          DT  3OL216
3833          DI       0      50    1000
3834          DQ       0      50      50

3835          KK  4D216I
3836          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3837          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3838          DT  4OL216
3839          DI       0      50    1000
3840          DQ       0      50      50

3841          KK  5D216I
3842          KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
3843          KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
3844          DT  5OL216
3845          DI       0      50    1000
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                                                                                LABCARD
3846          DQ       0      50      50

3847          KK   1D215
3848          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3849          DR  1DI216
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3850          KK  1DI186
3851          KM   ASSUME APPROX. 17% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3852          KM   183RD AVENUE
3853          DT   3D183
3854          DI       0    1560    2500
3855          DQ       0    1285    2060

3856          KK   1I216
3857          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3858          HC       2   13.58
1                                   HEC-1 INPUT                                          PAGE 94

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

3859          KK   1D216
3860          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3861          DT  1DI217
3862          DI       0      72     325     553    1560    1600
3863          DQ       0       0     142     282     900     930

3864          KK   1216I
3865          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3866          DR  1OL216

3867          KK  1DI183
3868          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3869          DR   3D183

3870          KK   2I216
3871          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3872          HC       3   13.58
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3873          KK  2DI186
3874          KM   ASSUME APPROX. 28% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3875          KM   183RD AVENUE
3876          DT   4D183
3877          DI       0    1285    2500
3878          DQ       0     925    1800

3879          KK   2D216
3880          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3881          DT  2DI217
3882          DI       0     132     556     945    1560    1600
3883          DQ       0       0     237     414     680     690

3884          KK   2216I
3885          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3886          DR  2OL216

3887          KK  2DI183
3888          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3889          DR   4D183

3890          KK   3I216
3891          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3892          HC       3   13.58
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3893          KK  3DI186
3894          KM   ASSUME APPROX. 41% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3895          KM   183RD AVENUE
3896          DT   5D183
3897          DI       0     925    2500
3898          DQ       0     380    1030
1                                   HEC-1 INPUT                                          PAGE 95

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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3899          KK   3D216
3900          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3901          DT  3DI217
3902          DI       0     800     831    1413    1560    1600
3903          DQ       0       0       7      55      58      60

3904          KK   3216I
3905          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3906          DR  3OL216

3907          KK  3DI183
3908          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3909          DR   5DI83

3910          KK   4I216
3911          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3912          HC       3   13.58

3913          KK   2D215
3914          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3915          DR  2DI216

3916          KK   2I216
3917          KM   COMBINE WITH FLOWS FROM THE WEST AT 183RD AVE.
3918          HC       2   13.58

3919          KK   3D215
3920          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3921          DR  3DI216

3922          KK   3I216
3923          KM   COMBINE WITH FLOW FROM WEST JUST US OF CP216
3924          HC       2   13.58

3925          KK   4D216
3926          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3927          DT  4DI217
3928          DI       0    1008    2008    3413
3929          DQ       0       0     151     457

3930          KK   4D215
3931          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3932          DR  4DI216

3933          KK   5I216
3934          KM   COMBINE WITH FLOW FROM WEST JUST US CP216
3935          HC       2   13.58

3936          KK   4216I
3937          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3938          DR  4OL216
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3939          KK   6I216
3940          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3941          HC       2   13.58

3942          KK   5D216
3943          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3944          DT  5DI217
3945          DI       0     308    2532    4304
3946          DQ       0       0     911    1538

3947          KK   5216I
3948          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3949          DR  5OL216

3950          KK   7I216
3951          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3952          HC       2   13.58
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3953          KK   6D216
3954          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3955          DT  6DI217
3956          DI       0     123    1247    2766
3957          DQ       0       0     424     980
              * KK CP216
              * KM COMBINE HYDROGRAPHS AT CP216
              * HC     2   13.58
              * KK RD215
              * KM ROUTE FLOW PERRYVILLE OVERLAND THROUGH SUB 216
              * RS   4.3       -1
              * RC 0.035   0.035   0.035    4745  0.0053
              * RX     0     290     355     452     524     568     750     868
              * RY  1163    1162    1160    1160    1162    1162    1160  1162.5

3958          KK    R216
3959          KM        ROUTE FLOW FROM CP216 TO CP234
3960          RS       4              -1
3961          RC     .02      .02     .04    5280   .0044
3962          RX    1000     1015    1020    1035    1070    1080    1140    1400
3963          RY    1031     1030    1028    1026    1026    1028    1030    1032
              *

3964          KK     234
3965          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 234
3966          BA     .53
3967          LG     .50      .00    4.05     .72     .00
3968          UI     22.      22.     22.     35.     74.     87.    103.    113.    124.    134.
3969          UI    148.     164.    179.    214.    259.    289.    250.    219.    197.    181.
3970          UI    167.     149.    136.    122.    110.    100.     82.     63.     43.     39.
3971          UI     37.      36.     30.     22.     22.     22.     11.      7.      7.      7.
3972          UI      7.       7.      7.      7.      7.      7.      7.      7.      0.      0.
3973          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

3974          KK   1I234
3975          KM        ADD HYDROGRAPHS AT CP234
3976          HC       2    1.04

3977          KK   CP234
3978          KM        ADD HYDROGRAPHS AT CP234
3979          HC       2   14.08

3980          KK    D234
3981          KM        DIVERT FROM CP234 TO CP248
3982          DT   1D248
3983          DI       0     290     677    3521   13393
3984          DQ       0       0     174    1824   10224

3985          KK    R234
3986          KM        ROUTE REMAINDER FROM CP234 TO CP235
3987          RS       3              -1
3988          RC     .06     .025     .025    2640   .0023
3989          RX    1000    1460    1900    1915    1930    1958    1959    1960
3990          RY    1018    1016    1016    1014    1014    1015    1015    1015
              *

3991          KK     207
3992          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207
3993          BA    1.00
3994          LG     .50      .00    4.20     .66     .00
3995          UI     39.      39.     39.     39.    125.    143.    169.    187.    209.    222.
3996          UI    241.     263.    291.    316.    374.    445.    510.    454.    399.    358.
3997          UI    329.     306.    280.    252.    231.    210.    191.    174.    145.    111.
3998          UI     83.      68.     66.     63.     63.     40.     39.     39.     39.     14.
3999          UI     12.      12.     12.     12.     12.     12.     12.     12.     12.     12.
4000          UI     12.      12.      0.      0.      0.      0.      0.      0.      0.      0.
4001          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

4002          KK    D207
4003          KM        DIVERT FROM CP207 TO CP208
4004          DT   2D208
4005          DI       0    1709   12182
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4006          DQ       0    1314    6607

4007          KK    R207
4008          KM        ROUTE REMAINDER FROM CP207 TO CP217
4009          RS       8              -1
4010          RC    .035    .035    .075    5280   .0057
4011          RX    1000    1001    1002    1015    1060    1490    1740    2250
4012          RY    1151    1151    1151    1150    1150    1152    1154    1156
              *

4013          KK     217
4014          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 217
4015          BA     .49
4016          LG     .50     .00    4.66     .53     .00
4017          UI     22.     22.     22.     54.     81.     98.    112.    124.    135.    150.
4018          UI    167.    188.    233.    278.    278.    235.    207.    188.    172.    152.
1                                          HEC-1 INPUT                                          PAGE 98

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

4019          UI    137.    122.    109.     95.     73.     54.     40.     38.     37.     31.
4020          UI     22.     22.     22.      7.      7.      7.      7.      7.      7.      7.
4021          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
4022          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4023          KK   1D216
4024          KM   RETURN DIVERT EAST AT 183RD AVE
4025          DR  1DI217

4026          KK   2I216
4027          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4028          HC       2   12.54

4029          KK   2D216
4030          KM   RETURN DIVERT EAST AT 183RD AVE
4031          DR  2DI217

4032          KK   3I216
4033          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4034          HC       2   12.54

4035          KK   3D216
4036          KM   RETURN DIVERT EAST AT 83RD AVE
4037          DR  3DI217

4038          KK   4I216
4039          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4040          HC       2   12.54

4041          KK   4D216
4042          KM   RETURN DIVERT EAST AT 83RD AVE
4043          DR  4DI217

4044          KK   5I216
4045          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4046          HC       2   12.54

4047          KK   5D216
4048          KM   RETURN DIVERT EAST AT 83RD AVE
4049          DR  5DI217

4050          KK   6I216
4051          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4052          HC       2   12.54

4053          KK   6D216
4054          KM   RETURN DIVERT EAST AT 83RD AVE
4055          DR  6DI217

4056          KK   7I216
4057          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4058          HC       2   12.54
1                                          HEC-1 INPUT                                          PAGE 99

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

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4059          KK   RD216
4060          KM   ROUTE FLOW 183RD OVERLAND THROUGH SUB 217
4061          RS     2.8          -1
4062          RC   0.035   0.035   0.035  4949.7  0.0057
4063          RX       0     849  1113.6    1552    1981    2488    2616    2990
4064          RY    1156    1154    1153    1153  1151.5    1152    1154    1156

4065          KK   CP217
4066          KM        ADD HYDROGRAPHS AT CP217
4067          HC       2   14.03

4068          KK    D217
4069          KM        DIVERT FROM CP217 TO CP218
4070          DT   DI218
4071          DI       0      90     884    6576   28127
4072          DQ       0      51     163    1840   10674

4073          KK    R217
4074          KM        ROUTE REMAINDER FROM CP217 TO CP235
4075          RS       7          -1
4076          RC     .02     .03    .075    5280   .0036
4077          RX    1000    1020    1035    1040    1050    1300    1640    1790
4078          RY    1015    1014    1015    1014    1014    1016    1018    1019
              *

4079          KK     235
4080          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 235
4081          BA     .47
4082          LG     .50     .00    4.00     .74     .00
4083          UI     19.     19.     19.     28.     63.     74.     89.     98.    106.    115.
4084          UI    126.    140.    152.    178.    216.    251.    228.    198.    177.    162.
4085          UI    150.    135.    122.    112.     99.     91.     79.     62.     49.     34.
4086          UI     33.     31.     31.     21.     19.     19.     19.      6.      6.      6.
4087          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
4088          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4089          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4090          KK   1I235
4091          KM        ADD HYDROGRAPHS AT CP235
4092          HC       2    1.96

4093          KK   CP235
4094          KM        ADD HYDROGRAPHS AT CP235
4095          HC       2   16.04

4096          KK    D235
4097          KM        DIVERT FROM CP235 TO CP248
4098          DT   2D248
4099          DI       0     158     313    4490    9737
4100          DQ       0       0     155    2380    5077
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4101          KK    R235
4102          KM        ROUTE REMAINDER FROM CP235 TO CP236
4103          RS       5          -1
4104          RC     .04     .02     .02    5280   .0051
4105          RX    1000    1640    1660    1675    1685    1778    1779    1780
4106          RY    1097    1094    1095    1094    1094    1095    1095    1095

4107          KK    D191
4108          KM        RETURN DIVERTED HYDROGRAPH AT CP291 IN THE WTPHS1 HEC-1 MODEL
4109          DR   1D208

4110          KK    R191
4111          KM        ROUTE FLOW FROM CP191 TO CP208
4112          RS       5          -1       0
4113          RC    .022    .022    .050    5280   .0040
4114          RX    1000    1001    1002    1045    1110    1130    1160    1890
4115          RY    1143    1143    1143    1142    1142    1143  1141.5    1150
              *

4116          KK     208
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4117          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 208
4118          BA    1.00
4119          LG     .50     .00    4.20     .66     .00
4120          UI     40.     40.     40.     57.    133.    156.    188.    206.    224.    243.
4121          UI    265.    294.    320.    371.    453.    523.    489.    424.    379.    346.
4122          UI    321.    290.    262.    239.    215.    195.    172.    137.    110.     72.
4123          UI     72.     67.     67.     50.     40.     40.     40.     17.     12.     12.
4124          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.      0.
4125          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4126          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4127          KK   1I208
4128          KM        ADD HYDROGRAPHS AT CP208
4129          HC       2   13.18

4130          KK    D207
4131          KM        RETURN DIVERT AT CP207
4132          DR   2D208

4133          KK    R207
4134          KM        ROUTE FLOW FROM CP207 TO CP208
4135          RS       8      -1
4136          RC    .075    .035    .035    5280   .0059
4137          RX    1000    1001    1350    2000    2020    2038    2039    2040
4138          RY    1056    1056    1054    1052    1052    1053    1053    1053

4139          KK   CP208
4140          KM        ADD HYDROGRAPHS AT CP208
4141          HC       2   14.18
```



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

4142          KK   1D208
4143          KM        DIVERT FROM CP208 TO CP219
4144          DT   1D219
4145          DI       0     599    5129    9299
4146          DQ       0     406    1039    1295

4147          KK   2D208
4148          KM        DIVERT FROM CP208 TO CP209A
4149          DT  DI209A
4150          DI       0     193    4090    8004
4151          DQ       0     193    4066    7610

4152          KK    R208
4153          KM        ROUTE REMAINDER FROM CP208 TO CP218
4154          RS      13      -1
4155          RC    .025    .025    .035    5280   .0047
4156          RX    1000    1001    1002    1010    1040    1055    1100    2010
4157          RY    1123    1123    1123    1122    1122    1125    1124    1130
              *

4158          KK     218
4159          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 218
4160          BA    1.00
4161          LG     .50     .00    4.05     .72     .00
4162          UI     39.     39.     39.     41.    128.    145.    172.    191.    212.    225.
4163          UI    246.    269.    295.    325.    385.    463.    514.    447.    393.    356.
4164          UI    327.    304.    275.    249.    229.    206.    188.    168.    136.    112.
4165          UI     71.     69.     65.     64.     57.     39.     39.     39.     31.     12.
4166          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
4167          UI     12.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4168          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4169          KK   1I218
4170          KM        ADD HYDROGRAPHS AT CP218
4171          HC       2   15.18

4172          KK    D217
4173          KM        RETURN DIVERT AT CP217
4174          DR   DI218

4175          KK    R217
4176          KM        ROUTE FLOW FROM CP217 TO CP218
```

```
4177          RS      10                -1
4178          RC    .075     .035     .035     5280    .0047
4179          RX    1000     1190     1650     1980     2030     2048     2049     2050
4180          RY    1123     1122     1120     1118     1118     1119     1119     1119

4181          KK   CP218
4182          KM        ADD HYDROGRAPHS AT CP218
4183          HC       2   28.21
```



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

4184          KK   1D218
4185          KM        DIVERT FROM CP218 TO CP237
4186          DT   DI237
4187          DI       0      68    1086   10670
4188          DQ       0      68     664    2533

4189          KK   2D218
4190          KM        DIVERT FROM CP218 TO CP219
4191          DT   2D219
4192          DI       0       0     422    8137
4193          DQ       0       0      99    2461

4194          KK    R218
4195          KM        ROUTE REMAINDER FROM CP218 TO CP236
4196          RS       5                -1
4197          RC     .02     .02     .075     5280    .0040
4198          RX    1000    1001     1002     1020     1090     1100     1210     1720
4199          RY    1097    1097     1097     1096     1096     1099     1098     1102
              *

4200          KK     236
4201          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 236
4202          BA    1.00
4203          LG     .50     .00     4.44      .59      .00
4204          UI     38.     38.      38.      38.     113.     137.     160.     180.     199.     214.
4205          UI    229.    251.     276.     297.     343.     419.     470.     474.     411.     366.
4206          UI    334.    310.     288.     261.     236.     220.     196.     181.     161.     132.
4207          UI    108.     70.      67.      64.      62.      60.      38.      38.      38.      38.
4208          UI     12.     12.      12.      12.      12.      12.      12.      12.      12.      12.
4209          UI     12.     12.      12.       0.       0.       0.       0.       0.       0.       0.
4210          UI      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.

4211          KK   1I236
4212          KM        ADD HYDROGRAPHS AT CP236
4213          HC       2   16.67

4214          KK   CP236
4215          KM        ADD HYDROGRAPHS AT CP236
4216          HC       2   26.34

4217          KK   1D236
4218          KM        DIVERT FROM CP236 TO CP249
4219          DT   DI249
4220          DI       0     236     411    6597   30351
4221          DQ       0       0      38    2223    8777

4222          KK   2D236
4223          KM        DIVERT FROM CP236 TO CP250
4224          DT   1D250
4225          DI       0     236     373    4374   21574
4226          DQ       0       0     124    2251    8636
```



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

4227          KK    R236
4228          KM        ROUTE REMAINDER FROM CP236 TO CP237
4229          RS       2                -1
4230          RC     .02     .02      .02     2640    .0038
4231          RX    1000    1070     1100     1120     1150     1178     1179     1180
4232          RY    1079    1075     1082     1076     1076     1077     1077     1077
              *
```

```
4233          KK    209A
4234          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 209A
4235          BA     .50
4236          LG     .50     .00    4.10     .70     .00
4237          UI     22.     22.     22.     42.     75.     89.    103.    115.    124.    137.
4238          UI    152.    166.    191.    238.    275.    260.    224.    199.    181.    167.
4239          UI    149.    134.    121.    108.     99.     80.     62.     40.     38.     36.
4240          UI     35.     26.     22.     22.     20.      7.      7.      7.      7.      7.
4241          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
4242          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4243          KK   1D208
4244          KM        RETURN DIVERT AT CP208
4245          DR  DI209A

4246          KK    R208
4247          KM        ROUTE FLOW FROM CP208 TO CP209A
4248          RS       2              -1
4249          RC     .75     .03     .03    2640   .0045
4250          RX    1000    1490    1890    1950    1970    1998    1999    2000
4251          RY    1130    1128    1126    1124    1124    1125    1125    1125

4252          KK  CP209A
4253          KM        ADD HYDROGRAPHS AT CP209A
4254          HC       2   14.68

4255          KK  1D209A
4256          KM        DIVERT FROM CP209A TO CP220
4257          DT   1D220
4258          DI       0      57    5215   28650
4259          DQ       0      39    1907    3775

4260          KK  2D209A
4261          KM        DIVERT FROM CP209A TO CP209
4262          DT   2D209
4263          DI       0      18    3308   24875
4264          DQ       0       0     900   10854

4265          KK   R209A
4266          KM        ROUTE REMAINDER FROM CP209A TO CP219
4267          RS       7              -1
4268          RC    .035    .035    .075    5280   .0045
4269          RX    1000    1001    1002    1010    1200    1500    1880    2100
4270          RY    1113    1113    1113    1112    1112    1114    1116    1117
```



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

4271          KK   2D208
4272          KM        RETURN DIVERT AT CP208
4273          DR   1D219

4274          KK    R208
4275          KM        ROUTE FLOW FROM CP208 TO CP219
4276          RS      22              -1
4277          RC    .075    .075    .075    6070   .0059
4278          RX    1000    1001    1002    1270    2570    2698    2699    2700
4279          RY    1115    1115    1115    1114    1114    1115    1115    1115
              *

4280          KK     219
4281          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 219
4282          BA     .50
4283          LG     .50     .00    4.05     .72     .00
4284          UI     22.     22.     22.     45.     77.     92.    105.    119.    128.    140.
4285          UI    158.    173.    202.    247.    289.    253.    220.    196.    180.    164.
4286          UI    146.    132.    119.    106.     93.     72.     55.     39.     38.     36.
4287          UI     33.     22.     22.     22.     12.      7.      7.      7.      7.      7.
4288          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
4289          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4290          KK   1I219
4291          KM        ADD HYDROGRAPHS AT CP219
4292          HC       2   14.68
```

```
4293          KK   2I219
4294          KM        ADD HYDROGRAPHS AT CP219
4295          HC       2   15.18

4296          KK   2D218
4297          KM        RETURN DIVERT AT CP218
4298          DR   2D219

4299          KK    R218
4300          KM        ROUTE FLOW FROM CP218 TO CP219
4301          RS      12          -1
4302          RC    .075      .04      .04     2640   .0045
4303          RX    1000     1110     1290     1600    2050    2108    2109    2110
4304          RY    1101     1100     1098     1096    1096    1097    1097    1097

4305          KK   CP219
4306          KM        ADD HYDROGRAPHS AT CP219
4307          HC       2   29.21

4308          KK   1D219
4309          KM        DIVERT FROM CP219 TO CP238
4310          DT   DI238
4311          DI       0       70     1410   16774
4312          DQ       0       68      990   10452
```



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

4313          KK   2D219
4314          KM        DIVERT FROM CP219 TO CP220
4315          DT   2D220
4316          DI       0        2      420    6322
4317          DQ       0        0      174    3073

4318          KK    R219
4319          KM        ROUTE REMAINDER FROM CP219 TO CP237
4320          RS      14              -1
4321          RC    .035     .035     .075     5280   .0036
4322          RX    1000     1001     1002     1020    1300    1820    2099    2100
4323          RY    1087     1087     1087     1086    1086    1088    1089    1089

4324          KK   1D218
4325          KM        RETURN DIVERT AT CP218
4326          DR   DI237

4327          KK    R218
4328          KM        ROUTE FLOW FROM CP218 TO CP237
4329          RS      14              -1
4330          RC    .035     .035     .075     6700   .0046
4331          RX    1000     1001     1002     1020    1300    1820    2099    2100
4332          RY    1087     1087     1087     1086    1086    1088    1089    1089
              *

4333          KK     237
4334          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 237
4335          BA     .50
4336          LG     .50      .00     4.90      .51     .00
4337          UI     20.      20.      20.      23.     65.     74.     88.     98.    108.    115.
4338          UI    126.     139.     151.     169.    204.    241.    255.    219.    195.    176.
4339          UI    162.     150.     135.     123.    113.    100.     93.     80.     62.     49.
4340          UI     35.      35.      32.      32.     23.     20.     20.     20.      9.      6.
4341          UI      6.       6.       6.       6.      6.      6.      6.      6.      6.      6.
4342          UI      6.       0.       0.       0.      0.      0.      0.      0.      0.      0.
4343          UI      0.       0.       0.       0.      0.      0.      0.      0.      0.      0.

4344          KK   1I237
4345          KM        ADD HYDROGRAPHS AT CP237
4346          HC       2   16.17

4347          KK   2I237
4348          KM        ADD HYDROGRAPHS AT CP237
4349          HC       2   17.17

4350          KK   CP237
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4351          KM        ADD HYDROGRAPHS AT CP237
4352          HC       2   27.84
1                                   HEC-1 INPUT                                                    PAGE106

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

4353          KK   1D237
4354          KM        DIVERT FROM CP237 TO CP250
4355          DT   2D250
4356          DI       0     292     346     629    3340   24038
4357          DQ       0       0       0     103    1577   11878

4358          KK   2D237
4359          KM        DIVERT FROM CP237 TO CP250A
4360          DT  1D250A
4361          DI       0     292     346     526    1763   12160
4362          DQ       0       0      54     203     974    3738

4363          KK    R237
4364          KM        ROUTE REMAINDER FROM CP237 TO CP238
4365          RS       1              -1
4366          RC     .04     .02     .02    2640   .0049
4367          RX    1000    1545    1560    1570    1585    1618    1619    1620
4368          RY    1069    1066    1067  1062.5  1062.5    1067    1067    1067

4369          KK   1D192
4370          KM        RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4371          DR   1D209

4372          KK    R192
4373          KM        ROUTE FLOW FROM CP192 TO CP209
4374          RS       5              -1       0
4375          RC    .035    .035     .15    5280   .0045
4376          RX    1000    1001    1002    1015    1200    1470    1840    2300
4377          RY    1111    1111    1111    1110    1110    1112    1114    1116
              *

4378          KK     209
4379          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 209
4380          BA     .50
4381          LG     .50     .00    4.58     .55     .00
4382          UI     22.     22.     22.     51.     80.     97.    111.    123.    134.    148.
4383          UI    166.    183.    221.    273.    289.    244.    215.    193.    178.    158.
4384          UI    141.    128.    113.    103.     82.     64.     40.     40.     37.     37.
4385          UI     23.     22.     22.     14.      7.      7.      7.      7.      7.      7.
4386          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
4387          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4388          KK   1I209
4389          KM        ADD HYDROGRAPHS AT CP209
4390          HC       2   13.68

4391          KK  2D209A
4392          KM        RETURN DIVERT AT CP209A
4393          DR   2D209
1                                   HEC-1 INPUT                                                    PAGE107

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

4394          KK   R209A
4395          KM        ROUTE FLOW FROM CP209A TO CP209
4396          RS       7              -1
4397          RC    .075    .035    .035    2640   .0057
4398          RX    1000    1240    1700    1980    1990    3028    3029    3030
4399          RY    1117    1116    1114    1112    1112    1113    1113    1113

4400          KK   CP209
4401          KM        ADD HYDROGRAPHS AT CP209
4402          HC       2   16.18

4403          KK   1D209
4404          KM        DIVERT FROM CP209 TO CP221
4405          DT   1D221
4406          DI       0      39    3983   16787
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4407          DQ       0      34    1666    5085

4408          KK   2D209
4409          KM        DIVERT FROM CP209 TO CP210
4410          DT   2D210
4411          DI       0       5    2317   11702
4412          DQ       0       0     703    5354

4413          KK    R209
4414          KM        ROUTE REMAINDER FROM CP209 TO CP220
4415          RS       7              -1
4416          RC    .035    .035    .075    5280   .0040
4417          RX    1000    1001    1002    1015    1180    1560    1820    2050
4418          RY    1091    1091    1091    1090    1090    1092    1094    1095

4419          KK  1D209A
4420          KM        RETURN DIVERT AT CP209A
4421          DR   1D220

4422          KK   R209A
4423          KM        ROUTE FLOW FROM CP209A TO CP220
4424          RS      12              -1
4425          RC    .075    .075    .075    6230   .0058
4426          RX    1000    1001    1002    1090    1280    1298    1299    1300
4427          RY    1140    1107    1107    1106    1106    1107    1107    1140
              *

4428          KK     220
4429          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 220
4430          BA     .50
4431          LG     .50     .00    4.20     .66     .00
4432          UI     22.     22.     22.     41.     74.     89.    103.    115.    124.    136.
4433          UI    151.    166.    189.    237.    272.    262.    224.    199.    182.    167.
4434          UI    150.    134.    122.    109.    100.     81.     62.     42.     38.     36.
4435          UI     35.     27.     22.     22.     21.      7.      7.      7.      7.      7.
4436          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
4437          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

4438          KK   1I220
4439          KM        ADD HYDROGRAPHS AT CP220
4440          HC       2   15.18

4441          KK   2I220
4442          KM        ADD HYDROGRAPHS AT CP220
4443          HC       2   16.68

4444          KK   2D219
4445          KM        RETURN DIVERT AT CP219
4446          DR   2D220

4447          KK    R219
4448          KM        ROUTE FLOW FROM CP219 TO CP220
4449          RS       3              -1
4450          RC    .075    .020    .020    2640   .0045
4451          RX    1000    1460    1670    1700    1730    1768    1769    1770
4452          RY    1088    1085    1087    1080    1080    1087    1087    1087

4453          KK   CP220
4454          KM        ADD HYDROGRAPHS AT CP220
4455          HC       2   30.71

4456          KK   1D220
4457          KM        DIVERT FROM CP220 TO CP239
4458          DT   DI239
4459          DI       0     735    9080   34764
4460          DQ       0     537    3765    9314

4461          KK   2D220
4462          KM        DIVERT FROM CP220 TO CP221
4463          DT   2D221
4464          DI       0     198    5315   25450
4465          DQ       0     174    4011   17035
```

```
4466          KK    R220
4467          KM        ROUTE REMAINDER FROM CP220 TO CP238
4468          RS      15              -1
4469          RC    .035    .035    .075    5280   .0038
4470          RX    1000    1001    1002    1020    1150    1670    1869    1870
4471          RY    1033    1033    1033    1032    1032    1034    1036    1036

4472          KK   1D219
4473          KM        RETURN DIVERT AT CP219
4474          DR   DI238

4475          KK    R219
4476          KM        ROUTE FLOW FROM CP219 TO CP238
4477          RS       8              -1
4478          RC    .035    .035    .075    6230   .0051
4479          RX    1000    1001    1002    1020    1150    1670    1869    1870
4480          RY    1033    1033    1033    1032    1032    1034    1036    1036
              *
1                                   HEC-1 INPUT                                          PAGE109

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


4481          KK     238
4482          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 238
4483          BA    .50
4484          LG    .50     .00    4.90     .47     .00
4485          UI    21.     21.     21.     34.     70.     83.     98.    108.    118.    127.
4486          UI   140.    156.    170.    204.    247.    273.    234.    206.    185.    170.
4487          UI   157.    140.    127.    115.    104.     93.     76.     60.     39.     37.
4488          UI    35.     34.     27.     21.     21.     21.      9.      6.      6.      6.
4489          UI     6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
4490          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4491          KK   1I238
4492          KM        ADD HYDROGRAPHS AT CP238
4493          HC       2   17.17

4494          KK   2I238
4495          KM        ADD HYDROGRAPHS AT CP238
4496          HC       2   18.67

4497          KK   CP238
4498          KM        ADD HYDROGRAPHS AT CP238
4499          HC       2   30.34

4500          KK   1D238
4501          KM        DIVERT FROM CP238 TO CP250A
4502          DT  2D250A
4503          DI       0     180     568    2711    8584   18252
4504          DQ       0       0       0     184     837    2617

4505          KK   2D238
4506          KM        DIVERT FROM CP238 TO CP251
4507          DT   1D251
4508          DI       0     180     568    2527    7747   15635
4509          DQ       0       0       0     522    2262    4829

4510          KK    R238
4511          KM        ROUTE REMAINDER FROM CP238 TO CP239
4512          RS       4              -1
4513          RC    .075     .02     .02    2640   .0023
4514          RX    1000    1230    1780    1790    1800    1810    1829    1830
4515          RY    1062    1060    1058    1056    1056    1058    1059    1059

4516          KK   2D192
4517          KM        RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4518          DR   1D210

4519          KK    R192
4520          KM        ROUTE FLOW FROM CP192 TO CP210
4521          RS       7              -1       0
4522          RC     .15     .15     .15    5900   .0054
4523          RX    1000    1001    1002    1050    2400    2548    2549    2550
4524          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5
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1                                   HEC-1 INPUT                                                    PAGE110

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

4525            KK     210
4526            KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 210
4527            BA     .46
4528            LG     .50     .00    4.66     .53     .00
4529            UI     20.     20.     20.     42.     71.     85.     97.    110.    118.    130.
4530            UI    146.    160.    188.    230.    266.    232.    202.    180.    165.    151.
4531            UI    133.    121.    108.     97.     84.     65.     49.     36.     35.     33.
4532            UI     29.     20.     20.     20.      9.      6.      6.      6.      6.      6.
4533            UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
4534            UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4535            KK   1I210
4536            KM         ADD HYDROGRAPHS AT CP210
4537            HC       2   13.64

4538            KK   2D209
4539            KM         RETURN DIVERT AT CP209
4540            DR   2D210

4541            KK    R209
4542            KM         ROUTE FLOW FROM CP209 TO CP210
4543            RS       6              -1
4544            RC    .075    .035    .035    2560   .0030
4545            RX    1000    1001    1630    2120    2250    2268    2269    2270
4546            RY    1102    1102    1100    1098    1098    1099    1099    1099

4547            KK   CP210
4548            KM         ADD HYDROGRAPHS AT CP210
4549            HC       2   16.58

4550            KK    R210
4551            KM         ROUTE FLOW FROM CP210 TO CP221
4552            RS      14              -1
4553            RC    .035    .035    .075    5450   .0033
4554            RX    1000    1001    1002    1020    1280    1880    2469    2470
4555            RY    1083    1083    1083    1082    1082    1084    1086    1088

4556            KK   1D209
4557            KM         RETURN DIVERT AT CP209
4558            DR   1D221

4559            KK    R209
4560            KM         ROUTE FLOW FROM CP209 TO CP221
4561            RS      22              -1
4562            RC    .075    .075    .075    5910   .0044
4563            RX    1000    1001    1002    1120    2150    2278    2279    2280
4564            RY    1091    1091    1091    1090    1090    1091    1091    1091
                *
1                                   HEC-1 INPUT                                                    PAGE111

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

4565            KK     221
4566            KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 221
4567            BA     .48
4568            LG     .50     .00    4.90     .47     .00
4569            UI     20.     20.     20.     36.     69.     82.     96.    106.    116.    126.
4570            UI    139.    154.    172.    210.    250.    258.    220.    194.    176.    162.
4571            UI    147.    132.    120.    107.     97.     84.     66.     50.     36.     35.
4572            UI     33.     33.     20.     20.     20.     15.      6.      6.      6.      6.
4573            UI      6.      6.      6.      6.      6.      6.      6.      0.      0.      0.
4574            UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4575            KK   1I221
4576            KM         ADD HYDROGRAPHS AT CP221
4577            HC       2   16.66

4578            KK   2I221
4579            KM         ADD HYDROGRAPHS AT CP221
```

```
4580    HC       2   17.06

4581    KK   2D220
4582    KM        RETURN DIVERT AT CP220
4583    DR   2D221

4584    KK    R220
4585    KM        ROUTE FLOW FROM CP220 TO CP221
4586    RS       4             -1
4587    RC    .075    .035    .035    2200   .0023
4588    RX    1000    1001    1470    1870    2160    2178    2179    2180
4589    RY    1082    1082    1080    1078    1078    1081    1081    1081

4590    KK   CP221
4591    KM        ADD HYDROGRAPHS AT CP221
4592    HC       2   31.65

4593    KK    R221
4594    KM        ROUTE FLOW FROM CP221 TO CP239
4595    RS      20             -1
4596    RC    .075    .075    .075    5750   .0032
4597    RX    1000    1001    1002    1320    2850    2998    2999    2999
4598    RY    1100    1071    1071    1070    1070    1071    1071    1100

4599    KK   1D220
4600    KM        RETURN DIVERT AT CP220
4601    DR   DI239

4602    KK    R220
4603    KM        ROUTE FLOW FROM CP220 TO CP239
4604    RS      21             -1
4605    RC    .075    .075    .075    5750   .0045
4606    RX    1000    1001    1002    1320    2850    2998    2999    3000
4607    RY    1071    1071    1071    1070    1070    1071    1071    1071
        *
```



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

4608    KK     239
4609    KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 239
4610    BA     .48
4611    LG     .50     .00    4.90     .47     .00
4612    UI     21.     21.     21.     41.     72.     86.    100.    112.    120.    133.
4613    UI    148.    161.    188.    231.    269.    247.    213.    191.    173.    159.
4614    UI    142.    128.    115.    104.     92.     74.     59.     37.     37.     34.
4615    UI     34.     23.     21.     21.     17.      6.      6.      6.      6.      6.
4616    UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4617    UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4618    KK   1I239
4619    KM        ADD HYDROGRAPHS AT CP239
4620    HC       2   18.65

4621    KK   2I239
4622    KM        ADD HYDROGRAPHS AT CP239
4623    HC       2   19.59

4624    KK   CP239
4625    KM        ADD HYDROGRAPHS AT CP239
4626    HC       2   31.76

4627    KK   1D239
4628    KM        DIVERT FROM CP239 TO CP251
4629    DT   2D251
4630    DI       0     283     389     786    3215
4631    DQ       0       0      69     333    2481

4632    KK   2D239
4633    KM        DIVERT FROM CP239 TO CP252
4634    DT   DI252
4635    DI       0     283     320     632    3061
4636    DQ       0       0     0.0   179.0    2327

4637    KK    R239
```

```
4638          KM        ROUTE REMAINDER FROM CP239 TO CP240
4639          RS       5              -1
4640          RC     .05      .02     .02    2640   .0007
4641          RX    1000     1510    1755    1765    1775    1785    1809    1810
4642          RY    1058     1056    1054    1052    1052    1054    1055    1055
              *

4643          KK     240
4644          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 240
4645          BA     .40
4646          LG     .50      .00    4.74     .51     .00
4647          UI     19.      19.     19.     53.     71.     89.     99.    110.    121.    136.
4648          UI    151.     180.    225.    249.    209.    182.    163.    149.    131.    117.
4649          UI    104.      92.     79.     59.     41.     34.     32.     32.     21.     19.
4650          UI     19.      11.      6.      6.      6.      6.      6.      6.      6.      6.
4651          UI      6.       0.      0.      0.      0.      0.      0.      0.      0.      0.
4652          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                          HEC-1 INPUT                                          PAGE113

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

4653          KK   CP240
4654          KM        ADD HYDROGRAPHS AT CP240
4655          HC       2   32.16

4656          KK    R240
4657          KM        ROUTE FLOW FROM CP240 TO CP241
4658          RS       5              -1
4659          RC    .025      .02     .02    3600   .0011
4660          RX    1000     1280    1620    1745    1770    1798    1799    1800
4661          RY    1056     1054    1052    1050    1050    1051    1051    1051
              *

4662          KK     213
4663          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 213
4664          BA     .35
4665          LG     .35      .35    4.90     .28     .00
4666          UI     31.      51.     124.    164.    197.    244.    345.    374.    285.    235.
4667          UI    189.     151.     103.     56.     52.     32.     26.     10.     10.     10.
4668          UI     10.      10.      0.      0.      0.      0.      0.      0.      0.      0.
4669          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

4670          KK    R213
4671          KM        ROUTE FLOW FROM CP213 TO CP212
4672          RS       8              -1
4673          RC    .025     .022     .025    4060   .0002
4674          RX    1000     1001    1140    1220    1290    1478    1479    1480
4675          RY  1077.7   1077.7    1076    1074    1074    1076  1077.7  1077.7
              *

4676          KK     212
4677          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 212
4678          BA     .54
4679          LG     .50      .00    4.82     .49     .00
4680          UI     18.      18.     18.     18.     34.     59.     69.     80.     87.     95.
4681          UI    102.     109.    116.    127.    137.    148.    171.    205.    226.    232.
4682          UI    203.     183.    167.    155.    146.    135.    124.    114.    106.     97.
4683          UI     89.      84.     70.     57.     49.     32.     32.     31.     30.     30.
4684          UI     22.      18.     18.     18.     17.      6.      6.      6.      6.      6.
4685          UI      6.       6.      6.      6.      6.      6.      6.      6.      6.      0.
4686          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
4687          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
              * DI212 REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM      RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
              * DR DI212
              * KK  R193
              * KM      ROUTE FLOW FROM CP193 TO CP212
              * RS     5              -1       0
              * RC  .022     .022     .06    8500   .0038
              * RX  1000     1001    1002    1035    1070    1085    1140    2450
              * RY1095.5     1095    1095    1094    1094    1095    1094    1100
              * KK 1I212
              * KM      ADD HYDROGRAPHS AT CP212
              * HC     2   36.88
```

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

4688          KK   SR212
4689          KM        STORAGE ROUTE THROUGH CP212
4690          RS       1    STOR       0       0
4691          SV       0    2.48   13.74   26.18   63.33
4692          SQ       0       0       0     483    6314
4693          SE  1077.1    1078  1079.4    1080    1081

4694          KK   CP212
4695          KM        ADD HYDROGRAPHS AT CP212
4696          HC       2   37.23

4697          KK    R212
4698          KM        ROUTE FLOW FROM CP212 TO CP221A
4699          RS      11              -1
4700          RC    .025    .022    .025    5000   .0002
4701          RX    1000    1001    1070    1090    1220    1287    1289    1290
4702          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4703          KK   1D193
4704          KM        RETURN DIVERTED HYDROGRAPH FROM
4705          DR   DI211

4706          KK    R193
4707          KM        ROUTE FLOW FROM DI211 TO CP211
4708          RS      17              -1       0
4709          RC     .15     .15     .15    5300   .0030
4710          RX    1000    1001    1002    1050    2400    2548    2549    2550
4711          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5

4712          KK     211
4713          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 211
4714          BA     .49
4715          LG     .50     .00    4.82     .49     .00
4716          UI     21.     21.     21.     40.     72.     86.    100.    112.    121.    132.
4717          UI    147.    162.    183.    231.    264.    258.    220.    196.    178.    165.
4718          UI    147.    132.    120.    107.     98.     81.     60.     43.     37.     35.
4719          UI     35.     28.     21.     21.     21.      8.      6.      6.      6.      6.
4720          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4721          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4722          KK   CP211
4723          KM        COMBINE DIVERT FROM 193
4724          HC       2   13.87

4725          KK    R211
4726          KM        ROUTE FLOW FROM TO CP221A
4727          RS       9              -1
4728          RC    .035    .035    .075    5400   .0009
4729          RX    1000    1001    1002    1020    1100    1620    2119    2120
4730          RY    1081    1081    1081    1080    1080    1082    1084    1084
              *
```



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

4731          KK    221A
4732          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 221A
4733          BA     .31
4734          LG     .50     .00    4.82     .49     .00
4735          UI     12.     12.     12.     12.     36.     43.     50.     57.     63.     67.
4736          UI     72.     79.     87.     94.    109.    132.    151.    145.    126.    113.
4737          UI    103.     96.     88.     80.     73.     67.     60.     56.     48.     38.
4738          UI     32.     21.     21.     20.     19.     17.     12.     12.     12.      9.
4739          UI      4.      4.      4.      4.      4.      4.      4.      4.      4.      4.
4740          UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
4741          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4742          KK  1I221A
4743          KM        ADD HYDROGRAPHS AT CP221A
```

```
4744          HC       2     .80

4745          KK  SR221A
4746          KM        STORAGE ROUTE THROUGH CP221A
4747          RS       1    STOR       0       0
4748          SV       0    1.31    8.04   28.16      40
4749          SQ       0       0       0    2250    5262
4750          SE    1077    1078  1078.9    1080  1080.5

4751          KK  CP221A
4752          KM        ADD HYDROGRAPHS AT CP221A
4753          HC       2   38.03

4754          KK   R221A
4755          KM        ROUTE FLOW FROM CP221A TO CP222
4756          RS       6              -1
4757          RC    .025    .022    .022    7800   .0024
4758          RX    1000    1001    1070    1090    1220    1287    1289    1290
4759          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4760          KK     222
4761          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 222
4762          BA    1.10
4763          LG     .31     .35    4.82     .28   15.00
4764          UI     34.     34.     34.     34.     34.    112.    121.    135.    158.    168.
4765          UI    184.    194.    205.    219.    237.    257.    272.    305.    354.    407.
4766          UI    455.    414.    370.    337.    311.    291.    274.    257.    236.    218.
4767          UI    204.    189.    173.    163.    148.    130.     98.     87.     60.     60.
4768          UI     58.     56.     56.     47.     34.     34.     34.     34.     24.     10.
4769          UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
4770          UI     10.     10.     10.     10.      0.      0.      0.      0.      0.      0.
4771          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4772          KK   CP222
4773          KM        ADD HYDROGRAPHS AT CP222
4774          HC       2   39.13
```



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

4775          KK    R222
4776          KM        ROUTE FLOW FROM CP222 TO CP241
4777          RS       8              -1
4778          RC     .03    .025     .03    5770   .0022
4779          RX    1000    1100    1320    1540    2350    2470    2630    2710
4780          RY    1057    1056    1054    1052    1052    1054    1056    1057
              *

4781          KK     223
4782          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 223
4783          BA    1.26
4784          LG     .12     .33    5.52     .19   72.00
4785          UI    119.    218.    491.    643.    786.   1003.   1453.   1254.    993.    797.
4786          UI    634.    465.    257.    200.    140.    112.     37.     37.     37.     37.
4787          UI     37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4788          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4789          KM        removed hydrograph combine for diversion to CP202 HDR
4790          KM         KK CP223
4791          KM         KM      ADD HYDROGRAPHS AT CP223 (223 + 226) subtracted 1.52 sq. mi
4792          KM         HC     2   53.15
4793          KM         KK  R223
4794          KM      ROUTE REMAINDER FROM CP223 TO CP224
4795          RS       4              -1
4796          RC     .03    .025     .03    2900   .0017
4797          RX    1000    1120    1350    1590    1780    1960    2129    2130
4798          RY    1067    1066    1064    1063    1063    1064  1065.5  1065.5
              *

4799          KK     224
4800          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 224
4801          BA     .80
4802          LG     .35     .32    5.64     .20       6
4803          UI     94.    258.    469.    606.    833.   1145.    854.    655.    492.    310.
4804          UI    163.    121.     79.     29.     29.     29.     29.      0.      0.      0.
```

```
                                                                                                LABCARD
4805          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4806          KK   CP224
4807          KM        ADD HYDROGRAPHS AT CP224 (224 + 223)
4808          HC       2   55.47

4809          KK    R224
4810          KM        ROUTE FLOW FROM CP224 TO CP241
4811          RS       7             -1
4812          RC     .03    .025     .03    5460   .0027
4813          RX    1000    1100    1320    1540    2350    2470    2630    2710
4814          RY    1057    1056    1054    1052    1052    1054    1056    1057
              *

4815          KK     241
4816          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 241
4817          BA    1.51
4818          LG     .38     .28    4.74     .34     .00
4819          UI    133.    206.    513.    682.    817.   1005.   1376.   1635.   1253.   1036.
4820          UI    834.    673.    488.    276.    223.    162.    133.     50.     41.     41.
1                                                HEC-1 INPUT                                          PAGE117

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

4821          UI     41.     41.      0.      0.      0.      0.      0.      0.      0.      0.
4822          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4823          KK   1I241
4824          KM        ADD HYDROGRAPHS AT CP241 (241 + 224)
4825          HC       2   56.98

4826          KK   2I241
4827          KM        ADD HYDROGRAPHS AT CP241 (241 + 222)
4828          HC       2   59.77

4829          KK   CP241
4830          KM        ADD HYDROGRAPHS AT CP241 (241 + 240)
4831          HC       2   78.75

4832          KK   SR241
4833          KM        STORAGE ROUTE THROUGH CP241
4834          RS       1    STOR       0       0
4835          SV       0     .09     .65     .94    8.45   16.94
4836          SQ       0       4     280     324    1773    7505
4837          SE  1042.2    1044    1046  1046.3    1048    1049
4838          ZZ
1
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  55           1
               V
               V
  66         RCP1
               .
               .
  72           .           2
               .           .
               .           .
  81          CP2...........
               V
               V
  84         RCP2
               .
               .
  90           .          3A
               .           V
               .           V
  97           .        RCP3A
               .           .
               .           .
 103           .           .           3
               .           .           .
```

```
110          .       I1CP3............
             .           .
             .           .
113       CP3............
             .
             .
120          .-------->   DI189
116       D3
           V
           V
123      RCP3
             .
             .
129          .           4
             .           .
             .           .
136          .           .           5
             .           .           .
             .           .           .
143          .         CP5............
             .           V
             .           V
146          .        RCP5
             .           .
             .           .
152          .           .           6
             .           .           .
             .           .           .
158          .         CP6............
             .           V
             .           V
161          .        RCP6
             .           .
             .           .
167          .           .           7
             .           .           .
             .           .           .
173          .         CP7............
             .           V
             .           V
176          .        RCP7
             .           .
             .           .
182          .           .           9
             .           .           .
             .           .           .
189          .       I1CP9............
             .           .
             .           .
192          .           .           8
             .           .           .
             .           .           .
199          .         CP9............
             .           V
             .           V
202          .        RCP9
             .           .
             .           .
208          .           .          10
             .           .           .
             .           .           .
217          .      I1CP10............
             .           .
             .           .
220      CP10............
             .
             .
225          .-------->  1DI188
223      1D10
             .
             .
231          .-------->  2DI188
228      2D10
           V
           V
```

```
234     RCP10
            .
240         .         12
            .          .
248      CP12...........
            V
            V
251     RCP12
            .
257         .         11
            .          V
            .          V
265         .      RCP11
            .          .
271         .          .         13
            .          .          .
279         .      CP13...........
            .          V
            .          V
282         .      RCP13
            .          .
288         .          .         14
            .          .          V
            .          .          V
295         .          .      RCP14
            .          .          .
301         .          .          .         15
            .          .          .          .
            .          .          .          .
309         .          .    I1CP15...........
            .          .          .
312         .          .          .         16
            .          .          .          V
            .          .          .          V
320         .          .          .       SR16
            .          .          .          .
            .          .          .          .
326         .          .      CP15...........
            .          .          V
            .          .          V
329         .          .      RCP15
            .          .          .
            .          .          .
335         .          .          .         17
            .          .          .          .
            .          .          .          .
342         .          .    I1CP17...........
            .          .          .
            .          .          .
345         .      CP17...........
            .          V
            .          V
348         .      RCP17
            .          .
            .          .
354         .          .        WT3
            .          .          .
            .          .          .
362         .    I1CWT3...........
            .          .
            .          .
365     CPWT3...........
            V
            V
368     SRWT3
            .
            .
381         .        116
```

```
392                 .-------> 116RET
390            116OUT
                    V
                    V
395             R116

401                     117
                          .
413                       .-------> 117RET
411                 117OUT
                          .
416             CP117............
                    V
                    V
419             R117

425                     123
                          .
438                       .------->  DI134
435                   D123
                          V
                          V
441                   R123
                          .
447                       .        124
                          .          .
458                 CP124............
                          .
463                       .------->  DI136
461                 1D124
                          .
469                       .------->  DI135
466                 2D124
                          V
                          V
472                   R124
                          .
478                       .        125
                          .          .
486                 1I125............
                          .
489             CP125............

494                 .------->  DI137
492             1D125

499                 .------->  DI138
497             2D125
                    V
                    V
502             R125

508                     118
                          .
519                       .-------> 118RET
517                 118OUT
                          V
                          V
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522          .           .        R118
             .           .           .
             .           .           .
528          .           .           .         126
             .           .           .           .
             .           .           .           .
540          .           .           .           .-------> 126RET
538          .           .           .      126OUT
             .           .           .           .
             .           .           .           .
543          .           .       1I126............
             .           .           .
             .           .           .
546          .       CP126............
             .           .
             .           .
552          .           .------->   DI139
549          .        D126
             .           V
             .           V
555          .        R126
             .           .
             .           .
561          .           .        100A
             .           .           V
             .           .           V
569          .           .       R100A
             .           .           .
             .           .           .
575          .           .           .        102A
             .           .           .           .
             .           .           .           .
586          .           .      1I102A............
             .           .           .
             .           .           .
589          .           .           .         101
             .           .           .           V
             .           .           .           V
599          .           .           .        R101
             .           .           .           .
             .           .           .           .
605          .           .      CP102A............
             .           .           .
             .           .           .
612          .           .           .-------> 102ART
608          .           .      102AOT
             .           .           V
             .           .           V
615          .           .       R102A
             .           .           .
             .           .           .
621          .           .           .         106
             .           .           .           .
             .           .           .           .
634          .           .           .           .-------> 106RET
632          .           .           .      106OUT
             .           .           .           .
             .           .           .           .
637          .           .       CP106............
             .           .           V
             .           .           V
640          .           .        R106
             .           .           .
             .           .           .
653          .           .           .         105
             .           .           .           V
             .           .           .           V
663          .           .           .        R105
             .           .           .           .
             .           .           .           .
669          .           .           .           .         112
             .           .           .           .           .
             .           .           .           .           .
681          .           .           .           .           .-------> 112RET
679          .           .           .           .      112OUT
             .           .           .           .           .
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684                 CP112............
                                 .
689                              .------->   DI120
687                 1D112
                                 .
694                              .------->  1D121A
692                 2D112
                                 V
                                 V
697                  R112
                                 .
703                              .        113A
                                 .          .
715                              .          .------->  113ART
713                              .     113AOT
                                 .          .
718                CP113A............
                                 .
723                              .------->  2D121A
721                 D113A
                                 V
                                 V
726                 R113A
                                 .
732                              .         114
                                 .          .
745                              .          .------->  114RET
743                              .     114OUT
                                 .          .
748            CP114......................
                                 .
753                              .------->  DI122B
751             D114
                   V
                   V
756             R114
                                 .
762                                 115
                                 .
775                              .------->  115RET
773                           115OUT
                                 .
778            CP115............
                   V
                   V
781             R115
                                 .
787                                 122A
                                 .
800                              .------->  122ART
797                           122AOT
                                 .
803           1I122A............
                                 .
808                              .<-------  DI122B
806                                 D114
                                    V
                                    V
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809                                  R114
                                       .
815                                    .        122B
                                       .          .
828                                    .          .-------> 122BRT
825                                    .     122BOT
                                       .          .
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831                                    .     CP122B...........
                                       .          V
                                       .          V
834                                    .      R122B
                                       .          .
                                       .          .
840                                CP122A...........
                                       V
                                       V
843                                1R122A
                                       V
                                       V
850                                2R122A
                                       .
                                       .
857                                    .        111
                                       .          .
869                                    .          .-------> 111RET
867                                    .     111OUT
                                       .          V
                                       .          V
872                                    .       R111
                                       .          .
                                       .          .
878                                    .          .        104
                                       .          .         V
                                       .          .         V
888                                    .          .       R104
                                       .          .          .
                                       .          .          .
894                                    .          .          .        111A
                                       .          .          .          .
909                                    .          .          .          .-------> 111ART
907                                    .          .          .     111AOT
                                       .          .          .          .
                                       .          .          .          .
912                                    .     CP111A.......................
                                       .          V
                                       .          V
915                                    .      R111A
                                       .          .
                                       .          .
921                                    .          .        119
                                       .          .          .
933                                    .          .          .------->  DI128
931                                    .          .       D119
                                       .          .         V
                                       .          .         V
936                                    .          .       R119
                                       .          .          .
                                       .          .          .
942                                    .          .          .        119A
                                       .          .          .          .
                                       .          .          .          .
953                                    .          .     CP119A...........
                                       .          .          .
                                       .          .          .
958                                    .          .          .------->  DI130
956                                    .          .      D119A
                                       .          .         V
                                       .          .         V
963                                    .          .      R119A
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969                                                  120
                                                      .
980                                  1I120.......................
                                                      .
985                                                   .<-------   DI120
983                                          1D112
                                                     V
                                                     V
986                                           R112
                                                      .
                                                      .
992                                  CP120............
                                                     V
                                                     V
995                                   R120
                                                      .
                                                      .
1003                                                  .<-------   DI128
1001                                          D119
                                                     V
                                                     V
1004                                          R119
                                                      .
                                                      .
1010                                                  .         128
                                                      .           .
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1019                                         CP128............
                                                     V
                                                     V
1022                                          R128
                                                      .
                                                      .
1030                                                  .           .<-------   DI130
1028                                                  .       D119A
                                                      .          V
                                                      .          V
1031                                                  .       R119A
                                                      .           .
                                                      .           .
1037                                                  .           .         130
                                                      .           .           .
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1048                                         1I130.......................
                                                      .
                                                      .
1051                                                  .         129
                                                      .          V
                                                      .          V
1060                                                  .       R129
                                                      .           .
                                                      .           .
1066                                 CP130.......................
                                                      .
                                                      .-------->   DI144
1071
1069                                  D130
                                                     V
                                                     V
1074                                  R130
                                                      .
                                                      .
1080                                          131A
                                                      .
                                                      .
1090                                 CP131A............
                                                     V
                                                     V
1093                                  R131A
                                                      .
                                                      .
1099                                          131
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1109                1I131............
                       .
1114                   .<-------  1D121A
1112                2D112
                       V
                       V
1115                R112
                       .
                       .
1121                   .        121A
                       .           .
                       .           .
1130             1I121A............
                       .
                       .
1135                   .          .<-------  2D121A
1133                   .       D113A
                       .          V
                       .          V
1136                   .       R113A
                       .           .
                       .           .
1142             CP121A............
                       V
                       V
1145                R121A
                       .
                       .
1151                   .         121
                       .           .
                       .           .
1160                CP121............
                       V
                       V
1163                R121
                       .
                       .
1169             CP131............
                       .
                       .
1174                   .------->   DI145
1172                D131
                       V
                       V
1177                R131
                       .
                       .
1183                   .         132
                       .           .
                       .           .
1193             CP132............
                       V
                       V
1196                R132
                       .
                       .
1202                   .         133
                       .           .
                       .           .
1216                   .          .-------> 133RET
1214             133OUT
                       .           .
                       .           .
1219             1I133............
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1222          CP133............
                       .
                       .
1227                   .------->   DI146
1225          1D133
                       .
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1232                   .------->   1D147
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1230                2D133
                      V
                      V
1235                R133
                      .
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1241                  .        134
                      .          .
                      .          .
1253                  .          .          .<-------   DI134
1251                  .          .       D123
                      .          .          V
                      .          .          V
1254                  .          .       R123
                      .          .          .
                      .          .          .
1260                CP134.......................
                      .
                      .
1265                  .------->  2D147
1263                D134
                      V
                      V
1268                R134
                      .
                      .
1276                  .          .<-------   DI135
1274                  .      1D124
                      .          V
                      .          V
1277                  .       R124
                      .          .
                      .          .
1283                  .          .        135
                      .          .          .
                      .          .          .
1297                  .          .          .------->  135RET
1295                  .          .     135OUT
                      .          .          .
                      .          .          .
1300                CP135......................
                      .
                      .
1305                  .------->  DI148
1303                D135
                      V
                      V
1308                R135
                      .
                      .
1316                  .          .<-------   DI136
1314                  .      2D124
                      .          V
                      .          V
1317                  .       R124
                      .          .
                      .          .
1323                  .          .        136
                      .          .          .
                      .          .          .
1333                  .      1I136...........
                      .          .
                      .          .
1336                CP136...........
                      V
                      V
1339                R136
                      .
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1347                  .          .<-------   DI137
1345                  .      1D125
                      .          V
                      .          V
1348                  .       R125
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1354          .          .          .          .        137
              .          .          .          .          .
              .          .          .          .          .
1366          .          .      CP137.......................
              .          .          .
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1371          .          .          .-------->   DI149
1369          .          .      1D137
              .          .          .
              .          .          .
1376          .          .          .-------->   DI153
1374          .          .      2D137
              .          .          V
              .          .          V
1379          .          .       R137
              .          .          .
              .          .          .
1387          .          .          .          .<-------   DI138
1385          .          .          .      2D125
              .          .          .          V
              .          .          .          V
1388          .          .          .       R125
              .          .          .          .
              .          .          .          .
1394          .          .          .          .        138
              .          .          .          .          .
              .          .          .          .          .
1407          .          .          .      1I138...........
              .          .          .          .
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1410          .          .      CP138...........
              .          .          V
              .          .          V
1413          .          .       R138
              .          .          .
              .          .          .
1419          .          .          .       138A
              .          .          .          .
              .          .          .          .
1431          .          .          .          .-------->  138ART
1429          .          .          .     138AOT
              .          .          .          .
              .          .          .          .
1434          .          .     1I138A...........
              .          .          .
              .          .          .
1437          .     2I138A...........
              .          .
              .          .
1442          .          .          .<-------   DI153
1440          .          .      2D137
              .          .          V
              .          .          V
1443          .          .       R137
              .          .          .
              .          .          .
1449          .          .          .        153
              .          .          .          .
              .          .          .          .
1460          .          .      CP153...........
              .          .          .
              .          .          .
1463          .     CP138A...........
              .          .
              .          .
1468          .          .-------->   DI154
1466          .      D138A
              .          V
              .          V
1471          .      R138A
              .          .
              .          .
1479          .          .          .<-------   DI154
1477          .          .      D138A
              .          .          V
              .          .          V
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1480          .          .        RLLE
              .          .          .
1486          .          .          .         154
              .          .          .           .
              .          .          .           .
1494          .          .       LLE1...........
              .          .         V
              .          .         V
1497          .          .      RLLE1
              .          .          .
              .          .          .
1503          .          .          .         157
              .          .          .           .
              .          .          .           .
1517          .          .          .           .-------> 157RET
1515          .          .          .      157OUT
              .          .          .           .
              .          .          .           .
1520          .          .      1I157...........
              .          .          .
              .          .          .
1523          .      2I157...........
              .          .
              .          .
1526          .          .        127
              .          .         V
              .          .         V
1532          .          .       R127
              .          .          .
              .          .          .
1538          .          .          .         139
              .          .          .           .
              .          .          .           .
1550          .          .          .           .-------> 139RET
1548          .          .          .      139OUT
              .          .          .           .
              .          .          .           .
1553          .          .      1I139...........
              .          .          .
              .          .          .
1558          .          .          .           .<-------  DI139
1556          .          .          .        D126
              .          .          .          V
              .          .          .          V
1559          .          .          .         RLE
              .          .          .           .
              .          .          .           .
1565          .          .      2I139...........
              .          .          .
              .          .          .
1568          .          .          .         140
              .          .          .           .
              .          .          .           .
1576          .          .        LE1...........
              .          .         V
              .          .         V
1579          .          .       RLE1
              .          .          .
              .          .          .
1585          .          .          .         156
              .          .          .           .
              .          .          .           .
1594          .          .        LE2...........
              .          .         V
              .          .         V
1597          .          .       RLE2
              .          .          .
              .          .          .
1603          .        LE3...........
              .          V
              .          V
1606          .      1RLE3
              .          V
              .          V
1612          .      2RLE3
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                .          .
1618            .          .        172
                .          .          .
                .          .          .
1626            .       LE4...........
                .          V
                .          V
1629            .      R172
                .          .
                .          .
1635            .          .        173
                .          .          .
                .          .          .
1645            .    CP173...........
                .          .
                .          .
1648            .          .       156A
                .          .          V
                .          .          V
1655            .          .     R156A
                .          .          .
                .          .          .
1661            .          .          .        158
                .          .          .          .
                .          .          .          .
1673            .          .          .          .-------> 158RET
1671            .          .          .     158OUT
                .          .          .          .
                .          .          .          .
1676            .          .     CP158...........
                .          .          V
                .          .          V
1679            .          .      R158
                .          .          .
                .          .          .
1685            .          .          .       173B
                .          .          .          .
                .          .          .          .
1694            .          .    CP173B...........
                .          .          .
                .          .          .
1697            .    AFR2E...........
                .          V
                .          V
1700            .    RR173
                .          .
                .          .
1706            .          .        171
                .          .          V
                .          .          V
1718            .          .      R171
                .          .          .
                .          .          .
1724            .          .          .       173A
                .          .          .          .
                .          .          .          .
1733            .          .    CP173A...........
                .          .          .
                .          .          .
1736            .   AFR2F1...........
                .          V
                .          V
1739            .   RR173A
                .          .
                .          .
1745            .          .        186
                .          .          V
                .          .          V
1756            .          .      R186
                .          .          .
                .          .          .
1762            .          .          .        187
                .          .          .          .
                .          .          .          .
1768            .          .     CP187...........
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                .          .          .
                .          .          .
1771            .     AFR2F2...........
                .          V
                .          V
1774            .      RR187
                .          .
                .          .
1780            .          .        199
                .          .          V
                .          .          V
1790            .          .       R199
                .          .          .
                .          .          .
1796            .          .          .        200
                .          .          .          .
                .          .          .          .
1805            .          .     CP200...........
                .          .          .
                .          .          .
1808            .     AFR2F3...........
                .          V
                .          V
1811            .      RR200
                .          .
                .          .
1817            .          .        141
                .          .          V
                .          .          V
1824            .          .       R141
                .          .          .
                .          .          .
1830            .          .          .       141A
                .          .          .          .
                .          .          .          .
1837            .          .    CP141A...........
                .          .          V
                .          .          V
1840            .          .     R141A
                .          .          .
                .          .          .
1846            .          .          .        142
                .          .          .          .
                .          .          .          .
1856            .          .     CP142...........
                .          .          V
                .          .          V
1859            .          .      R142
                .          .          .
                .          .          .
1865            .          .          .        143
                .          .          .          .
                .          .          .          .
1875            .          .     CP143...........
                .          .          V
                .          .          V
1878            .          .      R143
                .          .          .
                .          .          .
1886            .          .          .          .<-------   DI144
1884            .          .          .       D130
                .          .          .          V
                .          .          .          V
1887            .          .          .       R130
                .          .          .          .
                .          .          .          .
1893            .          .          .          .        144
                .          .          .          .          .
                .          .          .          .          .
1903            .          .          .      1I144...........
                .          .          .          .
                .          .          .          .
1906            .          .     CP144...........
                .          .          .
                .          .          .
1911            .          .          .-------> DI164A
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1909          .           .        D144
              .           .           V
              .           .           V
1914          .           .        R144
              .           .           .
              .           .           .
1920          .           .           .        145A
              .           .           .          .
              .           .           .          .
1930          .           .      CP145A............
              .           .           V
              .           .           V
1933          .           .       R145A
              .           .           .
              .           .           .
1941          .           .           .          .<-------   DI145
1939          .           .           .        D131
              .           .           .           V
              .           .           .           V
1942          .           .           .        R131
              .           .           .           .
              .           .           .           .
1948          .           .           .           .         145
              .           .           .           .           .
              .           .           .           .           .
1958          .           .           .       1I145............
              .           .           .           .
              .           .           .           .
1961          .           .       CP145............
              .           .           .
              .           .           .
1966          .           .           .------->   DI164
1964          .           .       1D145
              .           .           .
              .           .           .
1971          .           .           .------->   DI165
1969          .           .       2D145
              .           .           V
              .           .           V
1974          .           .       R145B
              .           .           .
              .           .           .
1982          .           .           .------->  DI165B
1980          .           .       3D145
              .           .           V
              .           .           V
1985          .           .       R145C
              .           .           .
              .           .           .
1993          .           .           .------->  DI165C
1991          .           .       4D145
              .           .           V
              .           .           V
1996          .           .       R145D
              .           .           .
              .           .           .
2004          .           .           .          .<-------   DI146
2002          .           .           .       1D133
              .           .           .           V
              .           .           .           V
2005          .           .           .        R133
              .           .           .           .
              .           .           .           .
2011          .           .           .           .         146
              .           .           .           .           .
              .           .           .           .           .
2022          .           .           .       1I146............
              .           .           .           .
              .           .           .           .
2025          .           .       CP146............
              .           .           .
              .           .           .
2030          .           .           .------->   1D166
2028          .           .        D146
              .           .           V
              .           .           V
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2033          .         .      R146A
              .         .          .
              .         .          .
2041          .         .          .<-------  DI165C
2039          .         .      4D145
              .         .          V
              .         .          V
2042          .         .      R145E
              .         .          .
              .         .          .
2048          .         .      1D165............
              .         .          .
              .         .          .
2053          .         .          .------->   DIRB1
2051          .         .      D146B
              .         .          V
              .         .          V
2056          .         .      R146B
              .         .          .
              .         .          .
2064          .         .          .<-------  DI165B
2062          .         .      3D145
              .         .          V
              .         .          V
2065          .         .      R145F
              .         .          .
              .         .          .
2071          .         .      2D165............
              .         .          .
              .         .          .
2076          .         .          .------->   DIRB2
2074          .         .      D146C
              .         .          V
              .         .          V
2079          .         .      R146C
              .         .          .
              .         .          .
2085          .         .        159
              .         .          V
              .         .          V
2092          .         .       R159
              .         .          .
              .         .          .
2098          .         .          .         160
              .         .          .           .
              .         .          .           .
2106          .         .      CP160............
              .         .          V
              .         .          V
2109          .         .       R160
              .         .          .
              .         .          .
2115          .         .          .         161
              .         .          .           .
              .         .          .           .
2125          .         .      CP161............
              .         .          V
              .         .          V
2128          .         .       R161
              .         .          .
              .         .          .
2134          .         .          .         162
              .         .          .           V
              .         .          .           V
2142          .         .          .        R162
              .         .          .           .
              .         .          .           .
2148          .         .          .           .         163
              .         .          .           .           .
              .         .          .           .           .
2158          .         .          .       1I163............
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2161          .         .      CP163............
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2166                                  .-------> DI176A
2164                             D163
                                    V
                                    V
2169                             R163
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2177                                .<-------  DI164A
2175                                    D144
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                                           V
2178                                    R144
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2184                                       .        164A
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2197                             CP164A............
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2222                                    R145
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2228                             CP164............
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2233                                .------->   DI177
2231                             D164
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2236                             R164
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2244                                       .<-------   DI165
2242                                    2D145
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2245                                    R145
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2265                             2I165............
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2268                          CP165............
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2273                             .------->   DI180
2271                          D165
                                 V
                                 V
2276                          R165
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2284                             .<-------  DI176A
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2282                    D163
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                          V
2285                    R163
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2291                      .        176A
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2302                CP176A............
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2307                      .-------->   DI191
2305                 D176A
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2310                 R176A
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2316                      .        177A
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2326                CP177A............
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                          V
2329                 R177A
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2345                 1I177............
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2350                      .          .<-------   DI177
2348                      .        D164
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2351                      .        R164
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2360                  R177
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2379                  R178
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2401            1D179
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2408                      .-------->  DI194A
2406            2D179
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2411             R179
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2428          .          .      1I180...........
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2433          .          .          .          .<-------   1D147
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              .          .          .          V
2434          .          .          .       R133
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2440          .          .          .          .         147
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2450          .          .          .      1I147...........
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2455          .          .          .          .           .<-------   2D147
2453          .          .          .          .        D134
              .          .          .          .           V
              .          .          .          .           V
2456          .          .          .          .        R134
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2462          .          .          .     CP147 ...........
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2467          .          .          .          .-------->   2D166
2465          .          .          .       D147
              .          .          .          V
              .          .          .          V
2470          .          .          .       R147
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2486          .          .          .      1I148...........
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2489          .          .          .          .        D135
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              .          .          .          .           V
2492          .          .          .          .        R135
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2498          .          .          .      CP148...........
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2503          .          .          .          .-------->   DI150
2501          .          .          .       D148
              .          .          .          V
              .          .          .          V
2506          .          .          .       R148
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2514          .          .          .          .           .<-------   2D166
2512          .          .          .          .        D147
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2515          .          .          .          .        R147
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2532          .          .          .          .           .           .       D146
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2535          .          .          .          .           .           .       R146
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2547                                          CP166............
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2550                                           D166
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2555                                           R166
2563                                                          .<-------   DI180
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2564                                                       R165
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2689          .           .           .       CP151............
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2699          .           .           .           .-------->   DI152
2697          .           .           .       2D151
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              .           .           .           V
2702          .           .           .        R151
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2722          .           .           .           .        D166
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2725          .           .           .           .        R166
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2731          .           .           .       CP167............
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2736          .           .           .           .-------->   1D183
2734          .           .           .       1D167
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2741          .           .           .           .-------->   2D168
2739          .           .           .       2D167
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              .           .           .           V
2744          .           .           .        R167
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2750          .           .           .           .        181A
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2760          .           .           .      CP181A............
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2765          .           .           .           .-------->   2D183
2763          .           .           .       D181A
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2768          .           .           .       R181A
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2774          .           .       CP182............
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2777          .           .        D182
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3493          .           .           .           .        R180
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3849                     .       1D215
3847                     .                .
                         .                .------->   3D183
3853                     .      1DI186
3850                     .                .
                         .                .
3856                 1I216............
                         .
                         .-------> 1DI217
3861
3859                 1D216
                         .
                         .                .<-------  1OL216
3866                     .       1216I
3864                     .                .
                         .                .          .<-------   3D183
3869                     .                .      1DI183
3867                     .                .          .
                         .                .          .
3870                 2I216......................
                         .
                         .------->   4D183
3876
3873                2DI186
                         .
                         .-------> 2DI217
3881
3879                 2D216
                         .
                         .                .<-------  2OL216
3886                     .       2216I
3884                     .                .
                         .                .          .<-------   4D183
3889                     .                .      2DI183
3887                     .                .          .
                         .                .          .
3890                 3I216......................
                         .
                         .------->   5D183
3896
3893                3DI186
                         .
                         .-------> 3DI217
3901
3899                 3D216
                         .
                         .                .<-------  3OL216
3906                     .       3216I
3904                     .                .
                         .                .          .<-------   5D183
3909                     .                .      3DI183
3907                     .                .          .
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3910                4I216.......................
                        .
3915                    .           .<-------  2DI216
3913                    .       2D215
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3916                4I216............
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3921                    .           .<-------  3DI216
3919                    .       3D215
                        .           .
3922                3I216............
                        .
3927                    .-------->  4DI217
3925                4D216
                        .
3932                    .           .<-------  4DI216
3930                    .       4D215
                        .           .
3933                5I216............
                        .
3938                    .           .<-------  4OL216
3936                    .       4216I
                        .           .
3939                6I216............
                        .
3944                    .-------->  5DI217
3942                5D216
                        .
3949                    .           .<-------  5OL216
3947                    .       5216I
                        .           .
3950                7I216............
                        .
3955                    .-------->  6DI217
3953                6D216
                        V
                        V
3958                 R216
                        .
3964                    .         234
                        .           .
3974                1I234............
                        .
3977            CP234............
                        .
3982                    .-------->   1D248
3980             D234
                    V
                    V
3985             R234
                        .
3991                    .        207
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4004                    .-------->   2D208
4002                 D207
                        V
                        V
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4007                                R207
                                      .
4013                                  .        217
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4025                                  .          .                .<-------  1DI217
4023                                  .          .       1D216
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4026                                  .       2I216............
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4031                                  .          .                .<-------  2DI217
4029                                  .          .       2D216
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4032                                  .       3I216............
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4037                                  .          .                .<-------  3DI217
4035                                  .          .       3D216
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4038                                  .       4I216............
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4043                                  .          .                .<-------  4DI217
4041                                  .          .       4D216
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4044                                  .       5I216............
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4049                                  .          .                .<-------  5DI217
4047                                  .          .       5D216
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4050                                  .       6I216............
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4055                                  .          .                .<-------  6DI217
4053                                  .          .       6D216
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4056                                  .       7I216............
                                      .          V
                                      .          V
4059                                  .       RD216
                                      .          .
4065                                  .    CP217............
                                      .          .
4070                                  .          .-------->   DI218
4068                                  .     D217
                                      .        V
                                      .        V
4073                                  .     R217
                                      .          .
4079                                  .          .        235
                                      .          .          .
4090                                  .    1I235............
                                      .          .
4093                                  .CP235............
                                      .
4098                                  .-------->   2D248
4096                                  .D235
                                      .  V
                                      .  V
4101                                  .R235
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4109                                  .<-------   1D208
4107                             D191
                                    V
                                    V
4110                             R191
                                    .
4116                                .         208
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4127                            1I208............
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4132                                .           .<-------   2D208
4130                                .        D207
                                    .           V
                                    .           V
4133                                .        R207
                                    .           .
                                    .           .
4139                            CP208............
                                    .
                                    .
4144                                .-------->   1D219
4142                            1D208
                                    .
                                    .
4149                                .-------->  DI209A
4147                            2D208
                                    V
                                    V
4152                             R208
                                    .
4158                                .         218
                                    .           .
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4169                            1I218............
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                                    .
4174                                .           .<-------   DI218
4172                                .        D217
                                    .           V
                                    .           V
4175                                .        R217
                                    .           .
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4181                            CP218............
                                    .
                                    .
4186                                .-------->   DI237
4184                            1D218
                                    .
                                    .
4191                                .-------->   2D219
4189                            2D218
                                    V
                                    V
4194                             R218
                                    .
4200                                .         236
                                    .           .
                                    .           .
4211                            1I236............
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                                    .
4214                        CP236............
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                                    .
4219                                .-------->   DI249
4217                        1D236
                                    .
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4224                                .-------->   1D250
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4222                2D236
                      V
                      V
4227                R236
                      .
4233                  209A
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4245                  .          .<-------  DI209A
4243                  .       1D208
                      .          V
                      .          V
4246                  .        R208
                      .          .
                      .          .
4252                  .     CP209A............
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4257                  .------->   1D220
4255                  .     1D209A
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                      .
4262                  .------->   2D209
4260                  .     2D209A
                      .        V
                      .        V
4265                  .      R209A
                      .
                      .
4273                  .          .<-------   1D219
4271                  .       2D208
                      .          V
                      .          V
4274                  .        R208
                      .          .
                      .          .
4280                  .          .         219
                      .          .           .
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4290                  .       1I219............
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                      .          .
4293                  .      2I219............
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4298                  .          .<-------   2D219
4296                  .       2D218
                      .          V
                      .          V
4299                  .        R218
                      .          .
                      .          .
4305                  .      CP219............
                      .
                      .
4310                  .------->   DI238
4308                  .      1D219
                      .
                      .
4315                  .------->   2D220
4313                  .      2D219
                      .        V
                      .        V
4318                  .       R219
                      .
                      .
4326                  .          .<-------   DI237
4324                  .       1D218
                      .          V
                      .          V
4327                  .        R218
                      .          .
                      .          .
4333                  .          .         237
                      .          .           .
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4344                                  1I237............
4347                              2I237............
4350                          CP237............
4355                              .------->   2D250
4353                          1D237
4360                              .------->  1D250A
4358                          2D237
                                  V
                                  V
4363                           R237
4371                                  .<-------   1D209
4369                              1D192
                                      V
                                      V
4372                               R192
4378                                          209
4388                              1I209............
4393                                                  .<-------   2D209
4391                                          2D209A
                                                  V
                                                  V
4394                                           R209A
4400                              CP209............
4405                                  .------->   1D221
4403                              1D209
4410                                  .------->   2D210
4408                              2D209
                                      V
                                      V
4413                               R209
4421                                                  .<-------   1D220
4419                                          1D209A
                                                  V
                                                  V
4422                                           R209A
4428                                                          220
4438                                           1I220............
4441                              2I220............
4446                                                  .<-------   2D220
4444                                           2D219
                                                  V
                                                  V
4447                                            R219
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4453                                                        CP220............
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4458                                                              .-------->   DI239
4456                                                        1D220
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4463                                                              .-------->   2D221
4461                                                        2D220
                                                                  V
                                                                  V
4466                                                         R220
                                                                  .
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4474                                                              .          .<-------   DI238
4472                                                              .      1D219
                                                                  .          V
                                                                  .          V
4475                                                              .       R219
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4481                                                              .          .         238
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4491                                                              .      1I238............
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4494                                                        2I238............
                                                                  .
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4497                                                  CP238............
                                                                  .
                                                                  .-------->  2D250A
4502
4500                                                  1D238
                                                                  .
                                                                  .
4507                                                              .-------->   1D251
4505                                                  2D238
                                                                  V
                                                                  V
4510                                                   R238
                                                                  .
                                                                  .
4518                                                              .<-------   1D210
4516                                                        2D192
                                                                  V
                                                                  V
4519                                                         R192
                                                                  .
                                                                  .
4525                                                              .        210
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4535                                                        1I210............
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4540                                                              .          .<-------   2D210
4538                                                              .      2D209
                                                                  .          V
                                                                  .          V
4541                                                              .       R209
                                                                  .          .
                                                                  .          .
4547                                                        CP210............
                                                                  V
                                                                  V
4550                                                         R210
                                                                  .
                                                                  .
4558                                                              .          .<-------   1D221
4556                                                              .      1D209
                                                                  .          V
                                                                  .          V
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4559                                  R209
                                        .
4565                                    .        221
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4575                                  1I221.........
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4578                            2I221.........
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4583                                    .<-------  2D221
4581                                  2D220
                                        V
                                        V
4584                                  R220
                                        .
4590                            CP221.........
                                      V
                                      V
4593                             R221
                                        .
4601                                    .<-------  DI239
4599                                  1D220
                                        V
                                        V
4602                                  R220
                                        .
4608                                    .        239
                                        .          .
4618                                  1I239.........
                                        .
4621                            2I239.........
                                        .
4624                        CP239.........
                                    .
4629                        .------->  2D251
4627                        1D239
                                    .
4634                        .------->  DI252
4632                        2D239
                                  V
                                  V
4637                         R239
                                    .
4643                                .        240
                                    .          .
4653                        CP240.........
                                  V
                                  V
4656                         R240
                                    .
4662                                .        213
                                    .          V
                                    .          V
4670                                .       R213
                                    .
4676                                .          .        212
                                    .          .          V
                                    .          .          V
4688                                .          .      SR212
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4694                    CP212............
                           V
                           V
4697                     R212
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4705                       .<-------   DI211
4703                       .      1D193
                           .         V
                           .         V
4706                       .       R193
                           .         .
                           .         .
4712                       .         .        211
                           .         .          .
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4722                       .      CP211............
                           .         V
                           .         V
4725                       .       R211
                           .         .
                           .         .
4731                       .         .       221A
                           .         .          .
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4742                       .     1I221A...........
                           .         V
                           .         V
4745                       .     SR221A
                           .         .
                           .         .
4751                    CP221A...........
                           V
                           V
4754                     R221A
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4760                       .        222
                           .         .
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4772                    CP222............
                           V
                           V
4775                     R222
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4781                       .        223
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4799                       .         .        224
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4806                       .      CP224............
                           .         V
                           .         V
4809                       .       R224
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4815                       .         .        241
                           .         .          .
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4823                       .      1I241............
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4826                    2I241............
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                           .
4829                 CP241............
                        V
                        V
4832                 SR241
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
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*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
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*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   14JUN04  TIME  14:33:19  *
*                                      *
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LABCARD
*    HYDROLOGIC ENGINEERING CENTER    *
*          609 SECOND STREET          *
*       DAVIS, CALIFORNIA 95616       *
*          (916) 756-1104             *
*                                     *
***************************************
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LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'

PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE
PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY
TURNED OFF) AT DI189.

THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS
AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY
HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL

REVISED BY URS DATE: 01-14-04
FILE: L303M1L.DAT

NOTES:
1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN THE WLB MODEL.
4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO DRAINAGE REPORTS.
5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY. GRAND. COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115. ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL STORM.
8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO THE DATA FILE BY THE FCDMC.
10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS AREAS #3 & #4) WERE ESTIMATED BY EEC.

```
38 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        600  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME       0155  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL     .08 HOURS
                     TOTAL TIME BASE   49.92 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

40 JD          INDEX STORM NO. 1
                      STRM       4.03  PRECIPITATION DEPTH
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TRDA .00 TRANSPOSITION DRAINAGE AREA

41 PI PRECIPITATION PATTERN

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51 JD INDEX STORM NO. 2

STRM 3.79 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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52 JD INDEX STORM NO. 3

STRM 3.51 PRECIPITATION DEPTH

TRDA 50.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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53 JD         INDEX STORM NO. 4
                 STRM        3.39  PRECIPITATION DEPTH
                 TRDA      100.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00
54 JD         INDEX STORM NO. 5
                 STRM        3.29  PRECIPITATION DEPTH
                 TRDA      200.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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WARNING --- ROUTED OUTFLOW (    879.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    930.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    971.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1001.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1022.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1035.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1040.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1038.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1028.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1009.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    984.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    924.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    894.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    891.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    936.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    972.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    999.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1017.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1027.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1030.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1025.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1011.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    991.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    967.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    939.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    911.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    881.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    902.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    942.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    973.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    996.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (   1019.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    862.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    870.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    900.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    922.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    868.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    866.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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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	1	1573.	12.50	222.	61.	30.	1.94		
+	ROUTED TO	RCP1	1386.	12.83	222.	61.	30.	1.94		
+	HYDROGRAPH AT	2	1339.	12.75	237.	66.	32.	1.82		
+	2 COMBINED AT	CP2	2657.	12.75	456.	126.	61.	3.76		
+	ROUTED TO	RCP2	2458.	12.92	455.	126.	61.	3.76		
+	HYDROGRAPH AT	3A	313.	12.33	31.	8.	4.	.29		
	ROUTED TO									

								LABCARD
+		RCP3A	250.	12.50	31.	8.	4.	.29
+	HYDROGRAPH AT	3	863.	12.33	89.	22.	11.	.81
+	2 COMBINED AT	I1CP3	1048.	12.42	119.	30.	14.	1.10
+	2 COMBINED AT	CP3	2655.	12.92	571.	155.	75.	4.86
+	DIVERSION TO	DI189	548.	12.92	54.	14.	7.	4.86
+	HYDROGRAPH AT	D3	2107.	12.92	517.	141.	68.	4.86
+	ROUTED TO	RCP3	2038.	13.08	517.	141.	68.	4.86
+	HYDROGRAPH AT	4	396.	12.25	36.	10.	5.	.30
+	HYDROGRAPH AT	5	927.	12.25	86.	23.	11.	.72
+	2 COMBINED AT	CP5	1315.	12.25	121.	33.	16.	1.02
+	ROUTED TO	RCP5	1312.	12.25	121.	33.	16.	1.02
+	HYDROGRAPH AT	6	746.	12.08	52.	14.	7.	.45
+	2 COMBINED AT	CP6	1854.	12.17	172.	47.	23.	1.47
+	ROUTED TO	RCP6	1784.	12.17	172.	47.	23.	1.47
+	HYDROGRAPH AT	7	494.	12.08	36.	10.	5.	.31
+	2 COMBINED AT	CP7	2245.	12.17	206.	57.	27.	1.78
+	ROUTED TO	RCP7	1947.	12.33	206.	57.	27.	1.78
+	HYDROGRAPH AT	9	1402.	12.33	161.	44.	21.	1.40
+	2 COMBINED AT	I1CP9	3324.	12.33	364.	100.	48.	3.18
+	HYDROGRAPH AT	8	890.	12.33	93.	26.	12.	.81
+	2 COMBINED AT	CP9	4190.	12.33	455.	125.	60.	3.99
+	ROUTED TO	RCP9	3543.	12.75	454.	125.	60.	3.99
+	HYDROGRAPH AT	10	1357.	12.75	237.	62.	30.	2.02
+	2 COMBINED AT	I1CP10	4868.	12.75	686.	185.	89.	6.01
+	2 COMBINED AT	CP10	6522.	12.75	1189.	323.	156.	10.87
+	DIVERSION TO	1DI188	958.	12.75	174.	47.	23.	10.87

+	HYDROGRAPH AT	1D10	5564.	12.75	1014.	276.	133.	10.87
+	DIVERSION TO	2DI188	1596.	12.75	215.	54.	26.	10.87
+	HYDROGRAPH AT	2D10	3968.	12.75	799.	222.	107.	10.87
+	ROUTED TO	RCP10	3822.	12.83	799.	222.	107.	10.87
+	HYDROGRAPH AT	12	1214.	12.50	167.	43.	21.	1.38
+	2 COMBINED AT	CP12	4459.	12.83	953.	261.	126.	12.25
+	ROUTED TO	RCP12	4085.	13.00	952.	261.	126.	12.25
+	HYDROGRAPH AT	11	1559.	12.42	202.	54.	26.	1.56
+	ROUTED TO	RCP11	1268.	12.75	201.	54.	26.	1.56
+	HYDROGRAPH AT	13	1223.	12.42	145.	36.	17.	1.30
+	2 COMBINED AT	CP13	2062.	12.58	344.	89.	43.	2.86
+	ROUTED TO	RCP13	2035.	12.67	344.	89.	43.	2.86
+	HYDROGRAPH AT	14	1548.	12.33	173.	47.	23.	1.47
+	ROUTED TO	RCP14	1392.	12.58	173.	47.	23.	1.47
+	HYDROGRAPH AT	15	1272.	12.42	149.	40.	19.	1.26
+	2 COMBINED AT	I1CP15	2485.	12.50	319.	86.	42.	2.73
+	HYDROGRAPH AT	16	1206.	12.42	149.	41.	20.	1.13
+	ROUTED TO	SR16	0.	.00	0.	0.	0.	1.13
+	2 COMBINED AT	CP15	2485.	12.50	319.	86.	42.	3.90
+	ROUTED TO	RCP15	2108.	12.75	318.	86.	41.	3.90
+	HYDROGRAPH AT	17	1036.	12.33	108.	27.	13.	1.07
+	2 COMBINED AT	I1CP17	2480.	12.67	423.	112.	54.	4.97
+	2 COMBINED AT	CP17	4474.	12.67	761.	200.	96.	7.83
+	ROUTED TO	RCP17	4407.	12.75	761.	200.	96.	7.83
+	HYDROGRAPH AT	WT3	383.	12.50	50.	13.	6.	.44

								LABCARD
+	2 COMBINED AT	I1CWT3	4657.	12.75	809.	212.	102.	8.27
+	2 COMBINED AT	CPWT3	7618.	12.92	1684.	453.	218.	20.52
+	ROUTED TO	SRWT3	0.	.00	0.	0.	0.	20.52
+	HYDROGRAPH AT	116	872.	12.33	111.	33.	16.	.66
+	DIVERSION TO	116RET	872.	12.33	93.	25.	12.	.66
+	HYDROGRAPH AT	116OUT	233.	12.67	27.	8.	4.	.66
+	ROUTED TO	R116	110.	13.17	26.	8.	4.	.66
+	HYDROGRAPH AT	117	920.	12.58	158.	47.	23.	.92
+	DIVERSION TO	117RET	920.	12.58	130.	35.	17.	.92
+	HYDROGRAPH AT	117OUT	364.	13.08	41.	12.	6.	.92
+	2 COMBINED AT	CP117	454.	13.08	65.	20.	10.	1.65
+	ROUTED TO	R117	248.	13.67	62.	20.	10.	1.65
+	HYDROGRAPH AT	123	320.	13.00	69.	17.	8.	.44
+	DIVERSION TO	DI134	0.	.00	0.	0.	0.	.44
+	HYDROGRAPH AT	D123	320.	13.00	69.	17.	8.	.44
+	ROUTED TO	R123	293.	13.33	69.	17.	8.	.44
+	HYDROGRAPH AT	124	331.	13.33	89.	22.	11.	.57
+	2 COMBINED AT	CP124	618.	13.33	156.	39.	19.	1.65
+	DIVERSION TO	DI136	296.	13.33	81.	20.	10.	1.65
+	HYDROGRAPH AT	1D124	323.	13.33	76.	19.	9.	1.65
+	DIVERSION TO	DI135	131.	13.33	23.	6.	3.	1.65
+	HYDROGRAPH AT	2D124	191.	13.33	52.	13.	6.	1.65
+	ROUTED TO	R124	178.	13.83	52.	13.	6.	1.65
+	HYDROGRAPH AT	125	934.	12.50	118.	29.	14.	1.00
+	2 COMBINED AT	1I125	930.	12.50	169.	42.	20.	2.01
	2 COMBINED AT							

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+		CP125	924.	12.50	222.	61.	29.	3.66
+	DIVERSION TO	DI137	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	1D125	616.	12.50	148.	41.	20.	3.66
+	DIVERSION TO	DI138	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	2D125	309.	12.50	74.	20.	10.	3.66
+	ROUTED TO	R125	273.	12.75	73.	20.	10.	3.66
+	HYDROGRAPH AT	118	326.	12.08	42.	14.	7.	.16
+	DIVERSION TO	118RET	321.	12.08	25.	7.	4.	.16
+	HYDROGRAPH AT	118OUT	253.	12.17	23.	7.	3.	.16
+	ROUTED TO	R118	72.	13.83	21.	7.	3.	.16
+	HYDROGRAPH AT	126	1038.	12.50	159.	47.	23.	.95
+	DIVERSION TO	126RET	1038.	12.50	121.	32.	15.	.95
+	HYDROGRAPH AT	126OUT	522.	12.83	51.	15.	7.	.95
+	2 COMBINED AT	1I126	522.	12.83	70.	21.	10.	1.11
+	2 COMBINED AT	CP126	776.	12.83	139.	41.	20.	4.75
+	DIVERSION TO	DI139	776.	12.83	139.	41.	20.	4.75
+	HYDROGRAPH AT	D126	0.	.00	0.	0.	0.	4.75
+	ROUTED TO	R126	0.	.00	0.	0.	0.	4.75
+	HYDROGRAPH AT	100A	173.	12.50	23.	6.	3.	.18
+	ROUTED TO	R100A	145.	13.08	23.	6.	3.	.18
+	HYDROGRAPH AT	102A	462.	12.50	60.	15.	7.	.51
+	2 COMBINED AT	1I102A	462.	12.50	83.	21.	10.	.69
+	HYDROGRAPH AT	101	215.	12.25	20.	5.	2.	.16
+	ROUTED TO	R101	211.	12.25	20.	5.	2.	.16
+	2 COMBINED AT	CP102A	597.	12.42	102.	25.	12.	.75
+	DIVERSION TO	102ART	597.	12.42	61.	15.	7.	.75

+	HYDROGRAPH AT	102AOT	372.	12.83	41.	10.	5.	.75
+	ROUTED TO	R102A	265.	13.42	41.	10.	5.	.75
+	HYDROGRAPH AT	106	712.	12.50	96.	24.	11.	.77
+	DIVERSION TO	106RET	712.	12.50	66.	17.	8.	.77
+	HYDROGRAPH AT	106OUT	413.	12.83	29.	7.	4.	.77
+	2 COMBINED AT	CP106	409.	12.83	68.	17.	8.	1.70
+	ROUTED TO	R106	281.	13.83	67.	17.	8.	1.70
+	HYDROGRAPH AT	105	306.	12.25	27.	7.	3.	.21
+	ROUTED TO	R105	264.	12.42	27.	7.	3.	.21
+	HYDROGRAPH AT	112	846.	12.25	99.	29.	14.	.63
+	DIVERSION TO	112RET	846.	12.25	83.	22.	11.	.63
+	HYDROGRAPH AT	112OUT	241.	12.67	23.	7.	3.	.63
+	2 COMBINED AT	CP112	393.	12.67	48.	13.	6.	.82
+	DIVERSION TO	DI120	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	1D112	263.	12.67	32.	9.	4.	.82
+	DIVERSION TO	1D121A	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	2D112	132.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	77.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	113A	772.	12.25	92.	27.	13.	.50
+	DIVERSION TO	113ART	489.	12.08	33.	9.	5.	.50
+	HYDROGRAPH AT	113AOT	772.	12.25	67.	18.	9.	.50
+	2 COMBINED AT	CP113A	766.	12.25	81.	22.	11.	1.34
+	DIVERSION TO	2D121A	43.	12.25	1.	0.	0.	1.34
+	HYDROGRAPH AT	D113A	723.	12.25	80.	22.	10.	1.34
+	ROUTED TO	R113A	562.	12.50	78.	22.	10.	1.34

+	HYDROGRAPH AT	114	2117.	12.75	423.	125.	60.	2.47
+	DIVERSION TO	114RET	2117.	12.75	365.	97.	47.	2.47
+	HYDROGRAPH AT	114OUT	600.	13.42	92.	28.	13.	2.47
+	3 COMBINED AT	CP114	860.	13.50	225.	65.	31.	5.26
+	DIVERSION TO	DI122B	597.	13.50	107.	27.	13.	5.26
+	HYDROGRAPH AT	D114	263.	13.50	118.	38.	18.	5.26
+	ROUTED TO	R114	240.	14.00	116.	38.	18.	5.26
+	HYDROGRAPH AT	115	2122.	12.67	408.	121.	58.	2.40
+	DIVERSION TO	115RET	2122.	12.67	369.	99.	47.	2.40
+	HYDROGRAPH AT	115OUT	376.	13.58	71.	23.	11.	2.40
+	2 COMBINED AT	CP115	513.	13.58	180.	60.	29.	7.59
+	ROUTED TO	R115	428.	14.08	179.	60.	29.	7.59
+	HYDROGRAPH AT	122A	587.	12.25	76.	23.	11.	.38
+	DIVERSION TO	122ART	587.	12.25	57.	15.	7.	.38
+	HYDROGRAPH AT	122AOT	274.	12.50	26.	8.	4.	.38
+	2 COMBINED AT	1I122A	442.	14.08	195.	66.	32.	8.33
+	HYDROGRAPH AT	D114	597.	13.50	107.	27.	13.	5.26
+	ROUTED TO	R114	506.	13.83	107.	27.	13.	5.26
+	HYDROGRAPH AT	122B	734.	12.25	92.	28.	14.	.51
+	DIVERSION TO	122BRT	537.	12.08	41.	12.	6.	.51
+	HYDROGRAPH AT	122BOT	734.	12.25	61.	17.	8.	.51
+	2 COMBINED AT	CP122B	719.	12.25	165.	43.	21.	5.66
+	ROUTED TO	R122B	641.	12.33	165.	43.	21.	5.66
+	2 COMBINED AT	CP122A	911.	14.00	353.	108.	52.	8.49
+	ROUTED TO	1R122A	888.	14.08	350.	108.	52.	8.49
	ROUTED TO							

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+		2R122A	865.	14.42	344.	108.	52.	8.49
+	HYDROGRAPH AT	111	482.	12.08	45.	13.	6.	.26
+	DIVERSION TO	111RET	374.	12.00	23.	6.	3.	.26
+	HYDROGRAPH AT	111OUT	477.	12.17	25.	7.	3.	.26
+	ROUTED TO	R111	271.	12.42	25.	7.	3.	.26
+	HYDROGRAPH AT	104	218.	12.25	19.	5.	2.	.15
+	ROUTED TO	R104	79.	14.75	19.	5.	2.	.15
+	HYDROGRAPH AT	111A	870.	12.25	95.	27.	13.	.61
+	DIVERSION TO	111ART	870.	12.25	95.	27.	13.	.61
+	HYDROGRAPH AT	111AOT	1.	19.75	1.	0.	0.	.61
+	3 COMBINED AT	CP111A	271.	12.42	44.	12.	6.	.97
+	ROUTED TO	R111A	109.	13.92	40.	12.	6.	.97
+	HYDROGRAPH AT	119	544.	13.17	126.	32.	15.	.86
+	DIVERSION TO	DI128	317.	13.17	74.	18.	9.	.86
+	HYDROGRAPH AT	D119	227.	13.17	53.	13.	6.	.86
+	ROUTED TO	R119	204.	13.58	53.	13.	6.	.86
+	HYDROGRAPH AT	119A	296.	13.17	69.	17.	8.	.47
+	2 COMBINED AT	CP119A	439.	13.25	121.	30.	15.	1.26
+	DIVERSION TO	DI130	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	D119A	439.	13.25	121.	30.	15.	1.26
+	ROUTED TO	R119A	430.	13.42	121.	30.	15.	1.26
+	HYDROGRAPH AT	120	388.	13.25	105.	26.	13.	.54
+	3 COMBINED AT	1I120	787.	13.33	254.	67.	32.	2.88
+	HYDROGRAPH AT	1D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	76.	13.33	16.	4.	2.	.82
+	2 COMBINED AT	CP120	857.	13.33	268.	71.	34.	3.58

+	ROUTED TO	R120	805.	13.83	266.	71.	34.	3.58
+	HYDROGRAPH AT	D119	317.	13.17	74.	18.	9.	.86
+	ROUTED TO	R119	298.	13.42	74.	18.	9.	.86
+	HYDROGRAPH AT	128	299.	12.92	57.	14.	7.	.41
+	2 COMBINED AT	CP128	481.	12.92	130.	32.	16.	1.27
+	ROUTED TO	R128	464.	14.50	130.	32.	16.	1.27
+	HYDROGRAPH AT	D119A	0.	.00	0.	0.	0.	1.26
+	ROUTED TO	R119A	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	130	571.	13.25	147.	37.	18.	1.00
+	3 COMBINED AT	1I130	577.	14.50	270.	68.	33.	3.77
+	HYDROGRAPH AT	129	339.	12.67	54.	14.	7.	.43
+	ROUTED TO	R129	274.	13.33	54.	14.	7.	.43
+	3 COMBINED AT	CP130	1457.	13.42	584.	153.	74.	5.37
+	DIVERSION TO	DI144	638.	13.42	165.	41.	20.	5.37
+	HYDROGRAPH AT	D130	818.	13.42	419.	112.	54.	5.37
+	ROUTED TO	R130	814.	13.67	417.	112.	54.	5.37
+	HYDROGRAPH AT	131A	316.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	CP131A	979.	13.58	479.	128.	62.	5.87
+	ROUTED TO	R131A	975.	13.75	478.	128.	62.	5.87
+	HYDROGRAPH AT	131	317.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	1I131	1115.	13.58	534.	145.	70.	9.57
+	HYDROGRAPH AT	2D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	81.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	121A	366.	12.92	70.	17.	8.	.50
+	2 COMBINED AT	1I121A	402.	12.92	84.	22.	10.	1.34

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+	HYDROGRAPH AT	D113A	43.	12.25	1.	0.	0.	1.34
+	ROUTED TO	R113A	9.	13.08	1.	0.	0.	1.34
+	2 COMBINED AT	CP121A	402.	12.92	85.	22.	10.	3.54
+	ROUTED TO	R121A	383.	13.08	84.	22.	10.	3.54
+	HYDROGRAPH AT	121	360.	12.92	68.	17.	8.	.50
+	2 COMBINED AT	CP121	692.	12.92	151.	38.	18.	4.03
+	ROUTED TO	R121	635.	13.50	150.	38.	18.	4.03
+	2 COMBINED AT	CP131	1727.	13.50	680.	182.	88.	10.47
+	DIVERSION TO	DI145	1405.	13.50	548.	145.	70.	10.47
+	HYDROGRAPH AT	D131	322.	13.50	132.	37.	18.	10.47
+	ROUTED TO	R131	316.	13.83	131.	37.	18.	10.47
+	HYDROGRAPH AT	132	253.	13.00	52.	13.	6.	.41
+	2 COMBINED AT	CP132	415.	13.58	178.	50.	24.	9.97
+	ROUTED TO	R132	403.	13.92	175.	50.	24.	9.97
+	HYDROGRAPH AT	133	304.	12.83	57.	16.	7.	.50
+	DIVERSION TO	133RET	192.	12.50	18.	5.	2.	.50
+	HYDROGRAPH AT	133OUT	304.	12.83	42.	11.	5.	.50
+	2 COMBINED AT	1I133	439.	13.83	213.	59.	29.	11.37
+	2 COMBINED AT	CP133	1005.	14.42	508.	155.	75.	15.93
+	DIVERSION TO	DI146	402.	14.42	203.	62.	30.	15.93
+	HYDROGRAPH AT	1D133	604.	14.42	305.	93.	45.	15.93
+	DIVERSION TO	1D147	201.	14.42	101.	31.	15.	15.93
+	HYDROGRAPH AT	2D133	403.	14.42	204.	62.	30.	15.93
+	ROUTED TO	R133	394.	14.58	202.	62.	30.	15.93
+	HYDROGRAPH AT	134	313.	13.08	68.	17.	8.	.50
	HYDROGRAPH AT							

+		D123	0.	.00	0.	0.	0.	.44
+	ROUTED TO	R123	0.	.00	0.	0.	0.	.44
+	3 COMBINED AT	CP134	558.	13.25	252.	78.	37.	16.87
+	DIVERSION TO	2D147	316.	13.25	124.	33.	16.	16.87
+	HYDROGRAPH AT	D134	242.	13.25	129.	45.	21.	16.87
+	ROUTED TO	R134	233.	13.42	128.	45.	21.	16.87
+	HYDROGRAPH AT	1D124	131.	13.33	23.	6.	3.	1.65
+	ROUTED TO	R124	108.	14.00	23.	6.	3.	1.65
+	HYDROGRAPH AT	135	373.	12.67	65.	18.	9.	.49
+	DIVERSION TO	135RET	350.	12.58	34.	9.	4.	.49
+	HYDROGRAPH AT	135OUT	351.	12.75	35.	9.	5.	.49
+	3 COMBINED AT	CP135	389.	12.83	178.	58.	28.	17.92
+	DIVERSION TO	DI148	35.	12.83	8.	2.	1.	17.92
+	HYDROGRAPH AT	D135	354.	12.83	170.	56.	27.	17.92
+	ROUTED TO	R135	311.	13.42	169.	56.	27.	17.92
+	HYDROGRAPH AT	2D124	296.	13.33	81.	20.	10.	1.65
+	ROUTED TO	R124	273.	15.00	75.	20.	10.	1.65
+	HYDROGRAPH AT	136	291.	13.08	63.	16.	8.	.46
+	2 COMBINED AT	1I136	289.	13.08	128.	36.	17.	1.03
+	2 COMBINED AT	CP136	527.	13.17	283.	90.	43.	18.33
+	ROUTED TO	R136	497.	13.67	282.	90.	43.	18.33
+	HYDROGRAPH AT	1D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	234.	13.08	73.	21.	10.	3.66
+	HYDROGRAPH AT	137	280.	13.42	77.	19.	9.	.54
+	3 COMBINED AT	CP137	867.	13.50	404.	125.	60.	21.60
+	DIVERSION TO	DI149	289.	13.50	134.	41.	20.	21.60

+	HYDROGRAPH AT	1D137	578.	13.50	269.	83.	40.	21.60
+	DIVERSION TO	DI153	289.	13.50	134.	41.	20.	21.60
+	HYDROGRAPH AT	2D137	289.	13.50	135.	42.	20.	21.60
+	ROUTED TO	R137	280.	14.08	134.	42.	20.	21.60
+	HYDROGRAPH AT	2D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	123.	15.42	62.	21.	10.	3.66
+	HYDROGRAPH AT	138	278.	13.00	54.	14.	7.	.54
+	2 COMBINED AT	1I138	250.	13.00	85.	30.	15.	22.08
+	2 COMBINED AT	CP138	314.	14.08	209.	72.	35.	22.08
+	ROUTED TO	R138	311.	14.50	208.	72.	35.	22.08
+	HYDROGRAPH AT	138A	717.	12.17	80.	24.	12.	.46
+	DIVERSION TO	138ART	717.	12.17	65.	17.	8.	.46
+	HYDROGRAPH AT	138AOT	257.	12.50	22.	7.	3.	.46
+	2 COMBINED AT	1I138A	320.	14.50	215.	76.	37.	23.70
+	2 COMBINED AT	2I138A	319.	14.50	214.	75.	37.	24.81
+	HYDROGRAPH AT	2D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	232.	15.83	119.	41.	20.	21.60
+	HYDROGRAPH AT	153	117.	13.33	32.	8.	4.	.20
+	2 COMBINED AT	CP153	234.	15.83	119.	48.	23.	21.92
+	2 COMBINED AT	CP138A	453.	16.08	326.	123.	60.	23.68
+	DIVERSION TO	DI154	306.	16.08	222.	84.	41.	23.68
+	HYDROGRAPH AT	D138A	147.	16.08	104.	39.	19.	23.68
+	ROUTED TO	R138A	138.	17.50	102.	39.	19.	23.68
+	HYDROGRAPH AT	D138A	306.	16.08	222.	84.	41.	23.68
+	ROUTED TO	RLLE	305.	16.17	222.	84.	41.	23.68

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+	HYDROGRAPH AT	154	174.	12.58	28.	7.	3.	.17
+	2 COMBINED AT	LLE1	366.	16.00	271.	102.	50.	.33
+	ROUTED TO	RLLE1	363.	16.33	270.	102.	50.	.33
+	HYDROGRAPH AT	157	610.	12.83	117.	33.	16.	.89
+	DIVERSION TO	157RET	517.	12.67	51.	14.	7.	.89
+	HYDROGRAPH AT	157OUT	610.	12.83	72.	19.	9.	.89
+	2 COMBINED AT	1I157	725.	12.92	286.	106.	51.	25.08
+	2 COMBINED AT	2I157	725.	12.92	364.	144.	70.	25.08
+	HYDROGRAPH AT	127	456.	12.08	41.	12.	6.	.22
+	ROUTED TO	R127	248.	13.42	41.	12.	6.	.22
+	HYDROGRAPH AT	139	719.	12.25	84.	25.	12.	.47
+	DIVERSION TO	139RET	719.	12.25	56.	15.	7.	.47
+	HYDROGRAPH AT	139OUT	526.	12.42	34.	10.	5.	.47
+	2 COMBINED AT	1I139	528.	12.42	75.	21.	10.	.69
+	HYDROGRAPH AT	D126	776.	12.83	139.	41.	20.	4.75
+	ROUTED TO	RLE	692.	13.00	138.	41.	20.	4.75
+	2 COMBINED AT	2I139	739.	13.00	207.	61.	29.	7.04
+	HYDROGRAPH AT	140	180.	12.67	30.	8.	4.	.18
+	2 COMBINED AT	LE1	870.	13.00	243.	71.	34.	.88
+	ROUTED TO	RLE1	806.	13.08	243.	71.	34.	.88
+	HYDROGRAPH AT	156	233.	12.75	42.	11.	5.	.30
+	2 COMBINED AT	LE2	965.	13.00	281.	82.	39.	1.18
+	ROUTED TO	RLE2	891.	13.25	278.	82.	39.	1.18
+	2 COMBINED AT	LE3	1487.	12.92	700.	243.	118.	1.65
+	ROUTED TO	1RLE3	1509.	12.92	700.	243.	118.	1.65
	ROUTED TO							

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+		2RLE3	1512.	12.92	700.	243.	118.	1.65
+	HYDROGRAPH AT	172	111.	12.58	16.	4.	2.	.12
+	2 COMBINED AT	LE4	1573.	12.92	706.	246.	120.	1.77
+	ROUTED TO	R172	1462.	13.33	702.	246.	120.	1.77
+	HYDROGRAPH AT	173	193.	13.00	40.	11.	5.	.31
+	2 COMBINED AT	CP173	1578.	13.33	725.	255.	125.	2.08
+	HYDROGRAPH AT	156A	501.	12.17	46.	13.	6.	.31
+	ROUTED TO	R156A	178.	14.17	45.	13.	6.	.31
+	HYDROGRAPH AT	158	1195.	12.33	147.	44.	21.	.97
+	DIVERSION TO	158RET	1195.	12.33	116.	31.	15.	.97
+	HYDROGRAPH AT	158OUT	534.	12.58	44.	13.	6.	.97
+	2 COMBINED AT	CP158	534.	12.58	85.	26.	13.	1.28
+	ROUTED TO	R158	198.	13.25	81.	26.	13.	1.28
+	HYDROGRAPH AT	173B	110.	12.83	18.	5.	2.	.20
+	2 COMBINED AT	CP173B	257.	13.17	95.	30.	15.	1.48
+	2 COMBINED AT	AFR2E	1576.	13.25	732.	262.	128.	30.12
+	ROUTED TO	RR173	1319.	13.50	673.	246.	121.	30.12
+	HYDROGRAPH AT	171	386.	13.42	112.	30.	14.	.70
+	ROUTED TO	R171	365.	13.67	111.	30.	14.	.70
+	HYDROGRAPH AT	173A	161.	12.75	29.	8.	4.	.20
+	2 COMBINED AT	CP173A	387.	13.67	139.	37.	18.	.90
+	2 COMBINED AT	AFR2F1	1653.	13.50	776.	278.	137.	31.02
+	ROUTED TO	RR173A	1449.	14.08	762.	278.	137.	31.02
+	HYDROGRAPH AT	186	180.	13.25	46.	11.	6.	.33
+	ROUTED TO	R186	166.	13.67	46.	11.	6.	.33
+	HYDROGRAPH AT	187	75.	12.00	4.	1.	0.	.35

+	2 COMBINED AT	CP187	166.	13.67	50.	12.	6.	.68
+	2 COMBINED AT	AFR2F2	1555.	14.08	795.	288.	142.	31.70
+	ROUTED TO	RR187	1357.	14.67	782.	288.	142.	31.70
+	HYDROGRAPH AT	199	71.	13.08	15.	4.	2.	.11
+	ROUTED TO	R199	62.	13.67	15.	4.	2.	.11
+	HYDROGRAPH AT	200	216.	12.67	34.	9.	4.	.29
+	2 COMBINED AT	CP200	216.	12.67	49.	12.	6.	.40
+	2 COMBINED AT	AFR2F3	1378.	14.67	790.	299.	147.	32.10
+	ROUTED TO	RR200	1285.	15.00	785.	299.	147.	32.10
+	HYDROGRAPH AT	141	484.	12.33	50.	12.	6.	.47
+	ROUTED TO	R141	478.	12.42	50.	12.	6.	.47
+	HYDROGRAPH AT	141A	214.	12.17	16.	4.	2.	.15
+	2 COMBINED AT	CP141A	571.	12.33	65.	16.	8.	.62
+	ROUTED TO	R141A	533.	12.50	65.	16.	8.	.62
+	HYDROGRAPH AT	142	305.	13.00	63.	16.	8.	.51
+	2 COMBINED AT	CP142	690.	12.50	127.	32.	15.	1.13
+	ROUTED TO	R142	645.	12.92	127.	32.	15.	1.13
+	HYDROGRAPH AT	143	300.	13.00	62.	16.	7.	.50
+	2 COMBINED AT	CP143	921.	12.92	188.	47.	23.	1.63
+	ROUTED TO	R143	900.	13.08	188.	47.	23.	1.63
+	HYDROGRAPH AT	D130	638.	13.42	165.	41.	20.	5.37
+	ROUTED TO	R130	603.	14.00	165.	41.	20.	5.37
+	HYDROGRAPH AT	144	328.	13.00	69.	17.	8.	.51
+	2 COMBINED AT	1I144	683.	13.83	232.	58.	28.	6.05
+	2 COMBINED AT	CP144	1199.	13.08	416.	104.	50.	7.68

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+	DIVERSION TO	DI164A	93.	13.08	22.	5.	3.	7.68
+	HYDROGRAPH AT	D144	1106.	13.08	394.	99.	47.	7.68
+	ROUTED TO	R144	1077.	13.33	393.	99.	47.	7.68
+	HYDROGRAPH AT	145A	287.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP145A	1318.	13.25	454.	114.	55.	8.17
+	ROUTED TO	R145A	1289.	13.50	453.	114.	55.	8.17
+	HYDROGRAPH AT	D131	1405.	13.50	548.	145.	70.	10.47
+	ROUTED TO	R131	1358.	14.00	544.	145.	70.	10.47
+	HYDROGRAPH AT	145	297.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	1I145	1436.	14.00	588.	161.	78.	9.00
+	2 COMBINED AT	CP145	2498.	14.00	1028.	272.	131.	11.63
+	DIVERSION TO	DI164	788.	14.00	228.	57.	27.	11.63
+	HYDROGRAPH AT	1D145	1710.	14.00	800.	215.	103.	11.63
+	DIVERSION TO	DI165	746.	14.00	293.	73.	35.	11.63
+	HYDROGRAPH AT	2D145	964.	14.00	507.	142.	68.	11.63
+	ROUTED TO	R145B	939.	14.42	507.	142.	68.	11.63
+	DIVERSION TO	DI165B	778.	14.42	360.	91.	44.	11.63
+	HYDROGRAPH AT	3D145	162.	14.42	147.	51.	24.	11.63
+	ROUTED TO	R145C	162.	14.50	147.	51.	24.	11.63
+	DIVERSION TO	DI165C	78.	14.50	62.	18.	9.	11.63
+	HYDROGRAPH AT	4D145	86.	15.58	86.	33.	16.	11.63
+	ROUTED TO	R145D	86.	15.67	85.	33.	16.	11.63
+	HYDROGRAPH AT	1D133	402.	14.42	203.	62.	30.	15.93
+	ROUTED TO	R133	388.	14.83	199.	62.	30.	15.93
+	HYDROGRAPH AT	146	523.	13.17	124.	31.	15.	.90
	2 COMBINED AT							

+	1I146	660.	13.50	304.	92.	44.	15.02
+ 2 COMBINED AT	CP146	727.	13.50	376.	122.	59.	18.49
+ DIVERSION TO	1D166	249.	13.50	99.	25.	12.	18.49
+ HYDROGRAPH AT	D146	478.	13.50	277.	98.	47.	18.49
+ ROUTED TO	R146A	476.	13.58	277.	98.	47.	18.49
+ HYDROGRAPH AT	4D145	78.	14.50	62.	18.	9.	11.63
+ ROUTED TO	R145E	77.	15.00	61.	18.	9.	11.63
+ 2 COMBINED AT	1D165	512.	13.58	330.	115.	55.	18.49
+ DIVERSION TO	DIRB1	178.	12.42	178.	76.	37.	18.49
+ HYDROGRAPH AT	D146B	334.	13.58	152.	39.	19.	18.49
+ ROUTED TO	R146B	333.	13.67	151.	39.	19.	18.49
+ HYDROGRAPH AT	3D145	778.	14.42	360.	91.	44.	11.63
+ ROUTED TO	R145F	761.	15.08	352.	91.	44.	11.63
+ 2 COMBINED AT	2D165	962.	15.00	479.	127.	61.	18.49
+ DIVERSION TO	DIRB2	486.	15.00	242.	64.	31.	18.49
+ HYDROGRAPH AT	D146C	476.	15.00	237.	63.	30.	18.49
+ ROUTED TO	R146C	474.	15.08	237.	63.	30.	18.49
+ HYDROGRAPH AT	159	608.	12.33	61.	15.	7.	.58
+ ROUTED TO	R159	594.	12.42	61.	15.	7.	.58
+ HYDROGRAPH AT	160	409.	12.42	44.	11.	5.	.39
+ 2 COMBINED AT	CP160	996.	12.42	105.	26.	13.	.97
+ ROUTED TO	R160	893.	12.58	105.	26.	13.	.97
+ HYDROGRAPH AT	161	310.	13.00	62.	15.	7.	.50
+ 2 COMBINED AT	CP161	1087.	12.58	165.	41.	20.	1.47
+ ROUTED TO	R161	925.	13.08	165.	41.	20.	1.47
+ HYDROGRAPH AT	162	268.	12.50	34.	8.	4.	.25

+	ROUTED TO	R162	198.	13.17	34.	8.	4.	.25
+	HYDROGRAPH AT	163	492.	12.92	99.	25.	12.	.75
+	2 COMBINED AT	1I163	664.	13.00	132.	33.	16.	1.00
+	2 COMBINED AT	CP163	1565.	13.00	295.	74.	35.	2.47
+	DIVERSION TO	DI176A	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	D163	1565.	13.00	295.	74.	35.	2.47
+	ROUTED TO	R163	1519.	13.17	295.	74.	35.	2.47
+	HYDROGRAPH AT	D144	93.	13.08	22.	5.	3.	7.68
+	ROUTED TO	R144	65.	16.00	22.	5.	3.	7.68
+	HYDROGRAPH AT	164A	309.	13.08	66.	17.	8.	.49
+	2 COMBINED AT	1I164A	302.	13.08	81.	22.	10.	8.17
+	2 COMBINED AT	CP164A	1765.	13.17	369.	94.	45.	10.64
+	ROUTED TO	R164A	1698.	13.25	368.	94.	45.	10.64
+	HYDROGRAPH AT	164	314.	13.08	68.	17.	8.	.49
+	2 COMBINED AT	1I164	1944.	13.25	431.	110.	53.	11.13
+	HYDROGRAPH AT	1D145	788.	14.00	228.	57.	27.	11.63
+	ROUTED TO	R145	772.	14.42	228.	57.	27.	11.63
+	2 COMBINED AT	CP164	1944.	13.25	656.	167.	80.	15.08
+	DIVERSION TO	DI177	257.	13.25	73.	19.	9.	15.08
+	HYDROGRAPH AT	D164	1639.	13.25	566.	144.	69.	15.08
+	ROUTED TO	R164	1516.	13.75	562.	144.	69.	15.08
+	HYDROGRAPH AT	2D145	746.	14.00	293.	73.	35.	11.63
+	ROUTED TO	R145	729.	15.25	282.	73.	35.	11.63
+	HYDROGRAPH AT	165	507.	13.25	122.	31.	15.	.90
+	2 COMBINED AT	1I165	740.	15.25	359.	102.	49.	12.53

+	2 COMBINED AT	2I165	1811.	13.67	907.	244.	117.	15.98
+	2 COMBINED AT	CP165	1945.	15.17	1107.	299.	144.	22.84
+	DIVERSION TO	DI180	945.	15.17	307.	77.	37.	22.84
+	HYDROGRAPH AT	D165	1000.	13.25	801.	222.	107.	22.84
+	ROUTED TO	R165	1000.	14.83	796.	222.	107.	22.84
+	HYDROGRAPH AT	D163	0.	.00	0.	0.	0.	2.47
+	ROUTED TO	R163	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	176A	327.	13.25	79.	20.	10.	.62
+	2 COMBINED AT	CP176A	322.	13.25	78.	20.	9.	3.09
+	DIVERSION TO	DI191	0.	.00	0.	0.	0.	3.09
+	HYDROGRAPH AT	D176A	322.	13.25	78.	20.	9.	3.09
+	ROUTED TO	R176A	298.	13.50	78.	20.	9.	3.09
+	HYDROGRAPH AT	177A	293.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP177A	493.	13.17	139.	35.	17.	3.58
+	ROUTED TO	R177A	488.	13.50	139.	35.	17.	3.58
+	HYDROGRAPH AT	177	291.	13.08	62.	15.	7.	.49
+	2 COMBINED AT	1I177	684.	13.33	200.	50.	24.	4.07
+	HYDROGRAPH AT	D164	257.	13.25	73.	19.	9.	15.08
+	ROUTED TO	R164	224.	14.00	73.	19.	9.	15.08
+	2 COMBINED AT	CP177	738.	13.75	261.	66.	32.	16.68
+	ROUTED TO	R177	723.	13.92	260.	66.	32.	16.68
+	HYDROGRAPH AT	178	274.	13.08	59.	15.	7.	.44
+	2 COMBINED AT	CP178	810.	13.42	314.	80.	39.	17.12
+	ROUTED TO	R178	805.	13.83	312.	80.	39.	17.12
+	HYDROGRAPH AT	179	293.	13.08	64.	16.	8.	.46
	2 COMBINED AT							

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+		1I179	938.	13.58	369.	95.	46.	17.58
+	2 COMBINED AT	CP179	1834.	14.00	1120.	314.	151.	25.34
+	DIVERSION TO	DI193	891.	14.00	423.	106.	51.	25.34
+	HYDROGRAPH AT	1D179	943.	14.00	696.	208.	100.	25.34
+	DIVERSION TO	DI194A	222.	14.00	144.	37.	18.	25.34
+	HYDROGRAPH AT	2D179	721.	14.00	552.	171.	82.	25.34
+	ROUTED TO	R179	716.	14.25	550.	171.	82.	25.34
+	HYDROGRAPH AT	180	515.	13.33	136.	34.	16.	.99
+	2 COMBINED AT	1I180	946.	14.00	642.	203.	97.	26.33
+	HYDROGRAPH AT	2D133	201.	14.42	101.	31.	15.	15.93
+	ROUTED TO	R133	190.	16.00	93.	31.	15.	15.93
+	HYDROGRAPH AT	147	325.	13.00	68.	17.	8.	.50
+	2 COMBINED AT	1I147	310.	13.00	134.	48.	23.	14.62
+	HYDROGRAPH AT	D134	316.	13.25	124.	33.	16.	16.87
+	ROUTED TO	R134	259.	14.17	121.	33.	16.	16.87
+	2 COMBINED AT	CP147	372.	15.33	249.	81.	39.	15.92
+	DIVERSION TO	2D166	367.	15.33	246.	80.	38.	15.92
+	HYDROGRAPH AT	D147	5.	15.33	2.	1.	0.	15.92
+	ROUTED TO	R147	4.	16.42	2.	1.	0.	15.92
+	HYDROGRAPH AT	148	307.	13.00	66.	16.	8.	.48
+	2 COMBINED AT	1I148	291.	13.00	64.	16.	8.	16.40
+	HYDROGRAPH AT	D135	35.	12.83	8.	2.	1.	17.92
+	ROUTED TO	R135	21.	14.58	8.	2.	1.	17.92
+	2 COMBINED AT	CP148	291.	13.00	73.	18.	9.	17.46
+	DIVERSION TO	DI150	44.	13.00	11.	3.	1.	17.46
+	HYDROGRAPH AT	D148	246.	13.00	61.	15.	7.	17.46

+	ROUTED TO	R148	172.	14.08	60.	15.	7.	17.46
+	HYDROGRAPH AT	D147	367.	15.33	246.	80.	38.	15.92
+	ROUTED TO	R147	346.	17.25	232.	80.	38.	15.92
+	HYDROGRAPH AT	166	496.	13.33	132.	33.	16.	.98
+	HYDROGRAPH AT	D146	249.	13.50	99.	25.	12.	18.49
+	ROUTED TO	R146	161.	16.58	88.	25.	12.	18.49
+	2 COMBINED AT	1I166	496.	13.33	207.	64.	31.	19.47
+	2 COMBINED AT	2I166	464.	13.33	337.	130.	63.	21.45
+	2 COMBINED AT	CP166	506.	13.42	392.	143.	69.	22.45
+	DIVERSION TO	DI167	487.	13.42	382.	141.	68.	22.45
+	HYDROGRAPH AT	D166	20.	13.42	10.	2.	1.	22.45
+	ROUTED TO	R166	16.	18.00	10.	2.	1.	22.45
+	HYDROGRAPH AT	D165	945.	15.17	307.	77.	37.	22.84
+	ROUTED TO	R165	663.	16.50	290.	77.	37.	22.84
+	2 COMBINED AT	1I180	618.	16.58	275.	73.	35.	30.29
+	2 COMBINED AT	CP180	1185.	16.50	893.	275.	132.	30.29
+	DIVERSION TO	1D195	1003.	16.50	761.	236.	113.	30.29
+	HYDROGRAPH AT	D180	182.	16.50	132.	39.	19.	30.29
+	ROUTED TO	R180	180.	16.92	131.	39.	19.	30.29
+	HYDROGRAPH AT	181	258.	12.92	49.	12.	6.	.37
+	2 COMBINED AT	CP181	240.	12.92	156.	50.	24.	30.66
+	DIVERSION TO	2D195	240.	12.92	156.	50.	24.	30.66
+	HYDROGRAPH AT	D181	0.	.00	0.	0.	0.	30.66
+	ROUTED TO	R181	0.	.00	0.	0.	0.	30.66
+	HYDROGRAPH AT	182	191.	12.75	31.	8.	4.	.24

+	2 COMBINED AT	1I182	172.	12.75	28.	7.	3.	30.90
+	HYDROGRAPH AT	D148	44.	13.00	11.	3.	1.	17.46
+	ROUTED TO	R148	35.	13.83	11.	3.	1.	17.46
+	HYDROGRAPH AT	150	188.	12.75	32.	8.	4.	.23
+	2 COMBINED AT	CP150	183.	12.75	41.	10.	5.	17.69
+	ROUTED TO	R150	160.	13.17	41.	10.	5.	17.69
+	HYDROGRAPH AT	151	200.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	1I151	287.	12.92	73.	18.	9.	17.94
+	HYDROGRAPH AT	1D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	274.	13.83	134.	41.	20.	21.60
+	HYDROGRAPH AT	149	293.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	CP149	400.	13.67	186.	56.	27.	22.20
+	ROUTED TO	R149	392.	13.92	184.	56.	27.	22.20
+	2 COMBINED AT	CP151	531.	13.42	249.	74.	36.	23.66
+	DIVERSION TO	1D168	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	1D151	361.	13.42	173.	54.	26.	23.66
+	DIVERSION TO	DI152	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	2D151	191.	13.42	97.	34.	16.	23.66
+	ROUTED TO	R151	184.	14.25	96.	34.	16.	23.66
+	HYDROGRAPH AT	167	501.	13.33	133.	33.	16.	.97
+	2 COMBINED AT	1I167	531.	13.42	209.	65.	31.	24.63
+	HYDROGRAPH AT	D166	487.	13.42	382.	141.	68.	22.45
+	ROUTED TO	R166	460.	13.92	381.	141.	68.	22.45
+	2 COMBINED AT	CP167	924.	13.75	557.	202.	98.	25.61
+	DIVERSION TO	1D183	216.	13.75	94.	24.	12.	25.61
	HYDROGRAPH AT							

+		1D167	707.	13.75	463.	178.	87.	25.61
+	DIVERSION TO	2D168	41.	13.75	18.	5.	2.	25.61
+	HYDROGRAPH AT	2D167	666.	13.75	445.	174.	84.	25.61
+	ROUTED TO	R167	659.	14.00	444.	174.	84.	25.61
+	HYDROGRAPH AT	181A	227.	13.17	52.	13.	6.	.39
+	2 COMBINED AT	CP181A	736.	13.83	476.	185.	90.	26.00
+	DIVERSION TO	2D183	141.	13.83	78.	27.	13.	26.00
+	HYDROGRAPH AT	D181A	595.	13.83	397.	158.	77.	26.00
+	ROUTED TO	R181A	589.	14.17	396.	158.	77.	26.00
+	2 COMBINED AT	CP182	582.	14.17	386.	159.	77.	38.46
+	DIVERSION TO	DI196	295.	14.17	196.	81.	39.	38.46
+	HYDROGRAPH AT	D182	287.	14.17	190.	78.	38.	38.46
+	ROUTED TO	R182	279.	15.08	189.	78.	38.	38.46
+	HYDROGRAPH AT	2D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	164.	13.92	75.	20.	10.	23.66
+	HYDROGRAPH AT	152	252.	12.92	50.	12.	6.	.35
+	2 COMBINED AT	CP152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	1D169	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	1D152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	DI155	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	2D152	266.	13.00	117.	31.	15.	24.01
+	ROUTED TO	R152	259.	13.83	114.	31.	15.	24.01
+	HYDROGRAPH AT	1D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	150.	15.83	65.	20.	10.	23.66
+	HYDROGRAPH AT	168	312.	13.17	71.	18.	9.	.51
+	2 COMBINED AT	1I168	289.	13.17	107.	36.	17.	24.17

+	HYDROGRAPH AT	2D167	41.	13.75	18.	5.	2.	25.61
+	ROUTED TO	R167	38.	14.67	18.	5.	2.	25.61
+	2 COMBINED AT	2I168	289.	13.17	122.	41.	20.	26.12
+	2 COMBINED AT	CP168	424.	13.58	231.	72.	35.	26.47
+	DIVERSION TO	2D169	108.	13.58	51.	15.	7.	26.47
+	HYDROGRAPH AT	D168	316.	13.58	180.	56.	27.	26.47
+	ROUTED TO	R168	311.	13.92	179.	56.	27.	26.47
+	HYDROGRAPH AT	1D167	216.	13.75	94.	24.	12.	25.61
+	ROUTED TO	R167	211.	14.42	91.	24.	12.	25.61
+	HYDROGRAPH AT	183	226.	12.42	27.	7.	3.	.21
+	2 COMBINED AT	1I183	211.	14.42	96.	30.	14.	25.82
+	HYDROGRAPH AT	D181A	141.	13.83	78.	27.	13.	26.00
+	ROUTED TO	R181A	140.	14.08	78.	27.	13.	26.00
+	2 COMBINED AT	2I183	345.	14.25	166.	57.	27.	26.21
+	2 COMBINED AT	CP183	638.	14.17	340.	113.	54.	27.07
+	ROUTED TO	R183	592.	15.42	339.	113.	54.	27.07
+	HYDROGRAPH AT	184	465.	13.17	106.	27.	13.	.79
+	2 COMBINED AT	1I184	602.	15.42	354.	136.	66.	27.86
+	2 COMBINED AT	2I184	846.	15.42	513.	207.	101.	40.32
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01
+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	155	255.	12.75	51.	13.	6.	.26
+	2 COMBINED AT	CP155	237.	12.75	47.	12.	6.	24.27
+	ROUTED TO	R155	187.	13.92	47.	12.	6.	24.27
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01

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+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	169	384.	13.17	100.	25.	12.	.51
+	2 COMBINED AT	1I169	358.	13.17	92.	23.	11.	24.52
+	2 COMBINED AT	2I169	370.	13.83	138.	35.	17.	25.13
+	HYDROGRAPH AT	D168	108.	13.58	51.	15.	7.	26.47
+	ROUTED TO	R168	105.	14.08	51.	15.	7.	26.47
+	2 COMBINED AT	CP169	463.	13.83	181.	50.	24.	27.24
+	ROUTED TO	R169	422.	14.50	178.	50.	24.	27.24
+	2 COMBINED AT	CP184	1085.	15.25	675.	254.	124.	41.09
+	DIVERSION TO	DI197	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	1D184	652.	15.25	405.	153.	74.	41.09
+	DIVERSION TO	DI198	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	2D184	218.	15.25	135.	51.	25.	41.09
+	ROUTED TO	R184	216.	15.67	135.	51.	25.	41.09
+	HYDROGRAPH AT	170	296.	12.67	53.	14.	7.	.29
+	ROUTED TO	R170	234.	13.75	53.	14.	7.	.29
+	HYDROGRAPH AT	185	443.	13.08	97.	24.	12.	.69
+	2 COMBINED AT	1I185	466.	13.58	149.	38.	18.	.98
+	2 COMBINED AT	CP185	486.	13.67	246.	84.	41.	44.55
+	ROUTED TO	R185	370.	15.33	225.	83.	41.	44.55
+	HYDROGRAPH AT	2D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	423.	17.00	262.	99.	49.	41.09
+	HYDROGRAPH AT	198	547.	13.08	129.	36.	17.	.90
+	DIVERSION TO	198RET	265.	12.50	26.	7.	4.	.90
+	HYDROGRAPH AT	198OUT	547.	13.08	109.	28.	14.	.90
	2 COMBINED AT							

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+		1I198	485.	13.08	266.	121.	61.	41.97
+	2 COMBINED AT	2I198	686.	16.83	454.	204.	101.	42.95
+	HYDROGRAPH AT	1D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	425.	16.17	268.	101.	49.	41.09
+	HYDROGRAPH AT	197	468.	13.50	133.	33.	16.	1.00
+	2 COMBINED AT	CP197	435.	16.17	319.	130.	64.	42.06
+	ROUTED TO	R197	431.	16.58	317.	129.	63.	42.06
+	HYDROGRAPH AT	203	145.	12.25	13.	3.	2.	.11
+	DIVERSION TO	203RET	145.	12.25	13.	3.	2.	.11
+	HYDROGRAPH AT	203OUT	0.	.00	0.	0.	0.	.11
+	2 COMBINED AT	CP203	431.	16.58	317.	129.	63.	42.17
+	2 COMBINED AT	CP198	1111.	16.75	745.	332.	164.	44.06
+	ROUTED TO	R198	1108.	16.92	745.	331.	164.	44.06
+	HYDROGRAPH AT	204	366.	12.25	31.	8.	4.	.27
+	2 COMBINED AT	1I204	1108.	16.92	744.	336.	167.	44.33
+	HYDROGRAPH AT	174	572.	12.25	51.	13.	6.	.45
+	ROUTED TO	R174	351.	12.83	51.	13.	6.	.45
+	HYDROGRAPH AT	175	354.	12.25	32.	8.	4.	.28
+	DIVERSION TO	DI175A	354.	12.25	32.	8.	4.	.28
+	HYDROGRAPH AT	D175	0.	.00	0.	0.	0.	.28
+	ROUTED TO	R175	0.	.00	0.	0.	0.	.28
+	HYDROGRAPH AT	176	635.	12.42	71.	18.	9.	.67
+	2 COMBINED AT	1I176	633.	12.42	71.	18.	8.	.95
+	2 COMBINED AT	CP176	708.	12.50	121.	30.	14.	1.40
+	ROUTED TO	R176	618.	12.92	121.	30.	14.	1.40
+	HYDROGRAPH AT	D175	354.	12.25	32.	8.	4.	.28

+	ROUTED TO	R175	322.	12.42	32.	8.	4.	.28
+	HYDROGRAPH AT	175A	417.	12.50	50.	13.	6.	.47
+	2 COMBINED AT	CP175A	721.	12.42	82.	20.	10.	.75
+	ROUTED TO	R175A	683.	12.67	82.	20.	10.	.75
+	HYDROGRAPH AT	CP3	548.	12.92	54.	14.	7.	4.86
+	ROUTED TO	R3	372.	13.42	54.	14.	7.	4.86
+	2 COMBINED AT	1I189	683.	12.67	140.	35.	17.	5.81
+	HYDROGRAPH AT	189	514.	12.42	56.	14.	7.	.51
+	2 COMBINED AT	CP189	954.	12.58	188.	47.	23.	6.32
+	ROUTED TO	R189	796.	13.17	187.	47.	23.	6.32
+	HYDROGRAPH AT	190	534.	12.92	101.	25.	12.	.86
+	2 COMBINED AT	CP190	1224.	13.08	286.	72.	34.	7.18
+	ROUTED TO	R190	1152.	13.33	285.	72.	34.	7.18
+	HYDROGRAPH AT	D176A	0.	.00	0.	0.	0.	3.09
+	ROUTED TO	R176A	0.	.00	0.	0.	0.	3.09
+	3 COMBINED AT	1I191	1559.	13.33	396.	99.	48.	11.39
+	HYDROGRAPH AT	191	545.	13.25	131.	33.	16.	.99
+	2 COMBINED AT	CP191	2050.	13.25	518.	130.	63.	12.38
+	DIVERSION TO	1D208	1339.	13.08	457.	115.	55.	12.38
+	HYDROGRAPH AT	D191	711.	13.25	62.	15.	7.	12.38
+	ROUTED TO	R191	622.	13.58	62.	15.	7.	12.38
+	HYDROGRAPH AT	192A	327.	12.83	61.	16.	8.	.50
+	DIVERSION TO	192ART	146.	12.33	10.	3.	1.	.50
+	HYDROGRAPH AT	192AOT	327.	12.83	52.	13.	6.	.50
+	2 COMBINED AT	CP192A	704.	13.58	110.	28.	13.	12.68

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+	ROUTED TO	R192A	665.	13.83	110.	28.	13.	12.68
+	HYDROGRAPH AT	192	282.	13.08	60.	15.	7.	.50
+	2 COMBINED AT	CP192	747.	13.83	166.	42.	20.	13.38
+	DIVERSION TO	1D209	659.	13.83	149.	38.	18.	13.38
+	HYDROGRAPH AT	1D192	88.	13.83	17.	4.	2.	13.38
+	DIVERSION TO	1D210	0.	.00	0.	0.	0.	13.38
+	HYDROGRAPH AT	2D192	88.	13.83	17.	4.	2.	13.38
+	ROUTED TO	R192	85.	14.00	17.	4.	2.	13.38
+	DIVERSION TO	DI211	68.	14.00	13.	3.	2.	13.38
+	HYDROGRAPH AT	1D193	17.	14.00	3.	1.	0.	13.38
+	ROUTED TO	R192	16.	14.25	3.	1.	0.	13.38
+	HYDROGRAPH AT	193	502.	13.25	121.	30.	15.	.91
+	2 COMBINED AT	1I193	484.	13.25	119.	30.	14.	14.29
+	HYDROGRAPH AT	1D179	891.	14.00	423.	106.	51.	25.34
+	ROUTED TO	R179	868.	14.50	422.	106.	51.	25.34
+	2 COMBINED AT	CP193	926.	14.42	499.	130.	63.	39.17
+	ROUTED TO	R193	916.	14.75	499.	130.	63.	39.17
+	HYDROGRAPH AT	2D179	222.	14.00	144.	37.	18.	25.34
+	ROUTED TO	R179	152.	18.42	111.	37.	18.	25.34
+	HYDROGRAPH AT	194A	210.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	CP194A	192.	12.75	111.	45.	22.	36.84
+	HYDROGRAPH AT	194B	206.	12.75	35.	9.	4.	.25
+	3 COMBINED AT	CP194B	921.	14.75	584.	183.	88.	36.84
+	ROUTED TO	SR194B	284.	18.67	267.	176.	88.	36.84
+	ROUTED TO	R194B	284.	18.75	267.	176.	88.	36.84
	HYDROGRAPH AT							

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+		194C	707.	13.42	122.	30.	15.	.49
+	2 COMBINED AT	CP194C	748.	13.42	290.	202.	101.	37.33
+	ROUTED TO	R194C	720.	13.58	288.	202.	101.	37.33
+	HYDROGRAPH AT	D180	1003.	16.50	761.	236.	113.	30.29
+	ROUTED TO	R180	983.	17.92	736.	235.	113.	30.29
+	HYDROGRAPH AT	195	239.	13.50	67.	17.	8.	.49
+	2 COMBINED AT	1I195	978.	17.92	736.	249.	120.	33.41
+	HYDROGRAPH AT	D181	240.	12.92	156.	50.	24.	30.66
+	ROUTED TO	R181	219.	13.17	155.	50.	24.	30.66
+	3 COMBINED AT	CP195	1360.	18.00	1083.	492.	241.	41.02
+	ROUTED TO	R195	1359.	18.00	1081.	492.	241.	41.02
+	HYDROGRAPH AT	D182	295.	14.17	196.	81.	39.	38.46
+	ROUTED TO	R182	288.	15.00	195.	80.	39.	38.46
+	HYDROGRAPH AT	196	284.	13.00	61.	16.	7.	.47
+	2 COMBINED AT	1I196	296.	15.00	208.	93.	46.	38.90
+	2 COMBINED AT	CP196	1483.	18.08	1221.	573.	281.	51.58
+	ROUTED TO	R196	1480.	18.25	1219.	572.	281.	51.58
+	HYDROGRAPH AT	226	1426.	12.33	172.	49.	24.	1.18
+	HYDROGRAPH AT	201	379.	12.33	39.	10.	5.	.34
+	HYDROGRAPH AT	202	235.	13.42	66.	16.	8.	.48
+	4 COMBINED AT	CP202	1686.	12.33	1225.	629.	312.	53.58
+	ROUTED TO	R202	1598.	12.50	1225.	629.	312.	53.58
+	2 COMBINED AT	CP204	2304.	16.83	1931.	952.	473.	57.76
+	ROUTED TO	R204	2304.	16.83	1931.	952.	473.	57.76
+	HYDROGRAPH AT	205	112.	12.08	6.	2.	1.	.06
+	2 COMBINED AT	CP205	2304.	16.83	1931.	953.	473.	57.82

+	ROUTED TO	R205	0.	.00	0.	0.	0.	57.82
+	HYDROGRAPH AT	206	182.	12.17	13.	3.	2.	.12
+	2 COMBINED AT	CP206	153.	12.17	11.	3.	1.	58.31
+	2 COMBINED AT	RCP206	1406.	15.00	785.	303.	149.	68.69
+	ROUTED TO	RR206	1020.	15.75	701.	276.	136.	68.69
+	HYDROGRAPH AT	228A	129.	12.08	10.	3.	1.	.08
+	2 COMBINED AT	AFR2K	1020.	15.75	701.	278.	137.	68.77
+	ROUTED TO	R228A	962.	17.50	691.	277.	137.	68.77
+	HYDROGRAPH AT	1D10	958.	12.75	174.	47.	23.	10.87
+	HYDROGRAPH AT	2D10	1596.	12.75	215.	54.	26.	10.87
+	2 COMBINED AT	1I188	2551.	12.75	389.	101.	49.	11.08
+	ROUTED TO	R10	2512.	12.83	389.	101.	49.	11.08
+	HYDROGRAPH AT	188	256.	12.25	21.	5.	3.	.19
+	2 COMBINED AT	CP188	2517.	12.83	409.	106.	51.	11.08
+	ROUTED TO	R188	2435.	13.00	409.	106.	51.	11.08
+	HYDROGRAPH AT	207A	497.	12.42	53.	13.	6.	.50
+	2 COMBINED AT	CP207A	2469.	13.00	458.	118.	57.	11.58
+	ROUTED TO	R207A	2423.	13.08	458.	118.	57.	11.58
+	HYDROGRAPH AT	214	196.	12.25	17.	4.	2.	.16
+	2 COMBINED AT	CP214	2423.	13.08	473.	122.	59.	11.74
+	ROUTED TO	R214	2377.	13.17	473.	122.	59.	11.74
+	HYDROGRAPH AT	215A	453.	12.42	49.	12.	6.	.45
+	ROUTED TO	R215A	436.	12.50	49.	12.	6.	.45
+	HYDROGRAPH AT	215	383.	12.33	40.	10.	5.	.35
+	2 COMBINED AT	1I215	793.	12.42	88.	22.	11.	.80

+	2 COMBINED AT	2I215	2432.	13.08	554.	142.	69.	12.54
+	DIVERSION TO	1DI216	1190.	13.08	117.	29.	14.	12.54
+	HYDROGRAPH AT	3I215	1289.	13.58	438.	113.	54.	12.54
+	DIVERSION TO	2DI216	758.	13.58	244.	61.	29.	12.54
+	HYDROGRAPH AT	4I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	3DI216	0.	.00	0.	0.	0.	12.54
+	HYDROGRAPH AT	5I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	4DI216	156.	13.58	51.	13.	6.	12.54
+	HYDROGRAPH AT	CP215	376.	13.58	143.	40.	19.	12.54
+	ROUTED TO	R215	371.	12.83	143.	40.	19.	12.54
+	HYDROGRAPH AT	233	464.	12.42	52.	13.	6.	.50
+	2 COMBINED AT	CP233	722.	12.50	191.	52.	25.	13.04
+	ROUTED TO	R233	631.	12.75	191.	52.	25.	13.04
+	HYDROGRAPH AT	216	301.	12.92	56.	14.	7.	.51
+	DIVERSION TO	1OL216	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1D216I	251.	12.92	36.	9.	4.	.51
+	DIVERSION TO	2OL216	50.	12.25	13.	3.	2.	.51
+	HYDROGRAPH AT	2D216I	201.	12.92	23.	6.	3.	.51
+	DIVERSION TO	3OL216	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3D216I	151.	12.92	13.	3.	2.	.51
+	DIVERSION TO	4OL216	50.	12.67	7.	2.	1.	.51
+	HYDROGRAPH AT	4D216I	101.	12.92	6.	1.	1.	.51
+	DIVERSION TO	5OL216	50.	12.75	4.	1.	0.	.51
+	HYDROGRAPH AT	5D216I	51.	12.92	2.	0.	0.	.51
+	HYDROGRAPH AT	1D215	1190.	13.08	117.	29.	14.	12.54
	DIVERSION TO							

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+		3D183	980.	13.08	96.	24.	12.	12.54
+	HYDROGRAPH AT	1DI186	210.	13.08	21.	5.	2.	12.54
+	2 COMBINED AT	1I216	207.	13.08	21.	5.	3.	13.58
+	DIVERSION TO	1DI217	76.	13.08	6.	1.	1.	13.58
+	HYDROGRAPH AT	1D216	131.	13.08	15.	4.	2.	13.58
+	HYDROGRAPH AT	1216I	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1DI183	980.	13.08	96.	24.	12.	12.54
+	3 COMBINED AT	2I216	1146.	13.08	129.	32.	15.	13.58
+	DIVERSION TO	4D183	825.	13.08	93.	23.	11.	13.58
+	HYDROGRAPH AT	2DI186	321.	13.08	36.	9.	4.	13.58
+	DIVERSION TO	2DI217	106.	13.08	7.	2.	1.	13.58
+	HYDROGRAPH AT	2D216	215.	13.08	29.	7.	3.	13.58
+	HYDROGRAPH AT	2216I	50.	12.25	13.	3.	2.	.51
+	HYDROGRAPH AT	2DI183	825.	13.08	93.	23.	11.	13.58
+	3 COMBINED AT	3I216	1090.	13.08	134.	34.	16.	13.58
+	DIVERSION TO	5D183	448.	13.08	55.	14.	7.	13.58
+	HYDROGRAPH AT	3DI186	642.	13.08	79.	20.	10.	13.58
+	DIVERSION TO	3DI217	0.	.00	0.	0.	0.	13.58
+	HYDROGRAPH AT	3D216	642.	13.08	79.	20.	10.	13.58
+	HYDROGRAPH AT	3216I	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3DI183	448.	13.08	55.	14.	7.	13.58
+	3 COMBINED AT	4I216	1140.	13.08	144.	36.	17.	13.58
+	HYDROGRAPH AT	2D215	758.	13.58	244.	61.	29.	12.54
+	2 COMBINED AT	2I216	1872.	13.08	387.	97.	47.	13.58
+	HYDROGRAPH AT	3D215	0.	.00	0.	0.	0.	12.54
+	2 COMBINED AT	3I216	1872.	13.08	387.	97.	47.	13.58

+	DIVERSION TO	4DI217	131.	13.08	12.	3.	1.	13.58
+	HYDROGRAPH AT	4D216	1742.	13.08	375.	94.	45.	13.58
+	HYDROGRAPH AT	4D215	156.	13.58	51.	13.	6.	12.54
+	2 COMBINED AT	5I216	1894.	13.08	425.	106.	51.	13.58
+	HYDROGRAPH AT	4216I	50.	12.67	7.	2.	1.	.51
+	2 COMBINED AT	6I216	1944.	13.08	432.	108.	52.	13.58
+	DIVERSION TO	5DI217	670.	13.08	122.	31.	15.	13.58
+	HYDROGRAPH AT	5D216	1274.	13.08	309.	77.	37.	13.58
+	HYDROGRAPH AT	5216I	50.	12.75	4.	1.	0.	.51
+	2 COMBINED AT	7I216	1304.	13.08	313.	78.	38.	13.58
+	DIVERSION TO	6DI217	445.	13.08	95.	24.	11.	13.58
+	HYDROGRAPH AT	6D216	859.	13.08	218.	54.	26.	13.58
+	ROUTED TO	R216	846.	13.25	218.	54.	26.	13.58
+	HYDROGRAPH AT	234	280.	13.17	63.	16.	8.	.53
+	2 COMBINED AT	1I234	1155.	13.17	290.	72.	35.	1.04
+	2 COMBINED AT	CP234	1565.	13.17	467.	121.	58.	14.08
+	DIVERSION TO	1D248	689.	13.17	156.	39.	19.	14.08
+	HYDROGRAPH AT	D234	876.	13.17	311.	82.	40.	14.08
+	ROUTED TO	R234	828.	13.50	311.	82.	40.	14.08
+	HYDROGRAPH AT	207	508.	13.25	122.	31.	15.	1.00
+	DIVERSION TO	2D208	391.	13.25	94.	24.	11.	1.00
+	HYDROGRAPH AT	D207	117.	13.25	28.	7.	3.	1.00
+	ROUTED TO	R207	99.	13.92	28.	7.	3.	1.00
+	HYDROGRAPH AT	217	309.	13.00	66.	16.	8.	.49
+	HYDROGRAPH AT	1D216	76.	13.08	6.	1.	1.	13.58

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+	2 COMBINED AT	2I216	372.	13.00	69.	17.	8.	12.54
+	HYDROGRAPH AT	2D216	106.	13.08	7.	2.	1.	13.58
+	2 COMBINED AT	3I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	3D216	0.	.00	0.	0.	0.	13.58
+	2 COMBINED AT	4I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	4D216	131.	13.08	12.	3.	1.	13.58
+	2 COMBINED AT	5I216	611.	13.08	89.	22.	11.	12.54
+	HYDROGRAPH AT	5D216	670.	13.08	122.	31.	15.	13.58
+	2 COMBINED AT	6I216	1286.	13.08	212.	53.	26.	12.54
+	HYDROGRAPH AT	6D216	445.	13.08	95.	24.	11.	13.58
+	2 COMBINED AT	7I216	1733.	13.08	308.	77.	37.	12.54
+	ROUTED TO	RD216	1379.	13.42	307.	77.	37.	12.54
+	2 COMBINED AT	CP217	1415.	13.42	330.	83.	40.	14.03
+	DIVERSION TO	DI218	320.	13.42	80.	20.	10.	14.03
+	HYDROGRAPH AT	D217	1096.	13.42	249.	62.	30.	14.03
+	ROUTED TO	R217	1063.	13.75	249.	62.	30.	14.03
+	HYDROGRAPH AT	235	243.	13.17	56.	14.	7.	.47
+	2 COMBINED AT	1I235	1269.	13.75	319.	80.	39.	1.96
+	2 COMBINED AT	CP235	1956.	13.75	605.	156.	75.	16.04
+	DIVERSION TO	2D248	1030.	13.75	296.	74.	36.	16.04
+	HYDROGRAPH AT	D235	926.	13.75	309.	82.	40.	16.04
+	ROUTED TO	R235	889.	14.08	307.	82.	40.	16.04
+	HYDROGRAPH AT	D191	1339.	13.08	457.	115.	55.	12.38
+	ROUTED TO	R191	1339.	13.75	455.	115.	55.	12.38
+	HYDROGRAPH AT	208	530.	13.17	122.	31.	15.	1.00
	2 COMBINED AT							

								LABCARD
+		1I208	1748.	13.33	568.	144.	69.	13.18
+	HYDROGRAPH AT	D207	391.	13.25	94.	24.	11.	1.00
+	ROUTED TO	R207	347.	13.75	94.	24.	11.	1.00
+	2 COMBINED AT	CP208	1969.	13.58	655.	166.	80.	14.18
+	DIVERSION TO	1D219	597.	13.58	275.	70.	34.	14.18
+	HYDROGRAPH AT	1D208	1372.	13.58	379.	96.	46.	14.18
+	DIVERSION TO	DI209A	1365.	13.58	378.	95.	46.	14.18
+	HYDROGRAPH AT	2D208	7.	13.58	2.	0.	0.	14.18
+	ROUTED TO	R208	7.	14.25	2.	0.	0.	14.18
+	HYDROGRAPH AT	218	498.	13.25	119.	30.	14.	1.00
+	2 COMBINED AT	1I218	476.	13.25	115.	29.	14.	15.18
+	HYDROGRAPH AT	D217	320.	13.42	80.	20.	10.	14.03
+	ROUTED TO	R217	291.	14.00	80.	20.	10.	14.03
+	2 COMBINED AT	CP218	468.	13.25	181.	46.	22.	28.21
+	DIVERSION TO	DI237	302.	13.25	130.	33.	16.	28.21
+	HYDROGRAPH AT	1D218	166.	13.25	51.	13.	6.	28.21
+	DIVERSION TO	2D219	39.	13.25	12.	3.	1.	28.21
+	HYDROGRAPH AT	2D218	127.	13.25	39.	10.	5.	28.21
+	ROUTED TO	R218	122.	14.17	39.	10.	5.	28.21
+	HYDROGRAPH AT	236	516.	13.25	128.	32.	15.	1.00
+	2 COMBINED AT	1I236	578.	13.33	163.	41.	20.	16.67
+	2 COMBINED AT	CP236	1176.	14.00	449.	119.	57.	26.34
+	DIVERSION TO	DI249	308.	14.00	81.	20.	10.	26.34
+	HYDROGRAPH AT	1D236	868.	14.00	368.	99.	47.	26.34
+	DIVERSION TO	1D250	387.	14.00	121.	30.	15.	26.34
+	HYDROGRAPH AT	2D236	481.	14.00	247.	68.	33.	26.34

+	ROUTED TO	R236	478.	14.17	247.	68.	33.	26.34
+	HYDROGRAPH AT	209A	276.	13.08	60.	15.	7.	.50
+	HYDROGRAPH AT	1D208	1365.	13.58	378.	95.	46.	14.18
+	ROUTED TO	R208	1352.	13.75	377.	95.	46.	14.18
+	2 COMBINED AT	CP209A	1479.	13.67	433.	109.	52.	14.68
+	DIVERSION TO	1D220	554.	13.67	173.	44.	21.	14.68
+	HYDROGRAPH AT	1D209A	925.	13.67	260.	65.	31.	14.68
+	DIVERSION TO	2D209	248.	13.67	67.	17.	8.	14.68
+	HYDROGRAPH AT	2D209A	677.	13.67	193.	49.	23.	14.68
+	ROUTED TO	R209A	663.	14.17	193.	49.	23.	14.68
+	HYDROGRAPH AT	2D208	597.	13.58	275.	70.	34.	14.18
+	ROUTED TO	R208	584.	14.92	257.	70.	34.	14.18
+	HYDROGRAPH AT	219	278.	13.08	60.	15.	7.	.50
+	2 COMBINED AT	1I219	591.	14.92	284.	84.	41.	14.68
+	2 COMBINED AT	2I219	1070.	14.75	476.	133.	64.	15.18
+	HYDROGRAPH AT	2D218	39.	13.25	12.	3.	1.	28.21
+	ROUTED TO	R218	37.	14.50	12.	3.	1.	28.21
+	2 COMBINED AT	CP219	1083.	14.75	476.	133.	64.	29.21
+	DIVERSION TO	DI238	756.	14.75	343.	99.	47.	29.21
+	HYDROGRAPH AT	1D219	314.	14.75	127.	32.	16.	29.21
+	DIVERSION TO	2D220	130.	14.75	52.	13.	6.	29.21
+	HYDROGRAPH AT	2D219	184.	14.75	75.	19.	9.	29.21
+	ROUTED TO	R219	167.	15.58	74.	19.	9.	29.21
+	HYDROGRAPH AT	1D218	302.	13.25	130.	33.	16.	28.21
+	ROUTED TO	R218	290.	14.50	126.	33.	16.	28.21

+	HYDROGRAPH AT	237	280.	13.25	68.	17.	8.	.50
+	2 COMBINED AT	1I237	397.	14.00	187.	51.	24.	16.17
+	2 COMBINED AT	2I237	420.	14.75	253.	71.	34.	17.17
+	2 COMBINED AT	CP237	856.	14.08	490.	136.	66.	27.84
+	DIVERSION TO	2D250	226.	14.08	75.	19.	9.	27.84
+	HYDROGRAPH AT	1D237	629.	14.08	415.	118.	57.	27.84
+	DIVERSION TO	1D250A	267.	14.08	124.	31.	15.	27.84
+	HYDROGRAPH AT	2D237	362.	14.08	291.	86.	42.	27.84
+	ROUTED TO	R237	361.	14.17	290.	86.	42.	27.84
+	HYDROGRAPH AT	1D192	659.	13.83	149.	38.	18.	13.38
+	ROUTED TO	R192	548.	14.25	149.	38.	18.	13.38
+	HYDROGRAPH AT	209	308.	13.08	66.	16.	8.	.50
+	2 COMBINED AT	1I209	586.	14.25	211.	53.	26.	13.68
+	HYDROGRAPH AT	2D209A	248.	13.67	67.	17.	8.	14.68
+	ROUTED TO	R209A	244.	14.08	67.	17.	8.	14.68
+	2 COMBINED AT	CP209	800.	14.17	272.	69.	33.	16.18
+	DIVERSION TO	1D221	349.	14.17	128.	33.	16.	16.18
+	HYDROGRAPH AT	1D209	451.	14.17	144.	36.	17.	16.18
+	DIVERSION TO	2D210	136.	14.17	42.	11.	5.	16.18
+	HYDROGRAPH AT	2D209	315.	14.17	101.	25.	12.	16.18
+	ROUTED TO	R209	299.	14.67	101.	25.	12.	16.18
+	HYDROGRAPH AT	1D209A	554.	13.67	173.	44.	21.	14.68
+	ROUTED TO	R209A	530.	14.58	172.	44.	21.	14.68
+	HYDROGRAPH AT	220	281.	13.08	62.	15.	7.	.50
+	2 COMBINED AT	1I220	557.	14.50	228.	58.	28.	15.18
	2 COMBINED AT							

+		2I220	844.	14.58	327.	83.	40.	16.68
+	HYDROGRAPH AT	2D219	130.	14.75	52.	13.	6.	29.21
+	ROUTED TO	R219	127.	14.92	52.	13.	6.	29.21
+	2 COMBINED AT	CP220	898.	14.67	360.	92.	44.	30.71
+	DIVERSION TO	DI239	600.	14.67	256.	65.	31.	30.71
+	HYDROGRAPH AT	1D220	298.	14.67	104.	26.	13.	30.71
+	DIVERSION TO	2D221	249.	14.67	90.	23.	11.	30.71
+	HYDROGRAPH AT	2D220	49.	14.67	14.	4.	2.	30.71
+	ROUTED TO	R220	40.	15.75	14.	4.	2.	30.71
+	HYDROGRAPH AT	1D219	756.	14.75	343.	99.	47.	29.21
+	ROUTED TO	R219	697.	15.33	340.	99.	47.	29.21
+	HYDROGRAPH AT	238	301.	13.17	69.	17.	8.	.50
+	2 COMBINED AT	1I238	729.	15.33	393.	118.	57.	17.17
+	2 COMBINED AT	2I238	758.	15.33	406.	121.	58.	18.67
+	2 COMBINED AT	CP238	1053.	15.33	682.	204.	98.	30.34
+	DIVERSION TO	2D250A	42.	15.33	14.	3.	2.	30.34
+	HYDROGRAPH AT	1D238	1011.	15.33	669.	201.	97.	30.34
+	DIVERSION TO	1D251	118.	15.33	38.	10.	5.	30.34
+	HYDROGRAPH AT	2D238	893.	15.33	630.	191.	92.	30.34
+	ROUTED TO	R238	876.	15.75	629.	191.	92.	30.34
+	HYDROGRAPH AT	2D192	0.	.00	0.	0.	0.	13.38
+	ROUTED TO	R192	0.	.00	0.	0.	0.	13.38
+	HYDROGRAPH AT	210	283.	13.08	61.	15.	7.	.46
+	2 COMBINED AT	1I210	270.	13.08	59.	15.	7.	13.64
+	HYDROGRAPH AT	2D209	136.	14.17	42.	11.	5.	16.18
+	ROUTED TO	R209	131.	14.50	42.	11.	5.	16.18

+	2 COMBINED AT	CP210	277.	13.08	100.	25.	12.	16.58
+	ROUTED TO	R210	246.	13.92	100.	25.	12.	16.58
+	HYDROGRAPH AT	1D209	349.	14.17	128.	33.	16.	16.18
+	ROUTED TO	R209	317.	15.58	117.	33.	16.	16.18
+	HYDROGRAPH AT	221	292.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I221	322.	15.58	157.	48.	23.	16.66
+	2 COMBINED AT	2I221	454.	15.50	255.	73.	35.	17.06
+	HYDROGRAPH AT	2D220	249.	14.67	90.	23.	11.	30.71
+	ROUTED TO	R220	242.	15.00	89.	23.	11.	30.71
+	2 COMBINED AT	CP221	579.	15.42	326.	91.	44.	31.65
+	ROUTED TO	R221	536.	16.58	325.	91.	44.	31.65
+	HYDROGRAPH AT	1D220	600.	14.67	256.	65.	31.	30.71
+	ROUTED TO	R220	577.	16.00	237.	65.	31.	30.71
+	HYDROGRAPH AT	239	300.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I239	594.	15.92	263.	83.	40.	18.65
+	2 COMBINED AT	2I239	1109.	16.33	596.	179.	86.	19.59
+	2 COMBINED AT	CP239	1863.	15.92	1195.	362.	174.	31.76
+	DIVERSION TO	2D251	1285.	15.92	698.	180.	87.	31.76
+	HYDROGRAPH AT	1D239	578.	15.92	496.	182.	88.	31.76
+	DIVERSION TO	DI252	148.	15.92	101.	26.	12.	31.76
+	HYDROGRAPH AT	2D239	430.	15.92	395.	156.	75.	31.76
+	ROUTED TO	R239	429.	16.42	395.	156.	75.	31.76
+	HYDROGRAPH AT	240	266.	13.00	54.	14.	6.	.40
+	2 COMBINED AT	CP240	544.	13.00	424.	168.	81.	32.16
+	ROUTED TO	R240	529.	13.33	423.	168.	81.	32.16

								LABCARD
+	HYDROGRAPH AT	213	335.	12.50	41.	10.	5.	.35
+	ROUTED TO	R213	193.	13.42	40.	10.	5.	.35
+	HYDROGRAPH AT	212	268.	13.42	74.	18.	9.	.54
+	ROUTED TO	SR212	187.	13.83	46.	12.	6.	.54
+	2 COMBINED AT	CP212	289.	13.75	74.	18.	9.	37.23
+	ROUTED TO	R212	247.	14.75	71.	18.	9.	37.23
+	HYDROGRAPH AT	1D193	68.	14.00	13.	3.	2.	13.38
+	ROUTED TO	R193	9.	25.83	8.	3.	2.	13.38
+	HYDROGRAPH AT	211	300.	13.08	67.	17.	8.	.49
+	2 COMBINED AT	CP211	287.	13.08	64.	19.	9.	13.87
+	ROUTED TO	R211	203.	14.33	63.	19.	9.	13.87
+	HYDROGRAPH AT	221A	172.	13.25	43.	11.	5.	.31
+	2 COMBINED AT	1I221A	266.	14.17	106.	31.	15.	.80
+	ROUTED TO	SR221A	261.	14.33	91.	27.	13.	.80
+	2 COMBINED AT	CP221A	451.	14.67	150.	41.	20.	38.03
+	ROUTED TO	R221A	417.	15.17	147.	41.	20.	38.03
+	HYDROGRAPH AT	222	493.	13.58	156.	44.	21.	1.10
+	2 COMBINED AT	CP222	499.	15.08	270.	78.	39.	39.13
+	ROUTED TO	R222	472.	15.83	266.	78.	39.	39.13
+	ROUTED TO	223	460.	16.17	265.	78.	39.	39.13
+	HYDROGRAPH AT	224	1022.	12.33	111.	29.	14.	.80
+	2 COMBINED AT	CP224	894.	12.33	303.	101.	50.	55.47
+	ROUTED TO	R224	585.	12.92	284.	101.	50.	55.47
+	HYDROGRAPH AT	241	1380.	12.50	169.	42.	20.	1.51
+	2 COMBINED AT	1I241	1250.	12.50	396.	136.	67.	56.98
	2 COMBINED AT							

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                                                                                LABCARD
+                    2I241      1315.   12.83        771.        301.        147.      59.77

     2 COMBINED AT
+                    CP241      1718.   17.17       1277.        569.        279.      78.75

     ROUTED TO
+                    SR241      1715.   17.25       1276.        569.        279.      78.75
1                        SUMMARY OF DAM OVERTOPPING/BREACH ANALYSIS FOR STATION    SRWT3
                   (PEAKS SHOWN ARE FOR INTERNAL TIME STEP USED  DURING BREACH FORMATION)

PLAN  1 ..............                  INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION        1174.00           1209.00          1212.10
                          STORAGE               0.              3012.             4041.
                          OUTFLOW               0.                 0.            18460.

              RATIO     MAXIMUM      MAXIMUM     MAXIMUM     MAXIMUM     DURATION     TIME OF      TIME OF
               OF      RESERVOIR     DEPTH       STORAGE     OUTFLOW     OVER TOP    MAX OUTFLOW   FAILURE
              PMF      W.S.ELEV     OVER DAM      AC-FT        CFS        HOURS        HOURS       HOURS

              1.00     1200.41        .00         1034.        0.         .00          .00         .00

PLAN  2 ..............                  INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION        1174.00           1209.00          1212.10
                          STORAGE               0.              3012.             4041.
                          OUTFLOW               0.                 0.            18460.

              RATIO     MAXIMUM      MAXIMUM     MAXIMUM     MAXIMUM     DURATION     TIME OF      TIME OF
               OF      RESERVOIR     DEPTH       STORAGE     OUTFLOW     OVER TOP    MAX OUTFLOW   FAILURE
              PMF      W.S.ELEV     OVER DAM      AC-FT        CFS        HOURS        HOURS       HOURS

              1.00     1199.90        .00          946.        0.         .00          .00         .00

PLAN  3 ..............                  INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION        1174.00           1209.00          1212.10
                          STORAGE               0.              3012.             4041.
                          OUTFLOW               0.                 0.            18460.

              RATIO     MAXIMUM      MAXIMUM     MAXIMUM     MAXIMUM     DURATION     TIME OF      TIME OF
               OF      RESERVOIR     DEPTH       STORAGE     OUTFLOW     OVER TOP    MAX OUTFLOW   FAILURE
              PMF      W.S.ELEV     OVER DAM      AC-FT        CFS        HOURS        HOURS       HOURS

              1.00     1199.08        .00          844.        0.         .00          .00         .00

PLAN  4 ..............                  INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION        1174.00           1209.00          1212.10
                          STORAGE               0.              3012.             4041.
                          OUTFLOW               0.                 0.            18460.

              RATIO     MAXIMUM      MAXIMUM     MAXIMUM     MAXIMUM     DURATION     TIME OF      TIME OF
               OF      RESERVOIR     DEPTH       STORAGE     OUTFLOW     OVER TOP    MAX OUTFLOW   FAILURE
              PMF      W.S.ELEV     OVER DAM      AC-FT        CFS        HOURS        HOURS       HOURS

              1.00     1198.72        .00          800.        0.         .00          .00         .00

PLAN  5 ..............                  INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION        1174.00           1209.00          1212.10
                          STORAGE               0.              3012.             4041.
                          OUTFLOW               0.                 0.            18460.

              RATIO     MAXIMUM      MAXIMUM     MAXIMUM     MAXIMUM     DURATION     TIME OF      TIME OF
               OF      RESERVOIR     DEPTH       STORAGE     OUTFLOW     OVER TOP    MAX OUTFLOW   FAILURE
              PMF      W.S.ELEV     OVER DAM      AC-FT        CFS        HOURS        HOURS       HOURS

              1.00     1198.42        .00          763.        0.         .00          .00         .00
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*** NORMAL END OF HEC-1 ***

HEC-1 Output

Flow Routing Change Model

(LABCARQ.DAT)

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   08JUL04  TIME  07:34:45  *
*                                      *
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LABCARQ
****************************************
*                                      *
*    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

This output is from a model modified by HDR July 20004: Flow Routing Change Model

1 HEC-1 INPUT PAGE 1

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

   1          ID     LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
   2          ID     EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'
   3          ID
   4          ID     PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE
   5          ID     PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY
   6          ID     TURNED OFF) AT DI189.
   7          ID
   8          ID     THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS
   9          ID     AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY
  10          ID     HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL
  11          ID
  12          ID
  13          ID                                        REVISED BY URS     DATE: 01-14-04
  14          ID                                                           FILE: L303M1L.DAT
  15          ID        NOTES:
  16          ID        1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3,
  17          ID           2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
  18          ID        2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
  19          ID        3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC
  20          ID           GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN
  21          ID           THE WLB MODEL.
  22          ID        4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION
  23          ID           WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION
  24          ID           CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO
  25          ID           DRAINAGE REPORTS.
  26          ID        5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY.
  27          ID           GRAND.  COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115.
  28          ID           ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
  29          ID        6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
  30          ID        7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL
  31          ID           STORM.
  32          ID        8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
  33          ID        9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO
  34          ID           THE DATA FILE BY THE FCDMC.
  35          ID       10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS
  36          ID           AREAS #3 & #4) WERE ESTIMATED BY EEC.
              *DIAGRAM
```

```
 37          IT      5                    600
 38          IO      5
 39          IN     15
 40          JD   4.03    .001
 41          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 42          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 43          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 44          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 45          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 46          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 47          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 48          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 49          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 50          PC    .983    .986    .989    .992    .995    .998    1.00   1.000   1.000   1.000
 51          JD    3.79      10
 52          JD    3.51      50
 53          JD    3.39     100
 54          JD    3.29     200
             * ************************************************************************
             * **************THE FOLLOWING SECTION IS WHITE TANKS 3**********************
             * ************************************************************************
             * ******TRANSMISSION LOSSES REMOVED - 4/25/00 - ERE************************
             * ************************************************************************
             *
             * SUB BASIN LG AND UI RECORDS UPDATED PER SLOPE CHANGE TO SUB BASIN 1
             * AT REQUEST OF FCDMC ON 11-17-03
             *
1                                        HEC-1 INPUT                                          PAGE  2

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

 55          KK      1
 56          KM   SUB BASIN 1
 57          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 58          KM    L=      3.5  Lca=      1.5    S=  527.2  Kn= .050  LAG=  40.7
 59          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
 60          BA    1.94
 61          LG     .20     .35    4.00     .52   10.00
 62          UI    160.    207.    585.    790.    939.   1135.   1427.   1996.   1720.   1386.
 63          UI   1159.    946.    776.    535.    307.    267.    194.    160.     72.     49.
 64          UI     49.     49.     49.     49.      0.      0.      0.      0.      0.      0.
 65          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 66          KK    RCP1
 67          KM        ROUTE FLOW FROM CP1 TO CP2.
 68          RS      5              -1       0
 69          RC     .06     .04     .06   17800   .0469
 70          RX   1000    1125    1300    1390    1405    1490    1590    1750
 71          RY   1440    1439    1437    1428    1428    1439    1442    1444
             *

 72          KK      2
 73          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 2.
 74          BA    1.82
 75          LG     .18     .35    4.55     .37   12.00
 76          UI    115.    115.    259.    443.    557.    643.    728.    849.   1014.   1348.
 77          UI   1418.   1145.    985.    864.    735.    634.    545.    404.    268.    202.
 78          UI    189.    143.    115.    102.     35.     35.     35.     35.     35.     35.
 79          UI     35.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 80          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 81          KK     CP2
 82          KM        ADD HYDROGRAPHS AT CP2.
 83          HC      2    3.76

 84          KK    RCP2
 85          KM        ROUTE COMBINED HYDROGRAPHS AT CP2 TO CP3.
 86          RS      2              -1       0
 87          RC     .06    .035     .06    4500   .0111
 88          RX   1000    1100    1350    1705    1735    1780    1850    2000
 89          RY   1304    1302    1302    1298    1298    1303    1302    1305
             *

 90          KK      3A
 91          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3A
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 92          BA     .29
 93          LG     .15      .35     4.30     .42     .00
 94          UI     34.      90.     165.     213.    289.    411.    312.    240.    181.    121.
 95          UI     60.      47.      32.      10.     10.     10.     10.      0.      0.      0.
 96          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

 97          KK   RCP3A
 98          KM        ROUTE FLOW FROM CP3A TO CP3
 99          RS       2              -1       0
100          RC     .03      .03      .05    5300   .0060
101          RX    1000     1023     1032    1046    1058    1067    1250    1540
102          RY    1289     1288     1286    1284    1284    1286    1288    1291
             *

103          KK       3
104          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 3.
105          BA     .81
106          LG     .15      .35     4.45     .38     .00
107          UI     90.     226.     427.     550.    718.   1081.    912.    702.    537.    401.
108          UI    208.     151.      97.      59.     28.     28.     28.     28.      0.      0.
109          UI      0.       0.       0.       0.      0.      0.      0.      0.      0.      0.

110          KK   I1CP3
111          KM        ADD HYDROGRAPHS AT I1CP3
112          HC       2     1.1

113          KK     CP3
114          KM        ADD HYDROGRAPHS AT CP3.
115          HC       2    4.86
             * PER URS FLOODPLAIN ANALYSIS BY MIKE R.
             * TURN OFF DIVERT PER CULVERT IMPROVEMENT BY 'SONORAN RIDGE REALESTATE'
             * ALSO BY DIRECTION OF MIKE DUNCAN AT FCDMC PER HIS PHONE CONVERSATION
             * WITH SONORAN RIDGE ON 2-14-02.
             *
             * PER PHONE CONVERSATION WITH FCDMC - PROPOSED 2-10'x6' BOX CULVERTS WERE
             * BACKFILLED ON 11-01-02.  THERE IS ALSO AN EXISTING 7' CMP AND AN 8' CMP
             * AT THIS LOCATION
             *

116          KK      D3
117          KM   DIVERT FLOWS THAT WILL OVERTOP THE BEARDSLEY CANAL AT OLIVE AVENUE.  THE
118          KM   HEC-2 DIVERSION RATING CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS
119          KM   INCORPORATED HERE.
             * FOLLOWING DIVERT DATA PROVIDED BY FCDMC ON 5-14-03
             * THIS INFORMATION IS BASED ON THE CULVERT STRUCTURE CONSTRUCTED PER THE
             * SONORAN RIDGE DEVELOPMENT, SEE 'S02001035' AND 'S02002033'
120          DT   DI189
121          DI       0     1432     2823    3000    4000
122          DQ       0        0      622     728    1728

123          KK    RCP3
124          KM        ROUTE FLOW FROM CP3 TO CP10.
125          RS       2              -1       0
126          RC     .05      .03      .05    5280   .0083
127          RX    1010     1015     1020    1050    1100    1275    1580    1750
128          RY    1251     1249     1249    1245    1245    1250    1250    1254
             *
1                                          HEC-1 INPUT                                                PAGE  4

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

129          KK       4
130          KM        RUNOFF HYDROGRAPH FORM SUB-BASIN 4.
131          BA     .30
132          LG     .20      .35     4.35     .44    9.00
133          UI     47.     191.     286.     443.    513.    346.    237.    115.     67.     36.
134          UI     14.      14.       0.       0.      0.      0.      0.      0.      0.      0.
135          UI      0.       0.       0.       0.      0.      0.      0.      0.      0.      0.
             *

136          KK       5
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137          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 5.
138          BA     .72
139          LG     .20      .35     4.30      .45    9.00
140          UI    109.     433.     653.     981.   1241.     852.     594.     323.     177.     104.
141          UI     33.      33.      33.       0.      0.       0.       0.       0.       0.       0.
142          UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

143          KK     CP5
144          KM        ADD HYDROGRAPHS AT CP5.
145          HC       2    1.02

146          KK    RCP5
147          KM        ROUTE COMBINED HYDROGRAPHS AT CP5 TO CP6.
148          RS       1                -1       0
149          RC     .08      .05      .08     2400   .0833
150          RX     955      970      985     1000    1020     1035     1050     1065
151          RY    2815     2810     2805     2800    2800     2805     2810     2815
             *

152          KK       6
153          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 6.
154          BA     .45
155          LG     .20      .35     3.95      .53   10.00
156          UI    206.     627.    1145.     834.    421.     154.      53.      33.       0.       0.
157          UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

158          KK     CP6
159          KM        ADD HYDROGRAPHS AT CP6.
160          HC       2    1.47

161          KK    RCP6
162          KM        ROUTE COMBINED HYDROGRAPHS AT CP6 TO CP7.
163          RS       1                -1       0
164          RC     .08      .05      .08     2400   .0833
165          RX     955      970      985     1000    1020     1035     1050     1065
166          RY    2815     2810     2805     2800    2800     2805     2810     2815
             *

167          KK       7
168          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 7.
169          BA     .31
             *     LG     0.35     0.15    7.976   0.082       20
170          LG     .20      .35     3.95      .53   10.00
171          UI    124.     383.     708.     610.    347.     132.      54.      21.       0.       0.
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

172          UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

173          KK     CP7
174          KM        ADD HYDROGRAPHS AT CP7.
175          HC       2    1.78

176          KK    RCP7
177          KM        ROUTE COMBINED HYDROGRAPHS AT CP7 TO CP9.
178          RS       3                -1       0
179          RC     .08      .05      .08    10200  .07745
180          RX    1000     1045     1120     1195    1230     1300     1350     1450
181          RY    1910     1880     1850     1838    1838     1850     1880     1910
             *

182          KK       9
183          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 9.
184          BA    1.40
             *     LG     0.35     0.15    7.909   0.084  19.572
185          LG     .20      .35     4.00      .52   10.00
186          UI    155.     380.     725.     933.   1213.    1828.    1593.    1225.     939.     707.
187          UI    389.     261.     178.     116.     47.      47.      47.      47.       0.       0.
188          UI      0.       0.       0.       0.      0.       0.       0.       0.       0.       0.

189          KK   I1CP9
190          KM        ADD HYDROGRAPHS AT CP9.
191          HC       2    3.18
             *
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```
192          KK       8
193          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 8.
194          BA     .81
             *     LG    0.35    0.15   7.976   0.082      20
195          LG     .20     .35    3.95     .53   10.00
196          UI    103.    314.    536.    704.   1058.   1138.    821.    608.    420.    207.
197          UI    147.     95.     31.     31.     31.      0.      0.      0.      0.      0.
198          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

199          KK     CP9
200          KM         ADD HYDROGRAPHS AT CP9.
201          HC       2    3.99

202          KK    RCP9
203          KM         ROUTE COMBINED HYDROGRAPHS AT CP9 TO CP10.
204          RS       8             -1       0
205          RC     .06    .035     .06   19200   .0232
206          RX    1000    1085    1310    1395    1415    1450    1630    1665
207          RY    1317    1314    1311    1308    1308    1314    1314    1317
             *

208          KK      10
209          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 10.
210          BA    2.02
             *     LG   0.347   0.248   5.124   0.254    4.52
211          LG     .16     .35    4.55     .36    4.00
212          UI    119.    119.    219.    428.    547.    632.    709.    813.    930.   1153.
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

213          UI   1500.   1391.   1155.   1006.    893.    765.    668.    577.    473.    323.
214          UI    210.    201.    191.    119.    119.     84.     36.     36.     36.     36.
215          UI     36.     36.     36.     36.      0.      0.      0.      0.      0.      0.
216          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

217          KK  I1CP10
218          KM         ADD HYDROGRAPHS AT I1CP10
219          HC       2    6.01

220          KK    CP10
221          KM         ADD HYDROGRAPHS AT CP10
222          HC       2   10.87

223          KK    1D10
224          KM    PER URS FLOODPLAIN STUDY BY MIKE R. AND BOB D. ON 2-14-02
225          DT  1DI188
226          DI       0    6483    9725
227          DQ       0     951    1475

228          KK    2D10
229          KM         FLOW TO WHITE TANKS #3 UNDER NORTHERN AVE.  THE HEC-2 DIVERSION RATING
230          KM         CURVE MODELED BY THE FLOOD CONTROL DISTRICT IS INCORPORATED HERE.
231          DT  2DI188
232          DI       0    1000    3000    4497    5000    6000    8000   10000
233          DQ       0       0     770    1277    1450    1710    2470    3240

234          KK   RCP10
235          KM         ROUTE FLOW AT CP10 TO CP12.
236          RS       1             -1       0
237          RC     .03     .03     .05    3500   .0057
238          RX     995    1000    1020    1055    1085    1165    1250    1330
239          RY    1221    1220    1220    1211    1211    1218    1220    1222
             *

240          KK      12
241          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 12.
242          BA    1.38
243          LG     .16     .35    4.80     .31    3.00
244          UI    111.    129.    394.    536.    636.    759.    932.   1314.   1276.   1007.
245          UI    850.    696.    573.    444.    263.    191.    169.    111.     91.     34.
246          UI     34.     34.     34.     34.     34.      0.      0.      0.      0.      0.
247          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

248          KK    CP12
249          KM         ADD HYDROGRAPHS AT CP12.
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```
 250          HC       2   12.25

 251          KK   RCP12
 252          KM        ROUTE COMBINED HYDROGRAPHS AT CP12 TO CPWT3
 253          RS       2              -1       0
 254          RC     .03      .03     .04    4800   .0031
 255          RX     995     1000    1020    1080    1200    1530    1665    1760
 256          RY    1211     1211    1210    1196    1196    1200    1204    1204
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 257          KK      11
 258          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 11.
 259          BA    1.56
              *     LG    0.35    0.15    7.25   0.107  13.299
 260          LG     .18     .37    5.20     .27    7.00
 261          UI    143.    245.    572.    756.    914.   1143.   1651.   1622.   1253.   1025.
 262          UI    821.    642.    392.    248.    210.    143.     85.     44.     44.     44.
 263          UI     44.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 264          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 265          KK   RCP11
 266          KM        ROUTE HYROGRAPH FROM CP11 TO CP13.
 267          RS       3              -1       0
 268          RC     .06    .035     .06   10200   .0098
 269          RX    1000    1070    1300    1480    1510    1525    1555    1600
 270          RY    1233    1232    1230    1222    1222    1230    1232    1233
              *

 271          KK      13
 272          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 13.
 273          BA    1.30
 274          LG     .15     .35    4.55     .35     .00
 275          UI    120.    210.    484.    639.    774.    972.   1415.   1334.   1039.    847.
 276          UI    674.    527.    304.    206.    167.    120.     60.     37.     37.     37.
 277          UI     37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 278          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 279          KK    CP13
 280          KM        ADD HYDROGRAPHS AT CP13.
 281          HC       2    2.86

 282          KK   RCP13
 283          KM        ROUTE COMBINED HYDROGRAPHS AT CP13 TO CP17
 284          RS       2              -1       0
 285          RC     .03      .03     .04    2400   .0042
 286          RX    1000    1025    1040    1065    1085    1110    1175    1200
 287          RY    1206    1198    1196    1194    1194    1198    1198    1201
              *

 288          KK      14
 289          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 14.
 290          BA    1.47
              *     LG    0.35    0.15   7.974   0.082  18.195
 291          LG     .20     .35    4.30     .45    9.00
 292          UI    166.    421.    789.   1018.   1340.   1997.   1636.   1264.    961.    700.
 293          UI    363.    275.    166.     93.     51.     51.     51.      0.      0.      0.
 294          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 295          KK   RCP14
 296          KM        ROUTE FLOW FROM CP14 TO CP15.
 297          RS       4              -1       0
 298          RC     .06    .035     .06    8800  .02556
 299          RX    1000    1030    1075    1200    1220    1280    1415    1480
 300          RY    1296    1295    1294    1288    1288    1294    1296    1300
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 301          KK      15
 302          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 15.
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```
 303          BA    1.26
              *     LG    0.35   0.194   6.561   0.142   15.67
 304          LG     .18     .35    4.40     .41    7.00
 305          UI    130.    282.    577.    747.    939.   1325.   1550.   1154.    918.    712.
 306          UI    517.    276.    216.    137.     92.     40.     40.     40.     40.      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          KK  I1CP15
 310          KM        ADD HYDROGRAPHS AT I1CP15
 311          HC       2    2.73
              *

 312          KK      16
 313          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 16.
 314          BA    1.13
 315          LG     .17     .35    4.65     .34   11.00
 316          UI    115.    239.    502.    650.    811.   1121.   1392.   1050.    840.    656.
 317          UI    500.    270.    194.    138.    102.     35.     35.     35.     35.      0.
 318          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 319          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 320          KK    SR16
 321          KM        STORAGE ROUTE THROUGH THE CATERPILLAR DETENTION BASIN IN SUBWATERSHED 16
 322          RS       1    STOR       0       0
 323          SV       0       1      31     114     270     502     807    1319    1388    1460
 324          SQ       0       0       0       0       0       0       0       0       0     135
 325          SE    1198    1200    1210    1220    1230    1240    1250    1260    1261    1262
              *

 326          KK    CP15
 327          KM        ADD HYDROGRAPHS AT CP15.
 328          HC       2    3.90

 329          KK   RCP15
 330          KM        ROUTE COMBINED HYDROGRAPHS AT CP15 TO CP17.
 331          RS       3              -1       0
 332          RC     .06    .035     .06    6800   .0079
 333          RX    1000    1310    1380    1540    1640    1670    1700    1910
 334          RY    1234    1232    1228    1226    1226    1228    1232    1235
              *

 335          KK      17
 336          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 17
 337          BA    1.07
 338          LG     .19     .35    4.10     .46     .00
 339          UI    115.    273.    532.    685.    876.   1316.   1252.    953.    740.    568.
 340          UI    348.    199.    154.    112.     35.     35.     35.     35.      0.      0.
 341          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

 342          KK  I1CP17
 343          KM        ADD HYDROGRAPHS AT I1CP17.
 344          HC       2    4.97

 345          KK    CP17
 346          KM        ADD HYDROGRAPHS AT CP17.
 347          HC       2    7.83

 348          KK   RCP17
 349          KM        ROUTE FLOW FROM CP17 TO CPWT3
 350          RS       2              -1       0
 351          RC     .06     .04     .04    1600   .0022
 352          RX    1000    1220    1280    1470    1530    1660    1680    1685
 353          RY    1196    1194    1190    1182    1182    1210    1211    1212
              *

 354          KK     WT3
 355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN WT3
 356          BA     .44
 357          LG     .35     .35    4.65     .30     .00
 358          UI     36.     43.    128.    174.    206.     247.    305.    432.    401.    318.
 359          UI    268.    220.    180.    135.     79.      61.     51.     36.     25.     11.
```

```
                                                                                LABCARQ
360          UI     11.     11.     11.     11.      0.      0.      0.      0.      0.      0.
361          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

362          KK  I1CWT3
363          KM        ADD HYDROGRAPHS AT I1CPWT3
364          HC       2    8.27

365          KK   CPWT3
             * KO     1                                21
366          KM        ADD HYDROGRAPHS AT CPWT3
367          HC       2   20.52

368          KK   SRWT3
369          KM        STORAGE ROUTE THROUGH WHITE TANKS STRUCTURE #3.
370          RS       1    STOR       0       0
371          SV       0       1      14      42      91     203     466     958    1704    2716
372          SV    3012    3325    3657    4006
373          SQ       0       0       0       0       0       0       0       0       0       0
374          SQ       0    3550    9000   17600
375          SE    1174    1176    1180    1184    1188    1192    1196    1200    1204    1208
376          SE    1209    1210    1211    1212
377          SS    1209       0       0       0
378          ST  1212.1    7667     2.2     1.5
379          SW    1000    1995    3000    4000    4988    6008    7007
380          SE  1212.1  1212.4 1212.63 1213.32 1214.72 1214.94  1214.8
             *
             * ***********************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2C WITH NEW SOILS*****
             * ***********************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE 10

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

381          KK     116
382          KM   BASIN 116
383          KM    L=      1.4  Lca=       .8   S=   14.1  Kn= .030  LAG=  27.8
384          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
385          BA     .66
386          LG     .28     .25    4.90     .33   28.00
387          UI     80.    227.    406.    527.    750.    948.    693.    525.    387.    215.
388          UI    135.     88.     49.     25.     25.     25.      0.      0.      0.      0.
389          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

390          KK  116OUT
391          KM    Divert Retention in Subbasin 116
392          DT  116RET    49.4
393          DI       0   10000
394          DQ       0   10000

395          KK    R116
396          KM        ROUTE FLOW FROM CP116 TO CP117
397          RS       4      -1       0
398          RC     .05    .022    .022    4300   .0037
399          RX    1000    1001    1002    1155    1185    1200    1240    1295
400          RY    1220    1220    1220    1218    1218  1218.5    1218    1221

401          KK     117
             *
402          KM   BASIN 117
403          KM    L=      2.0  Lca=      1.0   S=   20.6  Kn= .043  LAG=  45.2
404          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
405          BA     .92
406          LG     .31     .25    5.60     .23   26.00
407          UI     68.     68.    223.    307.    373.    433.    516.    675.    861.    722.
408          UI    596.    509.    423.    353.    283.    174.    120.    112.     74.     68.
409          UI     31.     21.     21.     21.     21.     21.      0.      0.      0.      0.
410          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

411          KK  117OUT
412          KM    Divert Retention in Subbasin 117
413          DT  117RET    68.9
414          DI       0   10000
415          DQ       0   10000
```

```
 416          KK   CP117
 417          KM        Add Hydrographs at CP117
 418          HC       2    1.65

 419          KK    R117
 420          KM        ROUTE FLOW FROM CP117 TO CP125
 421          RS       5       -1        0
 422          RC    .022    .022    .025    5450   .0033
 423          RX    1000    1001    1002    1025    1060    1355    1765    1910
 424          RY    1197    1197    1197    1196    1196    1198    1200    1201
              *
```



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

 425          KK     123
 426          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 123
 427          BA    .44
 428          LG    .50     .00    5.76     .32     .00
 429          UI    20.     20.     20.     51.     74.     90.    103.    114.    124.    138.
 430          UI   155.    175.    222.    259.    243.    208.    184.    167.    152.    134.
 431          UI   121.    107.     97.     81.     60.     41.     36.     34.     33.     23.
 432          UI    20.     20.     13.      6.      6.      6.      6.      6.      6.      6.
 433          UI     6.      6.      6.      0.      0.      0.      0.      0.      0.      0.
 434          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 435          KK    D123
 436          KM        DIVERT TO CP134 FROM CP123
 437          KM        Revised DQ record, old record "* DQ" is for divert to 124
 438          DT   DI134
 439          DI       0      94     177     293     448     683    1014    1440    1964    2593
              * DQ     0      94     177     293     448     448     448     448     448       4
 440          DQ       0       0       0       0       0     235     566     992    1516    2145

 441          KK    R123
 442          KM        ROUTE REMAINDER FROM CP123 TO CP124
 443          RS       4       -1        0
 444          RC    .075    .035    .035    2640   .0038
 445          RX    1000    1350    1690    2040    2130    2148    2149    2150
 446          RY    1216    1214    1212    1210    1210    1211    1211    1211
              *

 447          KK     124
 448          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 124
 449          BA    .57
 450          LG    .50     .00    5.76     .32     .00
 451          UI    20.     20.     20.     20.     50.     70.     80.     94.    102.    111.
 452          UI   118.    128.    138.    152.    163.    188.    228.    254.    257.    223.
 453          UI   201.    183.    170.    159.    146.    133.    122.    112.    102.     95.
 454          UI    82.     66.     57.     36.     36.     34.     33.     33.     21.     20.
 455          UI    20.     20.     12.      6.      6.      6.      6.      6.      6.      6.
 456          UI     6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
 457          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 458          KK   CP124
 459          KM        ADD HYDROGRAPHS AT CP124
 460          HC       2    1.65

 461          KK   1D124
 462          KM        DIVERT TO CP136 FROM CP124
 463          DT   DI136
 464          DI       0      42      84     232     605    1435    2923
 465          DQ       0      25      51     128     292     519     798
```



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

 466          KK   2D124
 467          KM        DIVERT TO CP135 FROM CP124
 468          KM        Revised DQ record, old record "* DQ" is for divert to 125
 469          DT   DI135
 470          DI       0      17      33     104     313     916    2125
              * DQ     0      17      33      82     189     341     534
 471          DQ       0       0       0      22     124     575    1591
```

```
472          KK    R124
473          KM        ROUTE FLOW FROM CP124 TO CP125
474          RS       7          -1       0
475          RC    .025    .022    .022    5280   .0034
476          RX    1000    1220    1400    1660    1680    1708    1709    1710
477          RY    1200    1198    1196    1194    1194    1195    1195    1195
             *

478          KK     125
479          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 125
480          BA    1.00
481          LG     .35    0.33    5.00     .27     .00
482          UI     86.     123     322     430     515     626     837    1062     852     701
483          UI     572     465     369     217     148     129     86.      62      26     26.
484          UI     26.     26.     26.      0.      0.      0.      0.      0.      0.      0.
485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

486          KK   1I125
487          KM        ADD HYDROGRAPHS AT 1I125
488          HC       2    2.01

489          KK   CP125
490          KM        ADD HYDROGRAPHS AT CP125
491          HC       2    3.66

492          KK   1D125
493          KM        DIVERT TO CP137 FROM CP125
494          DT   DI137
495          DI       0      29     228     748    1285    2526    4403    6923   10115
496          DQ       0      10      76     249     428     842    1468    2308    3372

497          KK   2D125
498          KM        DIVERT TO CP138 FROM CP125
499          DT   DI138
500          DI       0      19     152     499     857    1684    2935    4615    6743
501          DQ       0      10      76     249     428     842    1468    2308    3372

502          KK    R125
503          KM        ROUTE REMAINDER FLOW FROM CP125 TO CP126
504          RS       4          -1       0
505          RC     .05     .03     .03    5280   .0038
506          RX    1000    1350    1570    1590    1630    1645    1650    1670
507          RY    1184    1182    1180    1176    1176    1180    1182    1183
             *
```



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

508          KK     118
509          KM   BASIN 118
510          KM    L=      1.0  Lca=       .4   S=   20.6  Kn= .027  LAG=  16.0
511          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
512          BA     .16
513          LG     .10     .25    4.90     .41   80.00
514          UI     55.    174.    304.    339.    202.     93.     43.     14.     10.      0.
515          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
516          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

517          KK  118OUT
518          KM    Divert Retention in Subbasin 118
519          DT  118RET    14.7
520          DI       0   10000
521          DQ       0   10000

522          KK    R118
523          KM        ROUTE FLOW FROM CP118 TO CP126
524          RS      21          -1       0
525          RC    .035    .035    .075    7500   .0045
526          RX    1000    1001    1030    1140    1260    1660    2349    2350
527          RY  1192.5  1192.5    1192    1190    1190    1191    1192    1192
             *

528          KK     126
529          KM   BASIN 126
```

```
530   KM    L=      1.8  Lca=      1.0   S=   19.3  Kn= .038  LAG=  38.5
531   KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
532   BA     .95
533   LG     .30     .25    5.10     .27   25.00
534   UI     83.    127.    319.    424.    507.    623.    846.   1029.    793.    655.
535   UI    529.    428.    317.    181.    140.    107.     83.     38.     25.     25.
536   UI     25.     25.      0.      0.      0.      0.      0.      0.      0.      0.
537   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

538   KK  126OUT
539   KM    Divert Retention in Subbasin 126
540   DT  126RET    63.9
541   DI       0   10000
542   DQ       0   10000

543   KK   1I126
544   KM        ADD HYDROGRAPHS AT CP126 (R118+126)
545   HC       2    1.11

546   KK   CP126
547   KM        ADD HYDROGRAPHS AT CP126 (R118+R125+126)
548   HC       2    4.75
      * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
```



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

549   KK    D126
550   KM        DIVERT TO CP139 FROM CP126
551   KM        based on a 80/20 split from WLB model
552   DT   DI139
553   DI       0     100     200     400     800    1200    1600    2000    2400    2800
554   DQ       0     100     200     400     800    1200    1600    2000    2400    2800

555   KK    R126
556   KM        ROUTE FLOW FROM CP126 TO CP138
557   RS       8      -1       0
558   RC    .035    .035    .075    5280   .0030
559   RX    1000    1001    1002    1010    1180    1560    2020    2200
560   RY    1161    1161    1161    1160    1160    1162    1164    1165
      *
      * ***************************************************************************
      * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2A WITH NEW SOILS*****
      * ***************************************************************************
      *

561   KK    100A
562   KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 100A
563   BA     .18
564   LG     .50     .00    4.32    0.62     .00
565   UI     15.     18.     53.     72.     85.    102.    127.    179.    163.    130.
566   UI    109.     90.     73.     54.     31.     25.     20.     15.      9.      5.
567   UI      5.      5.      5.      5.      0.      0.      0.      0.      0.      0.
568   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

569   KK   R100A
570   KM        ROUTE FLOW FROM CP100A TO CP102A
571   RS      10      -1       0
572   RC    0.04   0.035    0.04    4500  0.0036
573   RX    1000    1270    1500    1530    1570    1600    1606    1612
574   RY    1318    1316    1315  1314.5  1314.5    1315    1316    1318
      *

575   KK    102A
576   KM        RUNOFF HYDROGRAPH FROM SUB-SUBIN 102A.
577   KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
578   KM    L=      1.0  Lca=       .4   S=   20.0  Kn= .071  LAG=  40.9
579   KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
580   BA     .51
581   LG     .40     .25    5.00     .31     .00
582   UI     42.     53.    152.    205.    244.    294.    368.    517.    453.    364.
583   UI    305.    249.    204.    144.     83.     70.     53.     42.     21.     13.
584   UI     13.     13.     13.     13.      0.      0.      0.      0.      0.      0.
585   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
586          KK  1I102A
587          KM        ADD HYDROGRAPHS AT 1I102A
588          HC       2    0.69
             *
1                                   HEC-1 INPUT                                                    PAGE 15

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

589          KK     101
590          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 101.
591          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
592          KM    L=       .7  Lca=       .4   S=   21.6  Kn= .050  LAG=  24.5
593          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
594          BA     .16
595          LG     .35      .37     5.20      .23      .00
596          UI     22.      76.     122.     166.     259.     205.     150.     106.      54.      34.
597          UI     21.       7.       7.       7.       0.       0.       0.       0.       0.       0.
598          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

599          KK    R101
600          KM        ROUTE FLOW FROM CP101 TO CP102A
601          RS       1       -1        0
602          RC    0.04   0.035    0.04     600  0.0067
603          RX    1000    1240    1290    1310    1340    1350    1410    1500
604          RY    1326    1324    1322    1320    1320    1322    1322    1322

605          KK  CP102A
606          KM        ADD HYDROGRAPHS AT CP102A
607          HC       2    0.75

608          KK  102AOT
609          KM        DIVERT OUT TEMPORARY RETENTION
610          KM        RUNOFF FROM 101,102A AND 100A APPEAR TO CONCENTRATE
611          KM        IN TEMPORARY RETENTION BASIN.
612          DT  102ART    30.4
613          DI       0   10000
614          DQ       0   10000

615          KK   R102A
616          KM        ROUTE FLOW FROM CP102A TO CP106
617          RS       7       -1        0
618          RC    0.04   0.035    0.04    5280  0.0042
619          RX    1000    1400    1730    1750    1790    1810    1816    1822
620          RY    1308    1306    1304    1303    1303    1304    1306    1308
             *

621          KK     106
622          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 106.
623          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
624          KM    L=      1.3  Lca=       .8   S=   18.9  Kn= .050  LAG=  41.8
625          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
626          BA     .77
627          LG     .35      .38     5.60      .20      .00
628          UI     62.      73.     220.     300.     357.     426.     524.     739.     709.     561.
629          UI    473.     388.     318.     245.     145.     107.      93.      62.      49.      19.
630          UI     19.      19.      19.      19.       0.       0.       0.       0.       0.       0.
631          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

632          KK  106OUT
633          KM        DIVERT OUT TEMPORARY RETENTION
634          DT  106RET    32.8
635          DI       0   10000
636          DQ       0   10000
             *

637          KK   CP106
638          KM        ADD HYDROGRAPHS AT CP106
639          HC       2    1.70

640          KK    R106
641          KM   ******************************************************************************
```

```
642          KM            RUNOFF ROUTED FROM CP106 TO CP114 AS DIRECTED BY FCDMC PER APPROVED
643          KM    STANELY ENG. LOMR FOR FOR SUN CITY GRAND.
644          KM
645          KM            ** RX AND RY CARDS IN SCI R106 USED TEN FIELDS INSTEAD OF EIGHT (HEC-1
646          KM    MAX),THEREFORE THE RIGHT OVERBANK AREA WAS ASSUMED
647          KM   ***************************************************************************
648          KM
649          RS       8              -1       0
650          RC    0.05   0.050    0.05    6800  0.0031
651          RX    1000    1032    1040    1085    1093    1108    1240    1390
652          RY    1293    1291    1289    1288    1290    1292    1291    1295
             *

653          KK     105
654          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 105
655          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
656          KM    L=        .8  Lca=        .3   S=   30.8  Kn= .050  LAG=  21.8
657          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
658          BA     .21
659          LG     .35     .38    5.60     .20     .00
660          UI     33.    132.    198.    303.    363.    246.    169.     85.     49.     27.
661          UI     10.     10.     10.      0.      0.      0.      0.      0.      0.      0.
662          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

663          KK    R105
664          KM        ROUTE FLOW FROM CP105 TO CP112
665          RS       3              -1       0
666          RC    .022    .022     .03    5220   .0044
667          RX    1000    1001    1010    1020    1040    1050    1099    1100
668          RY    1303    1303    1303    1302    1302    1304    1305    1305
             *

669          KK     112
670          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 112
671          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
672          KM    L=      1.6  Lca=       .8   S=   22.0  Kn= .030  LAG=  26.4
673          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
674          BA     .63
675          LG     .32     .25    5.10     .30   21.00
676          UI     80.    249.    422.    557.    846.    879.    635.    468.    319.    156.
677          UI    111.     70.     25.     25.     25.      0.      0.      0.      0.      0.
```

1 HEC-1 INPUT PAGE 17

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

678          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

679          KK  112OUT
680          KM        DIVERSION-RETENTION AT 112
681          DT  112RET   43.68
682          DI       0   10000
683          DQ       0   10000

684          KK   CP112
685          KM        ADD HYDROGRAPHS AT CP112.
686          HC       2    0.82
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL HAPPY TRAILS DEAD STORAGE RETENTION IN
             *       SUB-BASIN 112
             *

687          KK   1D112
688          KM        DIVERT TO CP120  FROM CP112
689          DT   DI120
690          DI       0      48     165     355     625     981    1434    1990
691          DQ       0      16      55     118     208     327     478     663

692          KK   2D112
693          KM        DIVERT TO CP121A FROM CP112
694          DT  1D121A
695          DI       0      32     110     237     417     654     956    1327
696          DQ       0      16      55     118     208     327     478     663

697          KK    R112
698          KM        ROUTE REMAINDER FROM CP112 TO CP113A
```

```
699          RS       6              -1       0
700          RC    .075    .035    .035    2640   .0023
701          RX    1000    1490    1830    2600    2770    2788    2789    2790
702          RY    1290    1288    1286    1284    1284    1285    1285    1285
             *

703          KK    113A
704          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 113A
705          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
706          KM    L=      1.4  Lca=       .8   S=   26.9  Kn= .030  LAG=  24.1
707          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
708          BA     .50
709          LG     .25     .25    5.80     .21   30.00
710          UI     70.    248.    391.    540.    829.    632.    460.    319.    152.    100.
711          UI     59.     21.     21.     21.      0.      0.      0.      0.      0.      0.
712          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL BELL WEST RANCH DEAD STORAGE RETENTION IN
             *       SUB-BASIN 113A
             *
1                                          HEC-1 INPUT                                          PAGE 18

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

713          KK  113AOT
714          KM        DIVERSION-RETENTION AT 113A
715          DT  113ART   18.71
716          DI       0   10000
717          DQ       0   10000

718          KK  CP113A
719          KM        ADD HYDROGRAPHS AT CP113A (R106+R112+113A)
720          HC       2    1.34

721          KK   D113A
722          KM        DIVERT TO CP121A FROM CP113A
723          DT  2D121A
724          DI       0     185     545     642     893    1913
725          DQ       0       0       0      12      74     467

726          KK   R113A
727          KM        ROUTE REMAINDER FROM CP113A TO CP114
             * RY stations were increased by 2' at the ends to contain flow
728          RS       4              -1       0
729          RC    .035    .035    .035    2500   .0032
730          RX    1000    1020    1199    1200    1300    1301    1320    1340
731          RY    1282    1279    1280    1279    1279    1280    1279    1282
             *

732          KK     114
733          KM   BASIN 114 (revised)
734          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
735          KM    L=      3.5  Lca=      1.9   S=   19.3  Kn= .033  LAG=  55.4
736          BA    2.47
737          LG     .29     .25    5.70     .23   26.00
738          UI    150.    150.    305.    550.    710.    817.    921.   1063.   1228.   1601.
739          UI   1921.   1626.   1371.   1209.   1047.    907.    774.    660.    482.    304.
740          UI    259.    247.    172.    150.    127.     46.     46.     46.     46.     46.
741          UI     46.     46.     46.      0.      0.      0.      0.      0.      0.      0.
742          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
             *
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE IN SUN CITY GRAND SUB-BASIN 114

743          KK  114OUT
744          KM        DIVERSION-RETENTION AT 114
745          DT  114RET  192.94
746          DI       0   10000
747          DQ       0   10000

748          KK   CP114
749          KM        ADD HYDROGRAPHS AT CP114.
750          HC       3    5.26
             * DIVERT AT 114 USING DIVERT FROM ORIGINAL WLB STUDY, WHICH COMPARES TO STUDY
```

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

  751         KK    D114
  752         KM         DIVERT FLOW FROM CP114 TO CP122B
  753         DT  DI122B
  754         DI       0     105     354     622    1153    1882
  755         DQ       0       0     195     395     845    1480

  756         KK    R114
  757         KM         ROUTE REMAINER FROM CP114 TO CP115
  758         RS       6              -1       0
  759         RC    .075     .04     .04    2100   .0038
  760         RX    1000    1020    1100    1850    2030    2048    2049    2050
  761         RY    1266    1264    1262    1260    1260    1261    1261    1261
              *

  762         KK     115
  763         KM   BASIN 115  (revised)
  764         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  765         KM    L=      3.2  Lca=      1.5   S=   13.9  Kn= .033  LAG=  51.8
  766         BA    2.40
  767         LG     .28     .25    5.40     .26   27.00
  768         UI    156.    156.    375.    620.    769.    884.   1016.   1182.   1464.   1956.
  769         UI   1788.   1466.   1273.   1098.    940.    795.    661.    468.    275.    262.
  770         UI    234.    156.    156.     66.     48.     48.     48.     48.     48.     48.
  771         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
  772         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN SUN CITY GRAND SUB-BASIN 115

  773         KK  115OUT
  774         KM         DIVERSION-RETENTION AT 115
  775         DT  115RET  195.39
  776         DI       0   10000
  777         DQ       0   10000

  778         KK   CP115
  779         KM         ADD HYDROGRAPHS AT CP115
  780         HC       2    7.59

  781         KK    R115
  782         KM         CHANNEL ROUTE FROM CP115 TO CP122A
  783         RS       5              -1       0
  784         RC    .021    .021    .021    5180   .0028
  785         RX    1000    1055    1110    1122    1128    1140    1145  1145.1
  786         RY    1249  1248.5    1249    1246    1246    1249    1249    1252
              *

  787         KK    122A
  788         KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 122A
  789         KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  790         KM    L=      1.6  Lca=       .8   S=   23.5  Kn= .030  LAG=  25.9
  791         KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
  792         BA   0.382
  793         LG     .24    0.21    5.30    0.19   35.00
  794         UI     50.    159.    264.    351.    546.    519.    378.    277.    180.     86.
```



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

  795         UI     62.     35.     15.     15.     15.      0.      0.      0.      0.      0.
  796         UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
              *       STORAGE IN MOUNTAIN VISTA RANCH SUBDIVISION.
              *       SUB-BASIN 122

  797         KK  122AOT
  798         KM         DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
  799         KM         57% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
  800         DT  122ART   30.54
  801         DI       0   10000
  802         DQ       0   10000
```

```
803          KK  1I122A
804          KM        ADD HYDROGRAPHS AT INTERMEDIATE POINT TO CP122A
805          HC       2    8.33
             * move to CP114 at divert 1D122

806          KK    D114
807          KM        RETRIEVE DIVERT DI122B AT CP114
808          DR  DI122B

809          KK    R114
810          KM        ROUTE DIVERTED FLOW FROM CP114 TO CP122B
             * end stations raised by 1.5' to contain flow
811          RS       5             -1        0
812          RC     .03      .03      .03     6200   .0033
813          RX     980     1000     1004     1008    1040     1044     1048     1060
814          RY  1261.0     1258     1257     1256    1256     1257     1258   1261.0
             *

815          KK    122B
816          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 122B
817          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
818          KM    L=      1.6  Lca=       .8   S=   23.2  Kn= .029  LAG=  25.2
819          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
820          BA    0.51
821          LG     .24     0.25     6.40     0.29   35.00
822          UI     68.     227.     369.     496.    781.     672.     492.     356.     202.     115.
823          UI     73.      34.      21.      21.     21.      0.       0.       0.       0.       0.
824          UI      0.       0.       0.       0.      0.      0.       0.       0.       0.       0.

825          KK  122BOT
826          KM        DIVERSION-RETENTION IN MOUNTAIN VISTA RANCH
827          KM        43% OF TOTAL RETENTION FOR MT. VISTA RANCH IN THIS SUBBASIN
828          DT  122BRT   23.04
829          DI       0   10000
830          DQ       0   10000

831          KK  CP122B
832          KM        ADD HYDROGRAPHS AT CP122B
833          HC       2    5.66
```



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

834          KK   R122B
835          KM        ROUTE FLOW FROM CP122B TO CP122A
836          RS       1             -1        0
837          RC    .035     .018     .035     1580   .0038
838          RX    1000     1010     1020   1020.1  1079.9    1080     1090     1100
839          RY    1232     1230   1229.5     1229    1229   1229.5     1230     1232

840          KK  CP122A
841          KM        ADD HYDROGRAPHS AT CP122A       (CP122A+122BOT+R115)
842          HC       2    8.49

843          KK  1R122A
844          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (new)
845          KM        This channel continues along Reemes from Green field for 1/2 mile
846          RS       2             -1        0
847          RC    .018     .035     .035     2640   .0042
848          RX    1000     1030     1060     1076    1101     1117     1118     1119
849          RY    1222     1222     1222     1218    1218     1222     1223     1224

850          KK  2R122A
851          KM        CHANNEL ROUTE BETWEEN CP122A AND CP133  (WLB - original modified for
852          KM                                                 length)
853          RS       7             -1        0
854          RC     .05      .05     .075     2640   .0038
855          RX    1000     1001     1002     1015    1235     1600     2030     2220
856          RY    1219     1219     1219     1218    1218     1220     1222     1224
             *
             * ************************************************************************
             * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2B WITH NEW SOILS*****
             * ************************************************************************
             *
```

```
857          KK     111
858          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111.
859          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
860          KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
861          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
862          BA     .26
863          LG     .25     .25    5.40     .26   25.00
864          UI     87.    280.    482.    563.    338.    161.     73.     26.     17.      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.
             *       INSERT HYDROGRAPH STEP INTO ORIGINAL WTADMS.24 TO REFLECT RETENTION
             *       STORAGE - SUM OF ALL ARIZONA TRADITIONS RETENTION IN
             *       SUB-BASIN 111

867          KK  111OUT
868          KM        DIVERSION-RETENTION
869          DT  111RET   12.46
870          DI       0   10000
871          DQ       0   10000
```



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

872          KK    R111
873          KM        ROUTE FROM CP111 TO CP111A
874          RS       3              -1       0
875          RC    .075    .035    .035    1800   .0039
876          RX    1000    1570    2040    2370    2440    2468    2469    2470
877          RY    1312    1310    1308    1306    1306    1307    1307    1307
             *

878          KK     104
879          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 104
880          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
881          KM    L=       .6  Lca=       .3   S=   16.2  Kn= .050  LAG=  22.1
882          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
883          BA     .15
884          LG     .35     .39    5.70     .19     .00
885          UI     23.     91.    137.    207.    259.    177.    123.     65.     36.     21.
886          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
887          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

888          KK    R104
889          KM        ROUTE FLOW FROM CP104 TO CP111A
890          RS      53              -1       0
891          RC    .075    .075    .075    6552   .0056
892          RX    1000    1001    1230    1270    1750    2000    2380    2650
893          RY    1321    1321    1320    1318    1318    1319    1318    1320
             *

894          KK    111A
895          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 111A.
896          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
897          KM    L=       .7  Lca=       .4   S=   17.6  Kn= .030  LAG=  16.2
898          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
899          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
900          KM    L=      1.5  Lca=       .9   S=   34.0  Kn= .030  LAG=  24.8
901          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
902          BA     .61
903          LG     .23     .26    5.30     .27   18.00
904          UI     83.    283.    455.    616.    968.    792.    580.    414.    220.    136.
905          UI     83.     31.     25.     25.      0.      0.      0.      0.      0.      0.
906          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

907          KK  111AOT
908          KM        DIVERSION-RETENTION AT 111A
909          DT  111ART   55.65
910          DI       0   10000
911          DQ       0   10000

912          KK  CP111A
913          KM        ADD HYDROGRAPHS AT CP111A
914          HC       3    0.97
             *     ADDED R111A, BASED ON WLB OVERLAND CHANNEL ROUTES
```

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

 915          KK   R111A
 916          KM          ROUTE FLOW FROM CP111A TO CP120
 917          RS      25              -1       0
 918          RC     .05      .05     .05    5700   .0028
 919          RX    1000     1001    1002    1045    1150    1570    1960    2350
 920          RY    1249     1249    1249    1248    1248    1250    1252    1254
              *

 921          KK     119
 922          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 119
 923          BA     .86
 924          LG     .50      .00    5.40     .38     .00
 925          UI     36.      36.     36.     58.    120.    142.    168.    185.    202.    218.
 926          UI    241.     267.    292.    350.    424.    469.    404.    355.    319.    293.
 927          UI    270.     241.    219.    197.    178.    161.    131.    103.     68.     63.
 928          UI     60.      59.     47.     36.     36.     36.     16.     11.     11.     11.
 929          UI     11.      11.     11.     11.     11.     11.     11.     11.      0.      0.
 930          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

 931          KK    D119
 932          KM        DIVERT TO CP128 FROM CP119
 933          DT   DI128
 934          DI       0       42     139     286     485     739    1052    1425
 935          DQ       0       25      81     167     283     429     607     819

 936          KK    R119
 937          KM        ROUTE REMAINDER FROM CP119 TO CP119A
 938          RS       6              -1       0
 939          RC    .075     .035    .035    2640   .0015
 940          RX    1000     1001    1450    1800    1820    1838    1839    1840
 941          RY    1292     1292    1290    1288    1288    1289    1289    1289
              *

 942          KK    119A
 943          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 119A
 944          BA     .47
 945          LG     .50      .00    5.40     .38     .00
 946          UI     19.      19.     19.     29.     64.     75.     90.     98.    107.    116.
 947          UI    128.     142.    154.    181.    219.    254.    226.    197.    177.    162.
 948          UI    150.     134.    121.    111.     98.     91.     77.     59.     46.     34.
 949          UI     33.      32.     31.     19.     19.     19.     16.      6.      6.      6.
 950          UI      6.       6.      6.      6.      6.      6.      6.      6.      6.      0.
 951          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
 952          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

 953          KK  CP119A
 954          KM        ADD HYDROGRAPHS AT CP119A
 955          HC       2     1.26
```



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

 956          KK   D119A
 957          KM        DIVERT TO CP130 FROM CP119A
 958          DT   DI130
 959          DI       0       13      46     100     177     281     413     577     774    1007
 960          DI    1279     1600    1978
 961          DQ       0        0       0       0       0       0       0       0       0       0
 962          DQ       0        9      31

 963          KK   R119A
 964          KM        ROUTE REMAINDER FROM CP119A TO CP120
 965          RS       2              -1       0
 966          RC    .035     .035    .035    2300   .0096
 967          RX    1000     1001    1002    1180    1200    1213    1214    1215
 968          RY    1278     1278    1278    1276    1276    1277    1277    1277
              *

 969          KK     120
 970          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 120
```

```
 971          BA     .54
 972          LG     .50     .00    7.30     .17     .00
 973          UI     21.     21.     21.     23.     69.     79.     94.    105.    115.    123.
 974          UI    134.    148.    161.    179.    212.    257.    277.    239.    211.    191.
 975          UI    176.    164.    147.    133.    124.    109.    101.     88.     70.     57.
 976          UI     37.     37.     35.     35.     28.     21.     21.     21.     13.      6.
 977          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
 978          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
 979          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

 980          KK   1I120
 981          KM        ADD HYDROGRAPHS AT 1I120
 982          HC       3    2.88

 983          KK   1D112
 984          KM        RETURN DIVERT AT CP112
 985          DR   DI120

 986          KK    R112
 987          KM        ROUTE FLOW FROM CP112 TO CP120
 988          RS       8              -1       0
 989          RC    .035    .035    .075    5270   .0044
 990          RX    1000    1001    1002    1020    1040    1340    1820    2030
 991          RY    1281    1281    1281    1280    1280    1282    1284    1286

 992          KK   CP120
 993          KM        ADD HYDROGRAPHS AT CP120.
 994          HC       2    3.58

 995          KK    R120
 996          KM        ROUTE FLOWS FROM CP120 TO CP130
 997          RS       5              -1       0
 998          RC     .03     .03     .06    5280   .0032
 999          RX    1000    1001    1002    1020    1040    1090    1520    1830
1000          RY    1261    1261    1261    1260    1260    1262    1264    1266
```

1 HEC-1 INPUT PAGE 25

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

1001          KK    D119
1002          KM        RETURN DIVERT AT CP119
1003          DR   DI128

1004          KK    R119
1005          KM        ROUTE FLOW CP119 TO CP128
1006          RS       4              -1       0
1007          RC    .035    .035     .06    2640   .0015
1008          RX    1000    1001    1002    1010    1045    1085    1460    1710
1009          RY    1287    1287    1287    1286    1286    1288    1290    1292
              *

1010          KK     128
1011          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 128
1012          BA     .41
1013          LG     .50     .00    4.90     .47     .00
1014          UI     22.     22.     25.     73.     90.    106.    120.    133.    151.    170.
1015          UI    206.    264.    270.    223.    195.    175.    155.    136.    119.    105.
1016          UI     89.     64.     41.     38.     36.     29.     22.     22.     14.      7.
1017          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
1018          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1019          KK   CP128
1020          KM        ADD HYDROGRAPHS AT CP128
1021          HC       2    1.27

1022          KK    R128
1023          KM        ROUTE FLOW FROM CP128 TO CP130
1024          RS      38              -1       0
1025          RC    .075    .075    .075    6240   .0062
1026          RX    1000    1400    1770    2240    3260    3468    3469    3470
1027          RY    1272    1270    1268    1266    1266    1267    1267    1267       .

1028          KK   D119A
1029          KM        RETURN DIVERT AT CP119A
1030          DR   DI130
```

```
1031          KK   R119A
1032          KM        ROUTE FLOW FROM CP119A TO CP130
1033          RS       5              -1       0
1034          RC     .08      .08     .08    6318   .0062
1035          RX    1000     1400    1770    2240    3260    3468    3469    3470
1036          RY    1272     1270    1268    1266    1266    1267    1267    1267
              *

1037          KK     130
1038          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 130
1039          BA    1.00
1040          LG     .50      .00    5.40     .38     .00
1041          UI     37.      37.     37.     37.    108.    133.    156.    177.    194.    210.
1042          UI    225.     244.    269.    289.    327.    397.    453.    482.    418.    371.
1043          UI    338.     312.    291.    264.    241.    221.    202.    184.    170.    142.
1044          UI    108.      85.     66.     65.     61.     61.     46.     37.     37.     37.
1045          UI     25.      11.     11.     11.     11.     11.     11.     11.     11.     11.
```



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

1046          UI     11.      11.     11.     11.      0.      0.      0.      0.      0.      0.
1047          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

1048          KK   1I130
1049          KM        ADD HYDROGRAPHS AT 1I130
1050          HC       3    3.77
              *

1051          KK     129
1052          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 129
1053          BA     .43
1054          LG     .42      .05    4.32     .59    4.00
1055          UI     28.      28.     72.    116.    143.    164.    189.    222.    287.    360.
1056          UI    312.     259.    226.    192.    164.    139.    109.     71.     50.     47.
1057          UI     36.      28.     23.      9.      9.      9.      9.      9.      9.      9.
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          KK    R129
1061          KM        ROUTE FLOW FROM CP129 TO CP130
1062          RS       9              -1       0
1063          RC    .075      .04     .04    5280    .006
1064          RX    1000     1250    1450    2070    2080    2098    2099    2100
1065          RY    1270     1268    1266    1264    1264    1265    1265    1265

1066          KK   CP130
1067          KM        ADD HYDROGRAPHS AT CP130.
1068          HC       3    5.37

1069          KK    D130
1070          KM        DIVERT TO CP144 FROM CP130
1071          DT   DI144
1072          DI       0       37     124     257     440     743    1487    2233    3928    6436
1073          DQ       0        0       0       0       0     196     657    1133    2198    3747

1074          KK    R130
1075          KM        ROUTE REMAINDER FROM CP130 TO CP131A
1076          RS       8              -1
1077          RC    .075      .04     .04    2640   .0057
1078          RX    1000     1001    1640    2050    2290    2328    2329    2330
1079          RY    1234     1234    1232    1230    1230    1231    1231    1231
              *

1080          KK    131A
1081          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131A
1082          BA     .49
1083          LG     .50      .00    5.00     .45     .00
1084          UI     22.      22.     22.     48.     77.     93.    106.    119.    129.    142.
1085          UI    159.     175.    208.    256.    285.    243.    212.    191.    174.    158.
1086          UI    141.     128.    112.    103.     86.     64.     45.     39.     36.     36.
1087          UI     27.      22.     22.     19.      7.      7.      7.      7.      7.      7.
1088          UI      7.       7.      7.      7.      7.      0.      0.      0.      0.      0.
1089          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
```

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

1090          KK  CP131A
1091          KM        ADD HYDROGRAPHS AT CP131A
1092          HC       2    5.87

1093          KK   R131A
1094          KM        ROUTE FLOW FROM CP131A TO R131
1095          RS       8              -1
1096          RC    .075     .04     .04    2640   .0051
1097          RX    1000    1001    1640    2050    2290    2328    2329    2330
1098          RY    1234    1234    1232    1230    1230    1231    1231    1231
              *

1099          KK     131
1100          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 131
1101          BA     .49
1102          LG     .50     .00    5.00     .45     .00
1103          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
1104          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
1105          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
1106          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
1107          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
1108          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1109          KK   1I131
1110          KM        ADD HYDROGRAPHS AT CP131
1111          HC       2    9.57

1112          KK   2D112
1113          KM        RETURN DIVERT AT CP112
1114          DR  1D121A

1115          KK    R112
1116          KM        ROUTE FLOW FROM CP112 TO CP121A
1117          RS       6              -1       0
1118          RC     .05    .022     .05    6700   .0034
1119          RX    1000    1180    1205    1225    1295    1320    1345    1670
1120          RY    1265    1264    1262    1260    1260    1262    1264    1265
              *

1121          KK    121A
1122          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121A
1123          BA     .50
1124          LG     .46     .09    5.76     .28     .00
1125          UI     26.     26.     30.     89.    109.    129.    146.    161.    183.    205.
1126          UI    248.    317.    331.    274.    238.    214.    190.    166.    147.    129.
1127          UI    109.     80.     52.     46.     43.     37.     26.     26.     19.      8.
1128          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
1129          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1130          KK  1I121A
1131          KM        ADD HYDROGRAPHS AT 1I121A
1132          HC       2    1.34

1133          KK   D113A
1134          KM        RETURN DIVERT AT CP113A
1135          DR  2D121A

1136          KK   R113A
1137          KM        ROUTE FLOW FROM CP113A TO CP121A
1138          RS       6              -1       0
1139          RC     .05    .025     .05    5280   .0047
1140          RX    1000    1001    1002    1020    1170    1200    1290    1500
1141          RY    1278    1278    1278    1276    1276    1278    1279    1280

1142          KK  CP121A
1143          KM        ADD HYDROGRAPHS AT CP121A
1144          HC       2    3.54
```

```
1145          KK   R121A
1146          KM        ROUTE FLOW FROM CP121A TO CP121
1147          RS       2             -1       0
1148          RC    .035    .035    .035    2640   .0096
1149          RX    1000    1001    1002    1180    1200    1213    1214    1215
1150          RY    1278    1278    1278    1276    1276    1277    1277    1277
              *

1151          KK     121
1152          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 121
1153          BA     .50
1154          LG     .46     .09    5.52     .31     .00
1155          UI     26.     26.     31.     90.    110.    130.    147.    163.    185.    209.
1156          UI    253.    325.    328.    272.    237.    213.    189.    165.    145.    127.
1157          UI    107.     77.     49.     46.     44.     35.     26.     26.     16.      8.
1158          UI      8.      8.      8.      8.      8.      8.      8.      0.      0.      0.
1159          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1160          KK   CP121
1161          KM        ADD HYDROGRAPHS AT CP121
1162          HC       2    4.03

1163          KK    R121
1164          KM        ROUTE FLOW FROM CP121 TO CP131
1165          RS       7             -1       0
1166          RC    .035    .035    .075    5280   .0055
1167          RX    1000    1001    1002    1050    1115    1450    1910    1570
1168          RY    1239    1239    1239    1238    1238    1239    1240    1242

1169          KK   CP131
1170          KM        ADD HYDROGRAPHS AT CP131.
1171          HC       2   10.47
```



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

1172          KK    D131
1173          KM        DIVERT TO CP145 FROM CP131
1174          DT   DI145
1175          DI       0      60     608    1900    3801    6042    9665
1176          DQ       0      39     491    1546    2353    4171    6841

1177          KK    R131
1178          KM        ROUTE REMAINDER FROM CP131 TO CP132
1179          RS       4             -1       0
1180          RC    .075    .035    .035    2150   .0028
1181          RX    1000    1370    1760    2150    2165    2173    2174    2175
1182          RY    1224    1222    1220    1218    1218    1219    1219    1219
              *

1183          KK     132
1184          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 132
1185          BA     .41
1186          LG     .50     .00    4.32     .62     .00
1187          UI      19      19      19      49      70      86      98     108     118     132
1188          UI     147     169     212     248     223     191     170     155     140     124
1189          UI     112      98      89      70      55      34      34      32      30      19
1190          UI      19      19       8       6       6       6       6       6       6       6
1191          UI       6       6       0       0       0       0       0       0       0       0
1192          UI       0       0       0       0       0       0       0       0       0       0

1193          KK   CP132
1194          KM        ADD HYDROGRAPHS AT CP132
1195          HC       2    9.97

1196          KK    R132
1197          KM        ROUTE FLOW FROM CP132 TO CP133
1198          RS       5             -1       0
1199          RC     .08     .04     .04    2640    .003
1200          RX    1000    1400    1670    2050    2230    2258    2259    2260
1201          RY    1218    1216    1214    1212    1212    1213    1213    1213
              *

1202          KK     133
1203          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 133
```

```
1204          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1205          KM    L=      1.1  Lca=       .6   S=   30.4  Kn= .097  LAG=  61.2
1206          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1207          BA     .50
1208          LG     .44      .25     4.65      .48     8.00
1209          UI     27.      27.      39.      95.     118.     139.     156.     174.     201.     229.
1210          UI    295.     352.     309.     261.     231.     207.     178.     158.     137.     116.
1211          UI     86.      56.      48.      45.      37.      27.      27.      15.       8.       8.
1212          UI      8.       8.       8.       8.       8.       8.       0.       0.       0.       0.
1213          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
```



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

1214          KK  133OUT
1215          KM        DIVERSION-RETENTION
1216          DT  133RET    9.36
1217          DI       0   10000
1218          DQ       0   10000

1219          KK   1I133
1220          KM        ADD HYDROGRAPHS AT 1I133
1221          HC       2   11.37

1222          KK   CP133
1223          KM        ADD HYDROGRAPHS AT CP133
1224          HC       2   15.93

1225          KK   1D133
1226          KM        DIVERT TO CP146 FROM CP133
1227          DT   DI146
1228          DI       0      80     341    1081    2600    4587    7337
1229          DQ       0      32     136     432    1040    1835    2935

1230          KK   2D133
1231          KM        DIVERT TO CP147 FROM CP133
1232          DT   1D147
1233          DI       0      48     205     649    1560    2752    4402
1234          DQ       0      16      68     216     520     917    1467

1235          KK    R133
1236          KM        ROUTE REMAINDER FROM CP133 TO CP134
1237          RS       4              -1       0
1238          RC     .06    .035    .035    2640   .0049
1239          RX    1000    1340    1600    1815    1860    1888    1889    1890
1240          RY    1206    1204    1202    1200    1200    1203    1203    1203
              *

1241          KK     134
1242          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 134
1243          BA     .50
1244          LG     .50      .00     4.74      .51      .00
1245          UI     22.      22.      22.      49.      79.      95.     108.     122.     132.     145.
1246          UI    162.     178.     213.     261.     291.     248.     216.     195.     178.     161.
1247          UI    143.     131.     114.     105.      88.      65.      46.      39.      37.      37.
1248          UI     27.      22.      22.      20.       7.       7.       7.       7.       7.       7.
1249          UI      7.       7.       7.       7.       7.       0.       0.       0.       0.       0.
1250          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

1251          KK    D123
1252          KM        RETURN DIVERT AT CP123
1253          DR   DI134
```



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

1254          KK    R123
1255          KM        ROUTE DIVERT FROM CP123 TO CP134
1256          RS       6              -1       0
1257          RC     .04     .04    .075    5280   .0038
1258          RX    1000    1001    1002    1045    1150    1570    1960    2350
1259          RY    1209    1209    1209    1208    1208    1210    1212    1214

1260          KK   CP134
```

```
1261          KM        ADD HYDROGRAPHS AT CP134
1262          HC       3   16.87

1263          KK    D134
1264          KM        DIVERT TO CP147 FROM CP134
1265          DT   2D147
1266          DI       0      26     162     614    1050    2192    3494    6483   10967
1267          DQ       0       0      62     352     697    1575    2539    4742    8027

1268          KK    R134
1269          KM        ROUTE REMAINDER FROM CP134 TO CP135
1270          RS       2              -1       0
1271          RC     .06     .03     .03    2640   .0045
1272          RX    1000    1490    1950    2015    2040    2048    2049    2050
1273          RY    1194    1192    1190    1188    1188    1189    1189    1189

1274          KK   1D124
1275          KM        RETURN DIVERT AT CP124
1276          DR   DI135

1277          KK    R124
1278          KM        ROUTE RUNOFF FROM CP124 TO CP135
1279          RS      10              -1       0
1280          RC    .035    .035    .075    5280   .0042
1281          RX    1000    1001    1002    1020    1070    1360    1800    2190
1282          RY    1195    1195    1195    1194    1194    1196    1198    1200
              *

1283          KK     135
1284          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 135
1285          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1286          KM    L=      1.2  Lca=      .6   S=   27.1  Kn= .076  LAG=  50.9
1287          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1288          BA     .49
1289          LG     .38     .25    4.65     .45   15.00
1290          UI     32.     32.     81.    132.    162.    187.    215.    252.    324.    410.
1291          UI    356.    296.    258.    219.    187.    159.    126.     81.     57.     53.
1292          UI     41.     32.     27.     10.     10.     10.     10.     10.     10.     10.
1293          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1294          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1295          KK  135OUT
1296          KM        DIVERSION-RETENTION
1297          DT  135RET   18.00
1298          DI       0   10000
1299          DQ       0   10000

1300          KK   CP135
1301          KM        ADD HYDROGRAPHS AT CP135
1302          HC       3   17.92

1303          KK    D135
1304          KM        DIVERT TO CP148 FROM CP135
1305          DT   DI148
1306          DI       0      24     136     323     849    1809    2524    4155    6589    8820
1307          DQ       0       0       0      21     135     427     747    1477    2566    3013

1308          KK    R135
1309          KM        ROUTE REMAINDER FROM CP135 TO CP136
1310          RS       4              -1       0
1311          RC    .075    .035    .035    2640   .0038
1312          RX    1000    1430    1790    2250    2275    2298    2299    2300
1313          RY    1182    1180    1178    1176    1176    1177    1177    1177

1314          KK   2D124
1315          KM        RETURN DIVERT AT CP124
1316          DR   DI136

1317          KK    R124
1318          KM        ROUTE FLOW FROM CP124 TO CP136
1319          RS      50              -1       0
1320          RC     .07     .07     .07    6084   .0053
```

```
                                                                                                LABCARQ
1321          RX    1000    1001    1002    1260    2160    2448    2449    2450
1322          RY    1193    1193    1193    1192    1192    1193    1193    1193
              *

1323          KK     136
1324          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 136
1325          BA     .46
1326          LG     .50     .00    4.82     .49     .00
1327          UI     21.     21.     21.     45.     73.     88.    100.    112.    122.    134.
1328          UI    150.    165.    198.    243.    268.    227.    198.    179.    164.    147.
1329          UI    131.    120.    105.     96.     79.     59.     40.     36.     34.     34.
1330          UI     24.     21.     21.     17.      6.      6.      6.      6.      6.      6.
1331          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
1332          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1333          KK   1I136
1334          KM        ADD HYDROGRAPHS AT 1I136
1335          HC       2    1.03
1                                          HEC-1 INPUT                                                PAGE 33

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

1336          KK   CP136
1337          KM        ADD HYDROGRAPHS AT CP136
1338          HC       2   18.33

1339          KK    R136
1340          KM        ROUTE FLOW FROM CP136 TO CP137
1341          RS       5              -1       0
1342          RC     .08    .035    .035    2640   .0042
1343          RX    1000    1370    1790    3210    3270    3298    3299    3300
1344          RY    1170    1168    1166    1164    1164    1165    1165    1165

1345          KK   1D125
1346          KM        RETURN DIVERT AT CP125
1347          DR   DI137

1348          KK    R125
1349          KM        ROUTE FLOW FROM CP125 TO CP137
1350          RS       8              -1       0
1351          RC    .035    .035    .075    5280   .0047
1352          RX    1000    1001    1002    1030    1175    1640    2135    2600
1353          RY    1171    1171    1171  1169.5    1170    1172    1174    1176
              *

1354          KK     137
1355          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 137
1356          BA     .54
1357          LG     .50     .00    5.10     .43     .00
1358          UI     18.     18.     18.     18.     37.     61.     70.     82.     89.     98.
1359          UI    104.    111.    120.    131.    141.    153.    179.    210.    240.    227.
1360          UI    200.    180.    166.    154.    145.    134.    121.    113.    104.     94.
1361          UI     88.     79.     67.     53.     41.     32.     32.     30.     30.     27.
1362          UI     18.     18.     18.     18.     10.      6.      6.      6.      6.      6.
1363          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
1364          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1365          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1366          KK   CP137
1367          KM        ADD HYDROGRAPHS AT CP137 (137 + DR137 FROM 125 + 136)
1368          HC       3    21.6

1369          KK   1D137
1370          KM        DIVERT FROM CP137 TO CP149
1371          DT   DI149
1372          DI       0       6     169     684    1659    3199    5400    8353   12141
1373          DQ       0       2      56     228     553    1066    1800    2784    4047

1374          KK   2D137
1375          KM        DIVERT FROM CP137 TO CP153
1376          DT   DI153
1377          DI       0       4     113     456    1106    2133    3600    6553    8094
1378          DQ       0       2      56     228     553    1066    1800    2784    4047
1                                          HEC-1 INPUT                                                PAGE 34
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                                                                                                                LABCARQ
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1379          KK    R137
1380          KM        ROUTE FLOW FROM CP137 TO CP138
1381          RS      22              -1       0
1382          RC     .08     .03     .03    2640   .0021
1383          RX    1000    2200    2310    2320    2340    2368    2369    2370
1384          RY    1162    1156  1156.5    1156    1156    1157    1157    1157

1385          KK   2D125
1386          KM        RETURN DIVERT AT CP125
1387          DR   DI138

1388          KK    R125
1389          KM        ROUTE FLOW FROM CP125 TO CP138
1390          RS      50              -1       0
1391          RC    .075    .075    .075    7500   .0048
1392          RX    1000    1050    1100    1200    2020    2198    2250    2300
1393          RY    1171  1170.5  1170.5    1170    1170  1170.5  1170.5    1171
              *

1394          KK     138
1395          KM   BASIN 138
1396          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1397          KM    L=      1.0  Lca=       .5   S=   28.0  Kn= .120  LAG=  70.5
1398          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1399          BA     .54
1400          LG     .50     .25    5.00     .43     .00
1401          UI     26.     26.     26.     70.     96.    119.    133.    147.    162.    182.
1402          UI    201.    239.    298.    336.    285.    247.    221.    202.    178.    159.
1403          UI    142.    126.    109.     83.     59.     46.     43.     42.     31.     26.
1404          UI     26.     17.      8.      8.      8.      8.      8.      8.      8.      8.
1405          UI      8.      8.      0.      0.      0.      0.      0.      0.      0.      0.
1406          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1407          KK   1I138
1408          KM        ADD HYDROGRAPHS AT CP138
1409          HC       2   22.08

1410          KK   CP138
1411          KM        ADD HYDROGRAPHS AT CP138 (137 + 138)
1412          HC       2   22.08

1413          KK    R138
1414          KM        ROUTE REMAINDER FROM CP138 TO CP138A
1415          RS      22              -1       0
1416          RC     .08     .03     .03    2640   .0021
1417          RX    1000    2200    2310    2320    2340    2368    2369    2370
1418          RY    1162    1156  1156.5    1156    1156    1157    1157    1157
              *
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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1419          KK    138A
1420          KM   BASIN 138A
1421          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1422          KM    L=      1.3  Lca=       .6   S=   24.0  Kn= .030  LAG=  21.4
1423          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1424          BA     .46
1425          LG     .25     .25    4.90     .32   30.00
1426          UI     75.    299.    448.    701.    781.    527.    357.    169.    100.     51.
1427          UI     22.     22.      0.      0.      0.      0.      0.      0.      0.      0.
1428          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1429          KK  138AOT
1430          KM        DIVERSION-RETENTION
1431          DT  138ART   34.44
1432          DI       0   10000
1433          DQ       0   10000

1434          KK  1I138A
1435          KM        ADD HYDROGRAPHS AT CP138 (138 + 138A)
1436          HC       2   23.70
```

```
1437        KK  2I138A
1438        KM        ADD HYDROGRAPHS AT CP138 (138 + 126)
1439        HC       2   24.81
            *
            * ***********************************************************************
            * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2D WITH NEW SOILS*****
            * ***********************************************************************
            *

1440        KK   2D137
1441        KM        RETURN DIVERT AT CP137
1442        DR   DI153

1443        KK    R137
1444        KM        ROUTE FLOW FROM CP137 TO CP153
1445        RS      51              -1       0
1446        RC    .075    .075    .075    5600   .0018
1447        RX     900    1000    1200    1450    1800    2000    2300    2450
1448        RY  1156.5    1156    1155  1154.7  1154.7    1155    1156  1156.5
            *

1449        KK     153
1450        KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 153
1451        BA     .20
1452        LG     .50     .00    5.76    0.32     .00
1453        UI      7.      7.      7.      7.     17.     24.     28.     33.     35.     39.
1454        UI     41.     44.     48.     53.     56.     65.     79.     87.     91.     79.
1455        UI     71.     65.     60.     56.     52.     47.     43.     40.     36.     33.
1456        UI     29.     24.     20.     13.     12.     12.     12.     12.      8.      7.
1457        UI      7.      7.      5.      2.      2.      2.      2.      2.      2.      2.
1458        UI      2.      2.      2.      2.      2.      2.      0.      0.      0.      0.
1459        UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1460        KK   CP153
1461        KM        ADD HYDROGRAPHS AT CP153
1462        HC       2   21.92

1463        KK  CP138A
1464        KM        ADD HYDROGRAPHS AT CP138A
1465        HC       2   23.68

1466        KK   D138A
1467        KM        DIVERT TO CP154 FROM CP138A
1468        DT   DI154
1469        DI       0      44     392    1366    3326    6347   10546   16046
1470        DQ       0      30     268     874    1974    3682    6100    9324

1471        KK   R138A
1472        KM        ROUTE REMAINDER FROM CP138A TO CP157
1473        RS      15              -1       0
1474        RC    .075     .04    .075    6708   .0051
1475        RX    1000    1001    1580    2290    2450    2710    2799    2800
1476        RY    1140    1140    1138    1136    1136    1138    1140    1140

1477        KK   D138A
1478        KM        RETURN DIVERT AT CP138A
1479        DR   DI154
            * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1480        KK    RLLE
1481        KM    ROUTE REMAINDER FROM CP138A TO CP157
1482        RS       1              -1       0
1483        RC    0.03    0.03    0.03    2020   0.004
1484        RX       0       4       8      12      20    41.5    51.1    82.3
1485        RY      10       8       6       4       0       0     4.8      10
            * KK R138A
            * KM        ROUTE FLOW FROM CP138A TO CP154
            * RS    15              -1       0
            * RC   .08     .08     .08    2640   .0026
            * RX  1000    1001    1002    1025    1160    1840    2099    2100
            * RY  1145    1145    1145    1144    1144    1146    1148    1148
```

```
                *

1486            KK     154
1487            KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 154
1488            BA     .17
1489            LG     .50     .00    5.88     .30     .00
1490            UI     12.     12.     36.     53.     64.     74.     87.    106.    146.    142.
1491            UI    114.     98.     82.     69.     58.     43.     27.     21.     19.     12.
1492            UI     12.      5.      4.      4.      4.      4.      4.      4.      0.      0.
1493            UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
                * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
                * KK CP154
                * KM      ADD HYDROGRAPHS AT CP154
                * HC      2   24.19
```



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

1494            KK    LLE1
1495            KM        ADD HYDROGRAPHS AT CP154
1496            HC       2    0.33
                * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1497            KK   RLLE1
1498            KM        ROUTE FLOW FROM CP154 TO CP157
1499            RS     4.7       -1       0
1500            RC    0.03    0.03    0.03    4950  0.0039
1501            RX       0      30      38      54    76.5     104     139     154
1502            RY      10       4       4       0       0       0       7      10
                *

1503            KK     157
1504            KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 157
1505            KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1506            KM    L=      1.3  Lca=       .6   S=   26.8  Kn= .084  LAG=  59.9
1507            KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1508            BA     .89
1509            LG     .40     .25    5.20     .36   12.00
1510            UI     50.     50.     78.    175.    219.    257.    289.    326.    373.    435.
1511            UI    560.    646.    535.    458.    407.    359.    312.    272.    238.    189.
1512            UI    133.     89.     84.     82.     51.     50.     43.     15.     15.     15.
1513            UI     15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
1514            UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1515            KK  157OUT
1516            KM    Divert Retention in Subbasin 157
1517            DT  157RET   26.96
1518            DI       0   10000
1519            DQ       0   10000

1520            KK   1I157
1521            KM        ADD HYDROGRAPHS AT 1I157
1522            HC       2   25.08

1523            KK   2I157
1524            KM        ADD HYDROGRAPHS AT 2I157
1525            HC       2   25.08
                *

1526            KK     127
1527            KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 127
1528            BA     .22
1529            LG     .12     .18    7.00     .14   20.00
1530            UI     90.    276.    510.    430.    243.     91.     37.     15.      0.      0.
1531            UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1532            KK    R127
1533            KM        ROUTE FLOW FROM CP127 TO CP139
1534            RS     29       -1       0
1535            RC    .08     .08     .08    3744   .0032
1536            RX   1000    1001    1002    1410    1820    2410    2860    3000
1537            RY   1155    1155    1155    1154    1154    1156    1158    1159
                *
```

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

1538          KK     139
1539          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 139
1540          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
1541          KM    L=      1.0  Lca=       .5   S=   17.0  Kn= .039  LAG=  24.5
1542          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
1543          BA     .47
1544          LG     .27     .24    6.20     .19   26.00
1545          UI     65.    224.    357.    488.    760.    602.    440.    311.    158.    100.
1546          UI     63.     20.     20.     20.     0.      0.      0.      0.      0.      0.
1547          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1548          KK  139OUT
1549          KM    Divert Retention in Subbasin 139
1550          DT  139RET   29.95
1551          DI       0   10000
1552          DQ       0   10000

1553          KK   1I139
1554          KM        ADD HYDROGRAPHS AT 1I139
1555          HC       2     .69

1556          KK    D126
1557          KM        RETURN DIVERT AT CP126
1558          DR   DI139

1559          KK     RLE
1560          KM        ROUTE FLOW FROM CP126 TO CP139
1561          RS     5.1             -1       0
1562          RC    0.03    0.03    0.03    3852  0.0047
1563          RX       0      48      56      64      73      85      98     146
1564          RY      12       0       0       0       0       0       0      12

1565          KK   2I139
1566          KM        ADD HYDROGRAPHS AT 2I139
1567          HC       2    7.04
              *

1568          KK     140
1569          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 140
1570          BA     .18
1571          LG     .50     .00    5.64     .34       8
1572          UI     13.     13.     35.     53.     65.     75.     88.    104.    142.    155.
1573          UI    123.    105.     90.     76.     64.     52.     33.     22.     21.     16.
1574          UI     13.      9.      4.      4.      4.      4.      4.      4.      0.      0.
1575          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1576          KK     LE1
1577          KM        ADD HYDROGRAPHS AT CP139
1578          HC       2    0.88
              *
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE
```



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

1579          KK    RLE1
1580          KM        ROUTE FLOW FROM CP139 TO CP156
1581          RS     1.3             -1       0
1582          RC    0.03    0.03    0.03    1743  0.0028
1583          RX       0      48      56      64      73      85      98     146
1584          RY      12       0       0       0       0       0       0      12
              *

1585          KK     156
1586          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156
1587          BA     .30
1588          LG     .35     .09    5.00     .41    8.00
1589          UI     18.     18.     33.     64.     82.     94.    106.    121.    139.    173.
1590          UI    223.    206.    171.    149.    132.    113.     99.     85.     69.     47.
1591          UI     31.     30.     28.     18.     18.     12.      5.      5.      5.      5.
1592          UI      5.      5.      5.      5.      0.      0.      0.      0.      0.      0.
```

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                                                                                                                LABCARQ
1593          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1594          KK     LE2
1595          KM        ADD HYDROGRAPHS AT CP156
1596          HC       2    1.18
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1597          KK    RLE2
1598          KM        ROUTE FLOW FROM CP156 TO CP157
1599          RS     4.3              -1       0
1600          RC    0.03    0.03    0.03    6848  0.0038
1601          RX       0      48      56      64      73      85      98     146
1602          RY      12       0       0       0       0       0       0      12
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1603          KK     LE3
1604          KM        ADD HYDROGRAPHS AT CP157
1605          HC       2    1.65
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1606          KK   1RLE3
1607          KM        ROUTE FLOW FROM CP157 TO CP172
1608          RS       1              -1       0
1609          RC    0.03    0.03    0.03     750  0.0044
1610          RX       0      48      56      64      73      85      98     146
1611          RY      12       0       0       0       0       0       0      12

1612          KK   2RLE3
1613          KM        ROUTE FLOW FROM CP157 TO CP172
1614          RS       1              -1       0
1615          RC    0.03    0.03    0.03     100  0.0044
1616          RX       0      48      56      64      73      85      98     146
1617          RY      12       0       0       0       0       0       0      12
              *
```



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

1618          KK     172
1619          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 172
1620          BA     .12
1621          LG     .50     .00    4.58     .55     .00
1622          UI      9.      9.     28.     39.     47.     55.     66.     82.    112.     96.
1623          UI     79.     68.     56.     47.     39.     26.     16.     15.     11.      9.
1624          UI      6.      3.      3.      3.      3.      3.      3.      0.      0.      0.
1625          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * MODIFY BASED ON RECENTLY CONSTRUCTED CHANNEL IN EL MIRAGE

1626          KK     LE4
1627          KM        ADD HYDROGRAPHS AT CP172
1628          HC       2    1.77

1629          KK    R172
1630          KM        ROUTE FLOW FROM CP172 TO CP173
1631          RS       4              -1       0
1632          RC    .075     .03    .075    4500   .0042
1633          RX    1000    1200    1360    1380    1430    1470    1639    1640
1634          RY    1111    1110    1108    1106    1106    1108    1110    1110
              *

1635          KK     173
1636          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173
1637          BA     .31
1638          LG     .50     .00    4.00     .74     6.3
1639          UI     15.     15.     15.     43.     57.     71.     79.     87.     96.    109.
1640          UI    121.    146.    184.    191.    160.    139.    125.    114.    100.     90.
1641          UI     79.     71.     57.     43.     27.     26.     25.     22.     15.     15.
1642          UI     14.      5.      5.      5.      5.      5.      5.      5.      5.      5.
1643          UI      5.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1644          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1645          KK   CP173
1646          KM        ADD HYDROGRAPHS AT CP173
1647          HC       2    2.08
```

```
*
* ***********************************************************************
* ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2E WITH NEW SOILS*****
* ***********************************************************************
*

KK    156A
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 156A
BA     .31
LG     .12     .25    4.38     .46   20.00
UI     82.    276.    434.    664.    443.    275.    114.     65.     18.     18.
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   R156A
KM        ROUTE FLOW FROM CP156A TO CP158
RS      34      -1       0
RC     .07     .07     .07    5400   .0030
RX    1000    1001    1002    1380    2200    2838    2839    2840
RY    1117    1117    1117    1116    1116    1118    1118    1118
*

KK     158
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 158
KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM    L=      1.4  Lca=       .7   S=    20.7  Kn= .034  LAG=  27.3
KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA     .97
LG     .27     .26    4.20     .48   25.00
UI    120.    350.    615.    802.   1158.   1393.   1004.    753.    547.    280.
UI    196.    120.     54.     37.     37.     37.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  158OUT
KM    Divert Retention in Subbasin 158
DT  158RET   61.74
DI       0   10000
DQ       0   10000

KK   CP158
KM        ADD HYDROGRAPHS AT CP158
HC       2    1.28

KK    R158
KM        ROUTE FLOW FROM CP158 TO CP173B
RS       6      -1       0
RC     .07     .04     .07    4524   .0035
RX    1000    1001    1240    1360    1440    1500    1650    1750
RY    1113    1113    1112    1110    1110    1112    1114    1115
*

KK    173B
KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173B
BA     .20
LG     .46     .11    3.50    0.89     .00
UI     12.     12.     21.     42.     53.     61.     69.     78.     90.    109.
UI    143.    141.    116.    101.     89.     77.     67.     58.     49.     35.
UI     22.     20.     19.     13.     12.     11.      4.      4.      4.      4.
UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

KK  CP173B
KM        ADD HYDROGRAPHS AT CP173B
HC       2    1.48
```



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

KK   AFR2E
KM        ADD HYDROGRAPHS AT RCP173
HC       2   30.12
```

```
1700          KK   RR173
1701          KM        RIVER ROUTE FLOW FROM RCP173 TO RCP173A
1702          RS       1        -1        0
1703          RC    .035    .035    .035    1650   .0050
1704          RX    1000    1001    1002    1042    2042    2082    2083    2084
1705          RY    1101    1101    1101    1091    1091    1101    1101    1101
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2F WITH NEW SOILS*****
              * ***********************************************************************
              *

1706          KK     171
1707          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 171
1708          BA     .70
1709          LG     .50     .00    5.40     .38     8.5
1710          UI     24.     24.     24.     24.     47.     78.     91.    106.    115.    126.
1711          UI    135.    143.    154.    169.    181.    197.    229.    271.    307.    296.
1712          UI    260.    235.    215.    200.    188.    174.    157.    147.    137.    122.
1713          UI    114.    105.     90.     68.     56.     42.     42.     39.     39.     38.
1714          UI     24.     24.     24.     24.     15.      7.      7.      7.      7.      7.
1715          UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      0.
1716          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1717          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1718          KK    R171
1719          KM        ROUTE FLOW FROM CP171 TO CP173A
1720          RS       3        -1        0
1721          RC    .075     .04     .04    2100   .0076
1722          RX    1000    1001    1170    1940    2005    2048    2049    2050
1723          RY    1105    1105    1104    1102    1102    1103    1103    1103
              *

1724          KK    173A
1725          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 173A
1726          BA     .20
1727          LG     .50     .00    4.32     .62     9.4
1728          UI     12.     12.     26.     46.     58.     67.     76.     88.    102.    133.
1729          UI    158.    130.    110.     97.     83.     73.     62.     52.     37.     22.
1730          UI     21.     20.     12.     12.      8.      4.      4.      4.      4.      4.
1731          UI      4.      4.      0.      0.      0.      0.      0.      0.      0.      0.
1732          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1733          KK  CP173A
1734          KM        ADD HYDROGRAPHS AT CP173A
1735          HC       2     .90
```



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

1736          KK  AFR2F1
1737          KM        ADD HYDROGRAPHS AT RCP173A
1738          HC       2   31.02

1739          KK  RR173A
1740          KM        RIVER ROUTE FLOW FROM RCP173A TO RCP187
1741          RS       3        -1        0
1742          RC    .035    .035    .035    5600   .0050
1743          RX    1000    1001    1002    1042    2042    2082    2083    2084
1744          RY    1092    1092    1092    1082    1082    1092    1092    1092
              *

1745          KK     186
1746          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 186
1747          BA     .33
1748          LG     .50     .00    4.90     .47     .00
1749          UI     12.     12.     12.     12.     35.     44.     51.     58.     64.     69.
1750          UI     74.     80.     88.     95.    108.    131.    149.    159.    138.    123.
1751          UI    112.    103.     96.     87.     80.     73.     67.     61.     56.     47.
1752          UI     36.     29.     22.     21.     20.     20.     15.     12.     12.     12.
1753          UI      9.      4.      4.      4.      4.      4.      4.      4.      4.      4.
1754          UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
1755          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
1756          KK    R186
1757          KM        ROUTE FLOW FROM CP186 TO CP187
1758          RS       5              -1       0
1759          RC     .08     .04     .04    1950   .0035
1760          RX    1000    1001    1200    1320    1690    1828    1829    1830
1761          RY    1097    1097    1096  1094.5  1094.5    1095    1095    1095
              *

1762          KK     187
1763          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 187
1764          BA     .35
1765          LG     .46    0.10    4.58     .48     .00
1766          UI     66.    147.     37.      5.      0.      0.      0.      0.      0.      0.
1767          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1768          KK   CP187
1769          KM        ADD HYDROGRAPHS AT CP187
1770          HC       2     .68

1771          KK  AFR2F2
1772          KM        ADD HYDROGRAPHS AT RCP187
1773          HC       2   31.70

1774          KK   RR187
1775          KM        RIVER ROUTE FLOW FROM RCP187 TO RCP200
1776          RS       3              -1       0
1777          RC    .035    .035    .035    5460   .0050
1778          RX    1000    1001    1002    1042    2042    2082    2083    2084
1779          RY    1080    1080    1080    1070    1070    1080    1080    1080
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1780          KK     199
1781          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 199
1782          BA     .11
1783          LG     .50     .00    4.90     .47     .00
1784          UI      5.      5.      5.     11.     17.     21.     24.     27.     29.     32.
1785          UI     36.     40.     48.     59.     64.     54.     47.     43.     39.     35.
1786          UI     31.     28.     25.     23.     18.     14.      9.      9.      8.      8.
1787          UI      5.      5.      5.      4.      2.      2.      2.      2.      2.      2.
1788          UI      2.      2.      2.      2.      0.      0.      0.      0.      0.      0.
1789          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1790          KK    R199
1791          KM        ROUTE FLOW FROM CP199 TO CP200
1792          RS       9              -1       0
1793          RC     .08     .08     .08    2180   .0138
1794          RX    1000    1001    1002    1150    1700    1948    1949    1950
1795          RY    1077    1077    1077    1076    1076    1077    1077    1077
              *

1796          KK     200
1797          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 200
1798          BA     .29
1799          LG     .43     .18    4.90     .38     .00
1800          UI     19.     19.     44.     74.     92.    105.    121.    140.    172.    230.
1801          UI    220.    179.    155.    135.    115.     98.     82.     59.     36.     32.
1802          UI     30.     19.     19.     11.      6.      6.      6.      6.      6.      6.
1803          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1804          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1805          KK   CP200
1806          KM        ADD HYDROGRAPHS AT CP200
1807          HC       2     .40

1808          KK  AFR2F3
1809          KM        ADD HYDROGRAPHS AT RCP200
1810          HC       2   32.10

1811          KK   RR200
1812          KM        RIVER ROUTE FLOW FROM RCP200 TO RCP206
1813          RS       2              -1       0
1814          RC    .035    .035    .035    2960   .0050
```

```
                                                                                LABCARQ
1815          RX    1000    1001    1002    1042    2042    2082    2083    2084
1816          RY    1070    1070    1070    1060    1060    1070    1070    1070
              *
              * ***********************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2G WITH NEW SOILS*****
              * ***********************************************************************
              *
1                                          HEC-1 INPUT                                          PAGE 45

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

1817          KK     141
1818          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141
1819          BA     .47
1820          LG     .35     .34    4.20     .39     .00
1821          UI     52.    126.    241.    310.    403.    607.    538.    413.    317.    239.
1822          UI    135.     88.     61.     41.     16.     16.     16.     16.      0.      0.
1823          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1824          KK    R141
1825          KM        ROUTE FLOW FROM CP141 TO CP141A
1826          RS       1              -1       0
1827          RC    .025    .022    .022    1650   .0091
1828          RX    1000    1580    2170    2200    2230    2248    2249    2250
1829          RY    1194    1192    1190    1188    1188    1189    1189    1189
              *

1830          KK    141A
1831          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 141A
1832          BA     .15
1833          LG     .35     .35    4.32     .37     .00
1834          UI     35.    122.    188.    302.    213.    138.     62.     34.     13.      8.
1835          UI      8.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1836          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1837          KK  CP141A
1838          KM        ADD HYDROGRAPHS AT CP141A
1839          HC       2     .62

1840          KK   R141A
1841          KM        ROUTE FLOW FROM CP141A TO CP142
1842          RS       2              -1       0
1843          RC     .06    .035    .035    2640   .0079
1844          RX    1000    1620    2100    2220    2250    2268    2269    2270
1845          RY    1276    1274    1272    1270    1270    1271    1271    1271
              *

1846          KK     142
1847          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 142
1848          BA     .51
1849          LG     .50     .00    4.20     .66     .00
1850          UI     24.     24.     24.     59.     86.    105.    119.    132.    144.    161.
1851          UI    180.    203.    258.    300.    281.    241.    213.    194.    176.    155.
1852          UI    140.    124.    112.     94.     70.     48.     42.     39.     39.     26.
1853          UI     24.     24.     16.      7.      7.      7.      7.      7.      7.      7.
1854          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1855          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1856          KK   CP142
1857          KM        ADD HYDROGRAPHS AT CP142
1858          HC       2    1.13
1                                          HEC-1 INPUT                                          PAGE 46

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

1859          KK    R142
1860          KM        ROUTE FLOW FROM CP142 TO CP143
1861          RS       8              -1       0
1862          RC     .07    .022    .022    2640   .0075
1863          RX    1000    1800    2235    2250    2275    2288    2289    2290
1864          RY    1250    1245    1247    1246    1246    1247    1247    1247
              *

1865          KK     143
```

```
1866          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 143
1867          BA     .50
1868          LG     .50     .00    4.28     .64     .00
1869          UI     23.     23.     23.     57.     83.    101.    116.    128.    140.    155.
1870          UI    174.    196.    248.    289.    279.    237.    210.    190.    174.    153.
1871          UI    138.    123.    110.     94.     71.     50.     41.     39.     38.     28.
1872          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
1873          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1874          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1875          KK   CP143
1876          KM        ADD HYDROGRAPHS AT CP143
1877          HC       2    1.63

1878          KK    R143
1879          KM        ROUTE FLOW FROM CP143 TO CP144
1880          RS       2              -1       0
1881          RC     .07     .03     .03    2640   .0072
1882          RX    1000    1490    2250    2370    2380    2394    2398    2400
1883          RY    1238    1236    1234    1232    1232    1233    1233    1233

1884          KK    D130
1885          KM        RETURN DIVERT AT CP130
1886          DR   DI144

1887          KK    R130
1888          KM        ROUTE FLOW FROM CP130 TO CP144
1889          RS       7              -1       0
1890          RC    .035    .035    .075    5280   .0049
1891          RX    1000    1001    1002    1020    1110    1570    2080    2370
1892          RY    1239    1239    1239    1238    1238    1240    1242    1244
              *

1893          KK     144
1894          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 144
1895          BA     .51
1896          LG     .50     .00    4.74     .51     .00
1897          UI     23.     23.     23.     58.     85.    103.    118.    130.    142.    159.
1898          UI    178.    200.    253.    294.    285.    242.    215.    194.    177.    156.
1899          UI    141.    125.    112.     96.     72.     51.     42.     39.     39.     28.
1900          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
1901          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
1902          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

1903          KK   1I144
1904          KM        ADD HYDROGRAPHS AT CP144
1905          HC       2    6.05

1906          KK   CP144
1907          KM        ADD HYDROGRAPHS AT CP144
1908          HC       2    7.68

1909          KK    D144
1910          KM        DIVERT TO CP164A FROM CP144
1911          DT  DI164A
1912          DI       0     407    1451    2130    3746    6248    9200   13452
1913          DQ       0       0     123     241     602    1278    1864    3217

1914          KK    R144
1915          KM        ROUTE FLOW FROM CP144 TO CP145A
1916          RS       7              -1       0
1917          RC    .075     .04     .04    2640   .0045
1918          RX    1000    1001    1630    2095    2150    2198    2199    2200
1919          RY    1220    1216    1216    1214    1214    1215    1215    1215
              *

1920          KK    145A
1921          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145A
1922          BA     .49
1923          LG     .50     .00    4.44     .59     .00
1924          UI     21.     21.     21.     41.     73.     87.    101.    113.    122.    134.
1925          UI    149.    163.    188.    234.    270.    255.    219.    195.    178.    163.
```

```
                                                                                                LABCARQ
1926          UI    146.    131.    119.    106.     96.     78.     61.     39.     37.     35.
1927          UI     35.     25.     21.     21.     19.      6.      6.      6.      6.      6.
1928          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
1929          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1930          KK  CP145A
1931          KM        ADD HYDROGRAPHS AT CP145A
1932          HC       2    8.17

1933          KK   R145A
1934          KM        ROUTE REMAINDER FROM CP145A TO CP145
1935          RS       7              -1       0
1936          RC    .075     .04     .04    2640   .0045
1937          RX    1000    1001    1630    2095    2150    2198    2199    2200
1938          RY    1220    1216    1216    1214    1214    1215    1215    1215

1939          KK    D131
1940          KM        RETURN DIVERT AT CP131
1941          DR   DI145

1942          KK    R131
1943          KM        ROUTE FLOW FROM CP131 TO CP145
1944          RS       8              -1       0
1945          RC     .04     .04    .075    5280   .0043
1946          RX    1000    1001    1002    1020    1050    1820    2210    2230
1947          RY    1213    1213    1213    1212    1212    1214    1216    1218
              *
1                                          HEC-1 INPUT                                          PAGE 48

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


1948          KK     145
1949          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 145
1950          BA     .48
1951          LG     .50     .00    4.66     .53     .00
1952          UI     21.     21.     21.     47.     76.     91.    104.    117.    126.    139.
1953          UI    156.    171.    204.    251.    279.    238.    208.    187.    171.    155.
1954          UI    138.    125.    110.    101.     84.     63.     44.     38.     36.     35.
1955          UI     26.     21.     21.     19.      7.      7.      7.      7.      7.      7.
1956          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
1957          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

1958          KK   1I145
1959          KM        ADD HYDROGRAPHS AT CP145
1960          HC       2     9.0

1961          KK   CP145
1962          KM        ADD HYDROGRAPHS AT CP145
1963          HC       2   11.63

1964          KK   1D145
1965          KM        DIVERT TO CP164 FROM CP145
1966          DT   DI164
1967          DI       0      37     218     475    1177    1902    3592    5561    8738
1968          DQ       0       0       0      34     193     517    1285    1864    3181

1969          KK   2D145
1970          KM        DIVERT TO CP165 FROM CP145
1971          DT   DI165
1972          DI       0      37     218     441     984    1385    2307    3697    5557
1973          DQ       0       0       0     111     383     584    1044    1740    2690
              *
              * THE FOLLOWING DATA WAS TAKEN FROM THE "OFF SITE FLOW ANALYSIS FOR
              * RANCHO GABRIELA PHASES 3 & 4" BY DAVID EVANS & ASSOCIATES, 7-2001
              *

1974          KK   R145B
              * KO     1
1975          KM   ROUTE FLOW FROM CP145 TO DIVERSION ALONG CACTUS
1976          RS       3              -1       0
1977          RC    0.75   0.035   0.035    2200  0.0056
1978          RX    1000    1420    1425    1430    1435    1469    1487    1507
1979          RY    1192    1191    1188    1188    1189    1191    1190    1191

1980          KK   3D145
```

```
1981          KM   DIVERT INTO FIELD SOUTH
1982          DT  DI165B
1983          DI       0     100     200     500     700     955
1984          DQ       0     2.3    66.3   347.4   545.1   792.8
```



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

1985          KK   R145C
1986          KM   ROUTE REMAINDER FROM CP145 TO 4D145
1987          RS       2              -1       0
1988          RC   0.035   0.035   0.035    1650   .0056
1989          RX    1000    1007    1012    1019    1029    1043    1056    1078
1990          RY    1180    1178    1175    1175    1177    1177    1177    1177

1991          KK   4D145
1992          KM   DIVERT INTO FIELD TO SOUTH
1993          DT  DI165C
1994          DI       0    97.7   133.7   152.6   154.9   162.2
1995          DQ       0    16.3    47.9    66.7    68.8    78.2

1996          KK   R145D
1997          KM   ROUTE REMAINDER FROM CP145 TO CP146
1998          RS       1              -1       0
1999          RC   0.035   0.035   0.035    1000  0.0056
2000          RX    1000    1007    1012    1019    1029    1043    1056    1078
2001          RY    1180    1178    1175    1175    1177    1177    1177    1177

2002          KK   1D133
2003          KM        RETURN DIVERT AT CP133
2004          DR   DI146

2005          KK    R133
2006          KM        ROUTE FLOW FROM CP133 TO CP146
2007          RS       8              -1       0
2008          RC    .035    .035    .075    5280   .0068
2009          RX    1000    1001    1002    1015    1080    1440    1740    2130
2010          RY    1187    1187    1187    1186    1186    1188    1190    1192
              *

2011          KK     146
2012          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 146
2013          BA     .90
2014          LG     .50     .00    4.90     .47     .00
2015          UI     36.     36.     36.     47.    119.    138.    166.    182.    199.    215.
2016          UI    233.    260.    281.    323.    399.    452.    449.    386.    344.    314.
2017          UI    290.    266.    238.    217.    197.    178.    161.    132.    104.     70.
2018          UI     64.     61.     59.     52.     36.     36.     36.     25.     11.     11.
2019          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
2020          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2021          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2022          KK   1I146
2023          KM        ADD HYDROGRAPHS AT CP146
2024          HC       2   15.02

2025          KK   CP146
2026          KM        ADD HYDROGRAPHS AT CP146
2027          HC       2   18.49
              *
              * REPLACED PER DAVID EVANS AND ASSOCIATES "OFF-SITE FLOW ANALYSIS, RANCHO
              * GABRIELLA PHASES 3 &4", 7-2001
              *
```



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

2028          KK    D146
2029          KM        DIVERT TO CP166 FROM CP146
2030          DT   1D166
2031          DI       0     100     200     300     400     500     737
2032          DQ       0       0       0      38     161     182     252

2033          KK   R146A
```

```
2034          KM        ROUTE FLOW FROM CP146 TO CP165
2035          RS        1              -1       0
2036          RC    0.035    0.02   0.035    1300  0.0047
2037          RX     1000    1012    1012    1031    1050    1050    1056    1062
2038          RY      4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2039          KK    4D145
2040          KM    RETURN DIVERT AT 4D145
2041          DR   DI165C

2042          KK    R145E
2043          KM    ROUTE FLOW FROM 4D145 TO 1D165
2044          RS        7              -1       0
2045          RC     0.08    0.08    0.08    1450  0.0069
2046          RX     1000    1001    1420    1730    2220    2470    2999    3000
2047          RY     1177    1177    1176    1175    1175    1176    1177    1177

2048          KK    1D165
2049          KM    ADD HYDROGRAPHS AT 1D165
2050          HC        2   18.49

2051          KK    D146B
2052          KM    DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABREILA PROJECT
2053          DT    DIRB1
2054          DI        0     517     600
2055          DQ      178     178     178

2056          KK    R146B
2057          KM    ROUTE FLOW FROM 1D165 TO 2D165
2058          RS        1              -1       0
2059          RC    0.035    0.02   0.035    1350  0.0047
2060          RX     1000    1012    1012    1031    1050    1050    1056    1062
2061          RY      4.1     1.1     0.6       0     0.6     1.1     2.6     4.1

2062          KK    3D145
2063          KM    RETURN DIVERT AT 3D145
2064          DR   DI165B

2065          KK    R145F
2066          KM    ROUTE FLOW FROM 3D145 TO 2D165
2067          RS       11              -1       0
2068          RC     0.08    0.08    0.08    3850  0.0069
2069          RX     1000    1001    1420    1730    2220    2470    2999    3000
2070          RY     1177    1177    1176    1175    1175    1176    1177    1177
```



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

2071          KK    2D165
2072          KM    ADD HYDROGRAPHS AT 2D165
2073          HC        2   18.49

2074          KK    D146C
2075          KM    DIVERT WEIR FLOW TO SOUTHEAST TOWARDS RANCHO GABRIELA PROJECT
2076          DT    DIRB2
2077          DI        0     983    1000
2078          DQ        0     496     505

2079          KK    R146C
2080          KM    ROUTE FLOW FROM 1D165 TO 2D165
2081          RS      1.4              -1       0
2082          RC    0.035    0.02   0.035    2600  0.0047
2083          RX     1000    1012    1012    1031    1050    1050    1056    1062
2084          RY      4.1     1.1     0.6       0     0.6     1.1     2.6     4.1
              *
              * END DEA MODIFICATIONS
              *

2085          KK     159
2086          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 159
2087          BA     .58
2088          LG     .35     .34    4.15     .40     .00
2089          UI     66.    169.    316.    407.    539.    797.    641.    495.    375.    269.
2090          UI    139.    105.     66.     33.     20.     20.     20.      0.      0.      0.
2091          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
2092          KK    R159
2093          KM        ROUTE FLOW FROM CP159 TO CP160
2094          RS       1              -1       0
2095          RC    .022    .022    .025     830   .0036
2096          RX    1000    1001    1002    1020    1060    1150    1320    1440
2097          RY    1265    1265    1265    1264    1264    1266    1268    1270
              *

2098          KK     160
2099          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 160
2100          BA    .39
2101          LG    .35     .33    4.58     .32     .00
2102          UI    41.     92.    184.    238.    301.    435.    474.    354.    279.    216.
2103          UI   150.     79.     64.     41.     22.     13.     13.     13.     13.      0.
2104          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2105          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2106          KK   CP160
2107          KM        ADD HYDROGRAPHS AT CP160
2108          HC       2     .97
```



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

2109          KK    R160
2110          KM        ROUTE FLOW FROM CP160 TO CP161
2111          RS       3              -1       0
2112          RC    .075     .04     .04    2650   .0072
2113          RX    1000    1001    1210    1630    1670    1688    1689    1690
2114          RY    1259    1259    1258    1256    1256    1257    1257    1257
              *

2115          KK     161
2116          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 161
2117          BA    .50
2118          LG    .49     .03    4.44     .56     .00
2119          UI    24.     24.     24.     70.     92.    114.    127.    140.    155.    176.
2120          UI   195.    236.    297.    307.    258.    225.    202.    184.    161.    145.
2121          UI   127.    115.     93.     70.     43.     42.     40.     36.     24.     24.
2122          UI    23.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2123          UI     7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2124          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2125          KK   CP161
2126          KM        ADD HYDROGRAPHS AT CP161
2127          HC       2    1.47

2128          KK    R161
2129          KM        ROUTE FLOW FROM CP161 TO CP163
2130          RS       6              -1       0
2131          RC    .08     .04     .04    5280   .0074
2132          RX    1000    1500    1910    2455    2470    2488    2489    2490
2133          RY    1226    1224    1222    1220    1220    1221    1221    1221
              *

2134          KK     162
2135          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 162
2136          BA    .25
2137          LG    .50     .00    4.74     .51     .00
2138          UI    22.     35.     86.    114.    137.    169.    233.    270.    206.    170.
2139          UI   138.    110.     78.     44.     37.     26.     22.      7.      7.      7.
2140          UI     7.      7.      0.      0.      0.      0.      0.      0.      0.      0.
2141          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2142          KK    R162
2143          KM        ROUTE FLOW FROM CP162 TO CP163
2144          RS       8              -1       0
2145          RC    .08     .04     .04    5460   .0062
2146          RX    1000    1500    1910    2455    2470    2488    2489    2490
2147          RY    1226    1224    1222    1220    1220    1221    1221    1221
              *

2148          KK     163
2149          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 163
```

```
2150          BA     .75
2151          LG     .50     .00    4.58     .55     .00
2152          UI     37.     37.     37.    107.    140.    173.    193.    212.    235.    267.
2153          UI    296.    361.    456.    458.    383.    336.    303.    274.    240.    216.
```



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

2154          UI    187.    170.    133.    101.     65.     63.     60.     51.     37.     37.
2155          UI     30.     11.     11.     11.     11.     11.     11.     11.     11.     11.
2156          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2157          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2158          KK   1I163
2159          KM        ADD HYDROGRAPHS AT CP163
2160          HC       2     1.0

2161          KK   CP163
2162          KM        ADD HYDROGRAPHS AT CP163
2163          HC       2    2.47

2164          KK    D163
2165          KM        DIVERT TO CP176A FROM CP163
2166          DT  DI176A
2167          DI       0      72     427    1229    2615    4708    5777    6545    8336   11092
2168          DQ       0       0       0       0       0       0       9      95     329     762

2169          KK    R163
2170          KM        ROUTE REMAINDER FROM CP163 TO CP164A
2171          RS       2              -1       0
2172          RC     .06    .035    .035    2640   .0078
2173          RX    1000    1410    1900    2110    2150    2168    2169    2170
2174          RY    1188    1186    1184    1182    1182    1183    1183    1183

2175          KK    D144
2176          KM        RETURN DIVERT AT CP144
2177          DR  DI164A

2178          KK    R144
2179          KM        ROUTE FLOW FROM CP144 TO  CP164A
2180          RS      46              -1       0
2181          RC     .07     .07     .07    6400   .0058
2182          RX    1000    1001    1002    1400    1910    2610    2669    2670
2183          RY    1203    1203    1203    1202    1202    1204    1205    1205
              *

2184          KK    164A
2185          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164A
2186          BA     .49
2187          LG     .50     .00    4.74     .51     .00
2188          UI     22.     22.     22.     51.     79.     96.    110.    122.    133.    147.
2189          UI    164.    182.    220.    273.    282.    238.    209.    189.    174.    154.
2190          UI    138.    124.    111.     98.     78.     60.     39.     39.     36.     35.
2191          UI     22.     22.     22.     11.      7.      7.      7.      7.      7.      7.
2192          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2193          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2194          KK  1I164A
2195          KM        ADD HYDROGRAPHS AT CP164A
2196          HC       2    8.17
```



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

2197          KK  CP164A
2198          KM        ADD HYDROGRAPHS AT CP164A
2199          HC       2   10.64

2200          KK   R164A
2201          KM        ROUTE FLOW FROM CP164A TO CP164
2202          RS       2              -1       0
2203          RC     .06    .035    .035    2640   .0072
2204          RX    1000    1410    1900    2110    2150    2168    2169    2170
2205          RY    1188    1186    1184    1182    1182    1183    1183    1183
              *
```

```
2206          KK     164
2207          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 164
2208          BA     .49
2209          LG     .50      .00     4.90      .47      .00
2210          UI     22.      22.      22.      49.      78.      94.     107.     120.     130.     143.
2211          UI    161.     177.     212.     261.     285.     241.     211.     190.     174.     157.
2212          UI    140.     127.     111.     103.      83.      63.      42.      39.      36.      36.
2213          UI     25.      22.      22.      17.       7.       7.       7.       7.       7.       7.
2214          UI      7.       7.       7.       7.       0.       0.       0.       0.       0.       0.
2215          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2216          KK   1I164
2217          KM        ADD HYDROGRAPHS AT CP164
2218          HC       2   11.13

2219          KK   1D145
2220          KM        RETURN DIVERT AT CP145
2221          DR   DI164

2222          KK    R145
2223          KM        ROUTE FLOW FROM CP145 TO CP164
2224          RS      7              -1       0
2225          RC    .035     .035     .075    5280   .0058
2226          RX    1000     1001     1002    1040    1170    1520    1910    2190
2227          RY    1185     1185     1185    1184    1184    1186    1188    1190

2228          KK   CP164
2229          KM        ADD HYDROGRAPHS AT CP164
2230          HC       2   15.08

2231          KK    D164
2232          KM        DIVERT TO CP177 FROM CP164
2233          DT   DI177
2234          DI       0      295     1091    2467    4521    7345   11030
2235          DQ       0       22      124     352     743    1329    2143

2236          KK    R164
2237          KM        ROUTE REMAINDER FROM CP164 TO CP165
2238          RS      7              -1       0
2239          RC     .04      .04     .075    4900   .0043
2240          RX    1000     1250     1730    2220    2320    2338    2339    2340
2241          RY    1164     1162     1160    1158    1158    1159    1159    1159
```



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

2242          KK   2D145
2243          KM        RETURN DIVERT AT CP145
2244          DR   DI165

2245          KK    R145
2246          KM        ROUTE FLOW FROM CP145 TO CP165
2247          RS     38              -1       0
2248          RC     .08      .08      .08    7500   .0069
2249          RX    1000     1001     1420    1730    2220    2470    2999    3000
2250          RY    1177     1177     1176    1175    1175    1176    1177    1177
              *

2251          KK     165
2252          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 165
2253          BA     .90
2254          LG     .50      .00     4.82      .49      .00
2255          UI     35.      35.      35.      38.     115.     131.     156.     173.     191.     204.
2256          UI    223.     244.     267.     295.     349.     422.     463.     401.     353.     320.
2257          UI    294.     274.     246.     223.     206.     184.     169.     149.     120.      99.
2258          UI     62.      62.      59.      58.      49.      35.      35.      35.      25.      11.
2259          UI     11.      11.      11.      11.      11.      11.      11.      11.      11.      11.
2260          UI     11.       0.       0.       0.       0.       0.       0.       0.       0.       0.
2261          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2262          KK   1I165
2263          KM        ADD HYDROGRAPHS AT CP165
2264          HC       2   12.53
```

```
2265          KK   2I165
2266          KM        ADD HYDROGRAPHS AT CP165
2267          HC       2   15.98

2268          KK   CP165
2269          KM        ADD HYDROGRAPHS AT CP165
2270          HC       2   22.84

2271          KK    D165
2272          KM        DIVERT TO CP180 FROM CP165
2273          DT   DI180
2274          DI       0    1000    5000
2275          DQ       0       0    4000

2276          KK    R165
2277          KM        ROUTE FLOW FROM CP165 TO CP179
2278          RS       7              -1       0
2279          RC    .022    .022     .04    5280   .0038
2280          RX    1000    1001    1002    1030    1075    1090    1250    2000
2281          RY    1135    1135    1135    1134    1134    1135    1133    1137
```



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


2282          KK    D163
2283          KM        RETURN DIVERT AT CP163
2284          DR  DI176A

2285          KK    R163
2286          KM        ROUTE FLOW FROM CP163 TO CP176A
2287          RS       6              -1       0
2288          RC    .035    .035     .075    5280   .0040
2289          RX    1000    1001    1002    1010    1025    1320    1620    1845
2290          RY    1197    1197    1197    1196    1196    1198    1200    1202
              *

2291          KK    176A
2292          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176A
2293          BA     .62
2294          LG     .50     .00    4.32     .62       1
2295          UI     24.     24.     24.     24.     79.     89.    106.    118.    131.    139.
2296          UI    151.    166.    182.    200.    236.    283.    318.    279.    245.    221.
2297          UI    203.    189.    171.    155.    142.    129.    117.    105.     87.     69.
2298          UI     46.     43.     41.     40.     37.     24.     24.     24.     21.      7.
2299          UI      7.      7.      7.      7.      7.      7.      7.      7.      7.      7.
2300          UI      7.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2301          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2302          KK  CP176A
2303          KM        ADD HYDROGRAPHS AT CP176A
2304          HC       2    3.09

2305          KK   D176A
2306          KM        DIVERT TO CP191 FROM CP176A
2307          DT   DI191
2308          DI       0      47     164     349     497    1107    2599    4968    8289
2309          DQ       0       0       0       0       0      60     278     719    1444

2310          KK   R176A
2311          KM        ROUTE REMAINDER FROM CP176A TO CP177A
2312          RS       4              -1       0
2313          RC    .075     .04     .04    2640   .0064
2314          RX    1000    1200    1545    2020    2145    2168    2169    2170
2315          RY    1173    1172    1170    1168    1168    1169    1169    1169
              *

2316          KK    177A
2317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177A
2318          BA     .49
2319          LG     .50     .00    4.38     .60     .00
2320          UI     22.     22.     22.     49.     78.     94.    107.    120.    130.    143.
2321          UI    161.    177.    212.    261.    285.    241.    211.    190.    174.    157.
2322          UI    140.    127.    111.    103.     83.     63.     42.     39.     36.     36.
2323          UI     25.     22.     22.     17.      7.      7.      7.      7.      7.      7.
2324          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
```

```
                                                                                                                LABCARQ
2325          UI      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

2326          KK  CP177A
2327          KM        ADD HYDROGRAPHS AT CP177A
2328          HC       2    3.58

2329          KK   R177A
2330          KM        ROUTE FLOW FROM CP177A TO CP177
2331          RS       8              -1       0
2332          RC    .075     .04     .04    2640   .0064
2333          RX    1000    1200    1545    2020    2145    2168    2169    2170
2334          RY    1173    1172    1170    1168    1168    1169    1169    1169
              *

2335          KK     177
2336          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 177
2337          BA     .49
2338          LG     .50     .00    4.32     .62     .00
2339          UI     22.     22.     22.     51.     79.     96.    110.    122.    133.    147.
2340          UI    164.    182.    220.    273.    282.    238.    209.    189.    174.    154.
2341          UI    138.    124.    111.     98.     78.     60.     39.     39.     36.     35.
2342          UI     22.     22.     22.     11.      7.      7.      7.      7.      7.      7.
2343          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2344          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2345          KK   1I177
2346          KM        ADD HYDROGRAPHS AT CP177
2347          HC       2    4.07

2348          KK    D164
2349          KM        RETURN DIVERT AT CP164
2350          DR   DI177

2351          KK    R164
2352          KM        ROUTE FLOW FROM CP164 TO CP177
2353          RS      11              -1       0
2354          RC    .035    .035     .07    5280   .0032
2355          RX    1000    1001    1002    1020    1040    1290    1540    1810
2356          RY    1159    1159    1159    1158    1158    1160    1162    1164

2357          KK   CP177
2358          KM        ADD HYDROGRAPHS AT CP177
2359          HC       2   16.68

2360          KK    R177
2361          KM        ROUTE FLOW FROM CP177 TO CP178
2362          RS       3              -1       0
2363          RC     .07     .04     .04    2250   .0067
2364          RX    1000    1170    1550    2020    2060    2078    2079    2080
2365          RY    1149    1148    1146    1144    1144    1145    1145    1145
              *
1                                                   HEC-1 INPUT                                                          PAGE 58

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

2366          KK     178
2367          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 178
2368          BA     .44
2369          LG     .50     .00    4.66     .53     .00
2370          UI     20.     20.     20.     46.     71.     86.     98.    109.    119.    131.
2371          UI    147.    162.    196.    244.    253.    214.    188.    170.    156.    139.
2372          UI    124.    112.    100.     89.     71.     55.     35.     35.     33.     32.
2373          UI     20.     20.     20.     11.      6.      6.      6.      6.      6.      6.
2374          UI      6.      6.      6.      6.      0.      0.      0.      0.      0.      0.
2375          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2376          KK   CP178
2377          KM        ADD HYDROGRAPHS AT CP178
2378          HC       2   17.12

2379          KK    R178
```

```
2380          KM        ROUTE FLOW FROM CP178 TO CP179
2381          RS       5        -1         0
2382          RC    .075      .04      .04     2640    .0034
2383          RX    1000     1040     1560     2110     2320     2348     2349     2350
2384          RY    1137     1136     1134     1132     1132     1133     1133     1133
              *

2385          KK     179
2386          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 179
2387          BA     .46
2388          LG     .50      .00     5.00      .45      .00
2389          UI     20.      20.      20.      41.      70.      84.      97.     109.     117.     129.
2390          UI    144.     158.     184.     225.     264.     234.     203.     181.     165.     152.
2391          UI    135.     122.     109.      98.      86.      68.      52.      36.      35.      33.
2392          UI     32.      20.      20.      20.      12.       6.       6.       6.       6.       6.
2393          UI      6.       6.       6.       6.       6.       0.       0.       0.       0.       0.
2394          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2395          KK   1I179
2396          KM        ADD HYDROGRAPHS AT CP179
2397          HC       2   17.58

2398          KK   CP179
2399          KM        ADD HYDROGRAPHS AT CP179
2400          HC       2   25.34

2401          KK   1D179
2402          KM        DIVERT TO CP193 FROM CP179
2403          DT   DI193
2404          DI       0      480     2000     5000
2405          DQ       0        0     1000     1000

2406          KK   2D179
2407          KM        DIVERT TO CP194A FROM CP179
2408          DT  DI194A
2409          DI       0      240     1000     4000
2410          DQ       0        0      240      240
```



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

2411          KK    R179
2412          KM        ROUTE REMAINDER FROM CP179 TO CP180
2413          RS       4        -1         0
2414          RC     .07     .022     .022     5280    .0025
2415          RX    1000     1320     1700     1820     1840     1868     1869     1870
2416          RY    1124     1122     1120     1118     1118     1119     1119     1119
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2H WITH NEW SOILS*****
              * ************************************************************************
              *

2417          KK     180
2418          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 180
2419          BA     .99
2420          LG     .50      .00     4.90      .47      .00
2421          UI     35.      35.      35.      35.      84.     120.     138.     163.     176.     191.
2422          UI    203.     220.     238.     261.     280.     321.     391.     430.     449.     390.
2423          UI    350.     319.     296.     277.     255.     231.     214.     196.     178.     166.
2424          UI    146.     120.     101.      66.      62.      60.      57.      57.      41.      35.
2425          UI     35.      35.      26.      11.      11.      11.      11.      11.      11.      11.
2426          UI     11.      11.      11.      11.      11.      11.       0.       0.       0.       0.
2427          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2428          KK   1I180
2429          KM        ADD HYDROGRAPHS AT CP180
2430          HC       2   26.33

2431          KK   2D133
2432          KM        RETURN DIVERT AT CP133
2433          DR   1D147

2434          KK    R133
2435          KM        ROUTE FLOW FROM CP133 TO CP147
```

```
2436          RS      55              -1       0
2437          RC     .07     .07     .07    6552   .0063
2438          RX    1000    1001    1720    1900    2290    2460    2619    2620
2439          RY    1189    1189    1188  1187.5  1187.5    1188    1189    1189
              *

2440          KK     147
2441          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 147
2442          BA     .50
2443          LG     .50     .00    4.82     .49     .00
2444          UI     23.     23.     23.     57.     84.    102.    116.    128.    140.    156.
2445          UI    175.    197.    249.    289.    278.    237.    210.    190.    174.    153.
2446          UI    138.    123.    110.     94.     70.     50.     41.     39.     38.     27.
2447          UI     23.     23.     18.      7.      7.      7.      7.      7.      7.      7.
2448          UI      7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
2449          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

2450          KK   1I147
2451          KM        ADD HYDROGRAPHS AT CP147
2452          HC       2   14.62

2453          KK    D134
2454          KM        RETURN DIVERT AT CP134
2455          DR   2D147

2456          KK    R134
2457          KM        ROUTE FLOW FROM CP134 TO CP147
2458          RS       7              -1       0
2459          RC     .05     .05     .15    5280   .0053
2460          RX    1000    1001    1002    1020    1190    1580    2180    2700
2461          RY    1187    1187    1187    1186    1186    1188    1190    1192

2462          KK  CP147
2463          KM        ADD HYDROGRAPHS AT CP147
2464          HC       2   15.92

2465          KK    D147
2466          KM        DIVERT TO CP166 FROM CP147
2467          DT   2D166
2468          DI       0     108    1147    2026    4338    8063   13066
2469          DQ       0     108    1129    1961    3822    6531   10041

2470          KK    R147
2471          KM        ROUTE REMAINDER FROM CP147 TO CP148
2472          RS       4              -1       0
2473          RC    .075     .04     .04    2640   .0038
2474          RX    1000    1420    1800    2230    2340    2368    2369    2370
2475          RY    1164    1162    1160    1158    1158    1159    1159    1159
              *

2476          KK     148
2477          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 148
2478          BA     .48
2479          LG     .50     .00    4.82     .49     .00
2480          UI     22.     22.     22.     51.     78.     95.    109.    120.    131.    145.
2481          UI    162.    181.    222.    270.    274.    232.    204.    185.    169.    150.
2482          UI    135.    120.    108.     94.     74.     56.     39.     38.     36.     32.
2483          UI     22.     22.     22.      9.      7.      7.      7.      7.      7.      7.
2484          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
2485          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2486          KK   1I148
2487          KM        ADD HYDROGRAPHS AT CP148
2488          HC       2   16.40

2489          KK    D135
2490          KM        RETURN DIVERT AT CP135
2491          DR   DI148
1                                          HEC-1 INPUT                                          PAGE 61

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

```
2492          KK    R135
2493          KM        ROUTE FLOW FROM CP135 TO CP148
2494          RS      10          -1       0
2495          RC    .035    .035    .075    5280   .0049
2496          RX    1000    1001    1002    1070    1130    1400    1780    2250
2497          RY    1171    1171    1171    1170    1170    1172    1174    1176

2498          KK   CP148
2499          KM        ADD HYDROGRAPHS AT CP148
2500          HC       2   17.46

2501          KK    D148
2502          KM        DIVERT TO CP150 FROM CP148
2503          DT   DI150
2504          DI       0       3     104     399     807    1777    2687    5053    8363
2505          DQ       0       1      16      60     106     241     472    1000    1788

2506          KK    R148
2507          KM        ROUTE REMAINDER FROM CP148 TO CP166
2508          RS       6              -1       0
2509          RC     .04     .04    .075    5280   .0030
2510          RX    1000    1001    1002    1045    1330    2030    2380    2700
2511          RY    1153    1153    1153    1152    1152    1154    1156    1157

2512          KK    D147
2513          KM        RETURN DIVERT AT CP147
2514          DR   2D166

2515          KK    R147
2516          KM        ROUTE FLOW FROM CP147 TO CP166
2517          RS      29              -1       0
2518          RC     .08     .08     .08    6240   .0042
2519          RX    1000    1001    1220    1720    2460    2998    2999    3000
2520          RY    1155    1155    1154    1152    1152  1153.5  1153.5  1153.5
              *

2521          KK     166
2522          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 166
2523          BA     .98
2524          LG     .50     .00    4.74     .51     .00
2525          UI     34.     34.     34.     34.     81.    118.    135.    160.    172.    188.
2526          UI    199.    215.    233.    256.    273.    312.    378.    420.    447.    390.
2527          UI    348.    317.    294.    275.    255.    230.    213.    197.    177.    165.
2528          UI    148.    123.     99.     71.     61.     60.     57.     57.     44.     34.
2529          UI     34.     34.     31.     11.     11.     11.     11.     11.     11.     11.
2530          UI     11.     11.     11.     11.     11.     11.     11.      0.      0.      0.
2531          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2532          KK    D146
2533          KM        RETURN DIVERT AT CP146
2534          DR   1D166
```



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

2535          KK    R146
2536          KM        ROUTE FLOW FROM CP146 TO CP166
2537          RS       8              -1       0
2538          RC    0.07    0.07    0.07    7470  0.0041
2539          RX    1000    1001    1220    1720    2460    2998    2999    3000
2540          RY    1155    1155    1154    1152    1152  1153.5  1153.5  1153.5

2541          KK   1I166
2542          KM        ADD HYDROGRAPHS AT CP166
2543          HC       2   19.47

2544          KK   2I166
2545          KM        ADD HYDROGRAPHS AT CP166
2546          HC       2   21.45

2547          KK   CP166
2548          KM        ADD HYDROGRAPHS AT CP166
2549          HC       2   22.45
```

```
2550          KK    D166
2551          KM        DIVERT TO CP167 FROM CP166
2552          DT   DI167
2553          DI       0      67     296     813    1921    3730    6346    9869
2554          DQ       0      67     296     765    1709    3184    5250    7966

2555          KK    R166
2556          KM        ROUTE REMAINDER FROM CP166 TO CP180
2557          RS      11              -1       0
2558          RC    .035    .035    .075    5280   .0051
2559          RX    1000    1001    1002    1020    1060    1420    2010    2320
2560          RY    1125    1125    1125    1124    1124    1126    1128    1130

2561          KK    D165
2562          KM        RETURN DIVERT AT CP165
2563          DR   DI180

2564          KK    R165
2565          KM        ROUTE FLOW FROM CP165 TO CP180
2566          RS       8              -1       0
2567          RC    0.07    0.07    0.07    7470  0.0043
2568          RX    1000    1001    1470    1820    2510    2910    3299    3300
2569          RY    1133    1133    1132    1131    1131    1132    1133    1133

2570          KK   1I180
2571          KM        ADD HYDROGRAPHS AT CP180
2572          HC       2   30.29

2573          KK   CP180
2574          KM        ADD HYDROGRAPHS AT CP180
2575          HC       2   30.29
```



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

2576          KK    D180
2577          KM        DIVERT TO CP195 FROM CP180
2578          DT   1D195
2579          DI       0       6     234     802    1724    3040    4789
2580          DQ       0       6     206     687    1448    2510    3899

2581          KK    R180
2582          KM        ROUTE REMAINDER FROM CP180 TO CP181
2583          RS       7              -1       0
2584          RC    .075     .04     .04    1350   .0007
2585          RX    1000    1001    1410    2240    2270    2298    2299    2300
2586          RY    1116    1116    1114    1112    1112    1113    1113    1113
              *

2587          KK     181
2588          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 181
2589          BA     .37
2590          LG     .50     .00    4.58     .55     .00
2591          UI     19.     19.     20.     65.     79.     93.    106.    117.    132.    148.
2592          UI    177.    224.    248.    206.    178.    159.    143.    124.    111.     97.
2593          UI     83.     63.     44.     34.     32.     31.     19.     19.     18.      6.
2594          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
2595          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2596          KK   CP181
2597          KM        ADD HYDROGRAPHS AT CP181
2598          HC       2   30.66

2599          KK    D181
2600          KM        DIVERT TO CP195 FROM CP181
2601          DT   2D195
2602          DI       0     100     200     328     500    1251    3000    6011
2603          DQ       0     100     200     328     500    1026    2250    4208

2604          KK    R181
2605          KM        ROUTE REMAINDER FROM CP181 TO CP182
2606          RS       7              -1       0
2607          RC    .075     .04     .04    2900   .0024
2608          RX    1000    1190    1640    2305    2340    2358    2359    2360
2609          RY    1111    1110    1108    1106    1106    1107    1107    1107
```

```
                 *
                 * ***********************************************************************
                 * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2I WITH NEW SOILS*****
                 * ***********************************************************************
                 *

2610             KK     182
2611             KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 182
2612             BA     .24
2613             LG     .50     .00    4.44     .58     .00
2614             UI     15.     15.     32.     56.     71.     83.     93.    108.    127.    167.
2615             UI    190.    154.    131.    116.     99.     85.     73.     60.     40.     26.
2616             UI     25.     22.     15.     15.      7.      5.      5.      5.      5.      5.
2617             UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
1                                                HEC-1 INPUT                                                    PAGE 64

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

2618             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2619             KK    1I182
2620             KM         ADD HYDROGRAPHS AT CP182
2621             HC       2    30.9

2622             KK     D148
2623             KM         RETURN DIVERT AT CP148
2624             DR    DI150

2625             KK     R148
2626             KM         ROUTE FLOW FROM CP148 TO CP150
2627             RS       7              -1       0
2628             RC    .075    .035    .035    2640   .0026
2629             RX    1000    1350    1830    2240    2340    2368    2369    2370
2630             RY    1158    1156    1154    1152    1152    1153    1153    1153
                 *

2631             KK     150
2632             KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 150
2633             BA     .23
2634             LG     .50     .00    4.90     .47     .00
2635             UI     14.     14.     27.     50.     65.     74.     84.     96.    110.    144.
2636             UI    175.    154.    129.    113.     99.     85.     74.     64.     47.     32.
2637             UI     24.     23.     18.     14.     14.      5.      4.      4.      4.      4.
2638             UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
2639             UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2640             KK    CP150
2641             KM         ADD HYDROGRAPHS AT CP150
2642             HC       2   17.69

2643             KK     R150
2644             KM         ROUTE FLOW FROM CP150 TO CP151
2645             RS       6              -1       0
2646             RC    .075    .035    .035    2640   .0030
2647             RX    1000    1250    1720    2110    2300    2348    2349    2350
2648             RY    1149    1148    1146    1144    1144    1145    1145    1145
                 *

2649             KK     151
2650             KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 151
2651             BA     .25
2652             LG     .50     .00    4.90     .47     .00
2653             UI     15.     15.     27.     53.     67.     78.     87.    100.    114.    140.
2654             UI    184.    173.    143.    125.    111.     95.     83.     72.     60.     41.
2655             UI     26.     25.     24.     15.     15.     11.      4.      4.      4.      4.
2656             UI      4.      4.      4.      4.      0.      0.      0.      0.      0.      0.
2657             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

2658             KK    1I151
2659             KM         ADD HYDROGRAPHS AT CP151
2660             HC       2   17.94
```

```
2661          KK   1D137
2662          KM        RETURN DIVERT AT CP137
2663          DR   DI149

2664          KK    R137
2665          KM        ROUTE FLOW FROM CP137 TO CP149
2666          RS       4             -1       0
2667          RC    .035    .035     .08    2640   .0038
2668          RX    1000    1001    1002    1015    1070    1470    1830    2350
2669          RY    1157    1157    1157    1156    1156    1158    1160    1162
              *

2670          KK     149
2671          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 149
2672          BA     .48
2673          LG     .50     .00    4.66     .53     .00
2674          UI     21.     21.     21.     43.     73.     88.    101.    114.    122.    134.
2675          UI    150.    164.    192.    235.    275.    245.    211.    189.    173.    158.
2676          UI    140.    127.    114.    102.     90.     71.     54.     37.     36.     34.
2677          UI     33.     21.     21.     21.     13.      6.      6.      6.      6.      6.
2678          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
2679          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2680          KK   CP149
2681          KM        ADD HYDROGRAPHS AT CP149
2682          HC       2   22.20

2683          KK    R149
2684          KM        ROUTE FLOW FROM CP149 TO CP151
2685          RS       5             -1       0
2686          RC    .035    .035     .07    2640   .0038
2687          RX    1000    1001    1002    1030    1200    2050    2315    2350
2688          RY    1143    1143    1143    1142    1142    1144    1146    1147

2689          KK   CP151
2690          KM        ADD HYDROGRAPHS AT CP151
2691          HC       2   23.66

2692          KK   1D151
2693          KM        DIVERT TO CP168 FROM CP151
2694          DT   1D168
2695          DI       0      22      73     360     833    1579    2881    4702    7044
2696          DQ       0       0      17     113     270     519     953    1560    2341

2697          KK   2D151
2698          KM        DIVERT TO CP152 FROM CP151
2699          DT   DI152
2700          DI       0      22      56     247     563    1060    1928    3142    4703
2701          DQ       0       0      17     113     270     519     953    1560    2341
```



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

2702          KK    R151
2703          KM        ROUTE REMAINDER FROM CP151 TO CP167
2704          RS      11             -1       0
2705          RC    .035    .035     .07    5280   .0030
2706          RX    1000    1001    1002    1015    1085    1500    1770    2400
2707          RY    1129    1129    1129    1128    1128    1130    1132    1134
              *

2708          KK     167
2709          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 167
2710          BA     .97
2711          LG     .50     .00    4.90     .47     .00
2712          UI     34.     34.     34.     34.     80.    117.    133.    158.    170.    186.
2713          UI    197.    213.    231.    253.    270.    309.    374.    415.    443.    386.
2714          UI    344.    314.    291.    272.    252.    227.    211.    195.    175.    163.
2715          UI    146.    122.     98.     71.     60.     59.     56.     56.     44.     34.
2716          UI     34.     34.     31.     10.     10.     10.     10.     10.     10.     10.
2717          UI     10.     10.     10.     10.     10.     10.     10.      0.      0.      0.
2718          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2719          KK   1I167
2720          KM        ADD HYDROGRAPHS AT CP167
```

```
2721          HC       2   24.63

2722          KK    D166
2723          KM          RETURN DIVERT AT CP166
2724          DR   DI167

2725          KK    R166
2726          KM         ROUTE FLOW FROM CP166 TO CP167
2727          RS       5              -1       0
2728          RC     .08     .025     .025    5280   .0028
2729          RX    1000    1510     2000    2250    2290    2318    2319    2320
2730          RY    1136    1134     1132    1130    1130    1131    1131    1131

2731          KK   CP167
2732          KM         ADD HYDROGRAPHS AT CP167
2733          HC       2   25.61

2734          KK   1D167
2735          KM         DIVERT TO CP183 FROM CP167
2736          DT   1D183
2737          DI       0     274     1281    3337    6703   11624   18322
2738          DQ       0       0      335    1021    2143    3783    6016

2739          KK   2D167
2740          KM         DIVERT TO CP168 FROM CP167
2741          DT   2D168
2742          DI       0     274      946    2316    4560    7841   12306
2743          DQ       0       0       64     250     587    1107    1838
```



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

2744          KK    R167
2745          KM         ROUTE REMAINDER FROM CP167 TO CP181A
2746          RS       4              -1       0
2747          RC    .035    .035      .08    2400   .0046
2748          RX    1000    1001     1002    1020    1080    1740    2169    2170
2749          RY    1119    1119     1119    1118    1118    1120    1119    1119
              *

2750          KK    181A
2751          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 181A
2752          BA     .39
2753          LG     .50     .00     4.58     .55     .00
2754          UI     16.     16.      16.     28.     55.     65.     77.     85.     93.    100.
2755          UI    111.    123.     136.    162.    199.    212.    181.    159.    144.    133.
2756          UI    121.    108.      98.     89.     80.     71.     57.     45.     29.     29.
2757          UI     27.     27.      19.     16.     16.     16.      5.      5.      5.      5.
2758          UI      5.      5.       5.      5.      5.      5.      5.      5.      0.      0.
2759          UI      0.      0.       0.      0.      0.      0.      0.      0.      0.      0.

2760          KK  CP181A
2761          KM         ADD HYDROGRAPHS AT CP181A
2762          HC       2    26.0

2763          KK   D181A
2764          KM         DIVERT TO CP183 FROM CP181A
2765          DT   2D183
2766          DI       0     133      491    1117    1637    2812    4542    6810    9620
2767          DQ       0      12       77     241     451     927    1631    2557    3709

2768          KK   R181A
2769          KM         ROUTE REMAINDER FROM CP181A TO CP182
2770          RS       5              -1       0
2771          RC     .04     .04      .08    2870   .0031
2772          RX    1000    1001     1002    1015    1075    1570    1880    2100
2773          RY    1109    1109     1109    1108    1108    1110    1112    1113

2774          KK   CP182
2775          KM         ADD HYDROGRAPHS AT CP182
2776          HC       2   38.46

2777          KK    D182
2778          KM         DIVERT TO CP196 FROM CP182
2779          DT   DI196
```

```
2780          DI       0     173     611    1337    2388    3802
2781          DQ       0      88     310     659    1212    1929

2782          KK    R182
2783          KM        ROUTE REMAINDER FROM CP182 TO CP184
2784          RS      14              -1       0
2785          RC    .075     .04     .04    5280   .0023
2786          RX    1000    1001    1700    2340    2450    2463    2464    2465
2787          RY    1104    1104    1102    1100    1100    1101    1101    1101
```



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

2788          KK   2D151
2789          KM        RETURN DIVERT AT CP151
2790          DR   DI152

2791          KK    R151
2792          KM        ROUTE FLOW FROM CP151 TO CP152
2793          RS       6              -1       0
2794          RC     .08    .035    .035    2600   .0027
2795          RX    1000    1090    1710    2160    2240    2268    2269    2270
2796          RY    1141    1140    1138    1136    1136    1137    1137    1137
              *

2797          KK     152
2798          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 152
2799          BA     .35
2800          LG     .50     .00    5.10     .43     .00
2801          UI     17.     17.     17.     54.     69.     83.     94.    103.    114.    129.
2802          UI    147.    187.    221.    206.    175.    155.    140.    124.    110.     97.
2803          UI     86.     74.     56.     39.     31.     29.     29.     18.     17.     17.
2804          UI      7.      5.      5.      5.      5.      5.      5.      5.      5.      5.
2805          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
2806          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2807          KK   CP152
2808          KM        ADD HYDROGRAPHS AT CP152
2809          HC       2   24.01

2810          KK   1D152
2811          KM        DIVERT TO CP169 FROM CP152
2812          DT   1D169
2813          DI       0     334     482    1536    3508    6291    9848   14192
2814          DQ       0       0      49     400    1058    1986    3171    4619

2815          KK   2D152
2816          KM        DIVERT TO CP155 FROM CP152
2817          DT   DI155
2818          DI       0     334     433    1136    2450    4305    6677    9573
2819          DQ       0       0      49     400    1058    1986    3171    4619

2820          KK    R152
2821          KM        ROUTE REMAINDER FROM CP152 TO CP168
2822          RS      10              -1       0
2823          RC    .035    .035    .075    5280   .0034
2824          RX    1000    1001    1002    1020    1110    1450    1880    2100
2825          RY    1123    1123    1123    1122    1122    1124    1126    1127

2826          KK   1D151
2827          KM        RETURN DIVERT AT CP151
2828          DR   1D168
```



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

2829          KK    R151
2830          KM        ROUTE FLOW FROM CP151 TO CP168
2831          RS      56              -1       0
2832          RC    .075    .075    .075    5928   .0042
2833          RX    1000    1001    1002    1180    2100    2458    2459    2460
2834          RY    1135    1135    1135    1134    1134    1135    1135    1135
              *
```

```
2835          KK     168
2836          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 168
2837          BA     .51
2838          LG     .50      .00     5.00      .45      .00
2839          UI     21.      21.      21.      37.      73.      86.     101.     111.     122.     132.
2840          UI    145.     162.     179.     213.     262.     277.     236.     208.     188.     173.
2841          UI    158.     141.     128.     116.     104.      92.      73.      58.      38.      38.
2842          UI     35.      35.      24.      21.      21.      20.       7.       7.       7.       7.
2843          UI      7.       7.       7.       7.       7.       7.       7.       0.       0.       0.
2844          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2845          KK    1I168
2846          KM        ADD HYDROGRAPHS AT CP168
2847          HC        2   24.17

2848          KK    2D167
2849          KM        RETURN DIVERT AT CP167
2850          DR    2D168

2851          KK     R167
2852          KM        ROUTE FLOW FROM CP167 TO CP168
2853          RS       10               -1        0
2854          RC     .075      .04      .04     2600    .0035
2855          RX     1000     1060     1460     2050     2315     2328     2329     2330
2856          RY     1125     1124     1122     1120     1120     1121     1121     1121

2857          KK    2I168
2858          KM        ADD HYDROGRAPHS AT CP168
2859          HC        2   26.12

2860          KK    CP168
2861          KM        ADD HYDROGRAPHS AT CP168
2862          HC        2   26.47

2863          KK     D168
2864          KM        DIVERT TO CP169 FROM CP168
2865          DT    2D169
2866          DI        0        4      282     1072     2510     4582     7322    10770
2867          DQ        0        0       59      334      981     1974     3330     5068

2868          KK     R168
2869          KM        ROUTE REMAINDER FROM CP168 TO CP183
2870          RS        5               -1        0
2871          RC      .04      .04     .075     2400    .0029
2872          RX     1000     1001     1002     1010     1030     1480     2259     2260
2873          RY     1113     1113     1113     1112     1112     1114     1116     1116
```



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

2874          KK    1D167
2875          KM        RETURN DIVERT AT CP167
2876          DR    1D183

2877          KK     R167
2878          KM        ROUTE FLOW FROM CP167 TO CP183
2879          RS       19               -1        0
2880          RC     .075     .075     .075     2250    .0071
2881          RX     1000     1001     1002     1210     2310     2558     2559     2560
2882          RY     1115     1115     1115     1114     1114     1115     1115     1115
              *

2883          KK      183
2884          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 183
2885          BA     .21
2886          LG     .50      .00     4.32      .62      .00
2887          UI     20.      38.      84.     109.     134.     172.     247.     206.     164.     131.
2888          UI    104.      74.      40.      33.      22.      16.       6.       6.       6.       6.
2889          UI      6.       0.       0.       0.       0.       0.       0.       0.       0.       0.
2890          UI      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.

2891          KK    1I183
2892          KM        ADD HYDROGRAPHS AT CP183
2893          HC        2   25.82
```

```
2894          KK   D181A
2895          KM        RETURN DIVERT AT CP181A
2896          DR   2D183

2897          KK   R181A
2898          KM        ROUTE FLOW FROM CP181A TO CP183
2899          RS       3              -1       0
2900          RC     .08      .04     .04    1250   .0040
2901          RX    1000     1001    1420    1850    1870    1888    1889    1890
2902          RY    1114     1114    1112    1110    1110    1111    1111    1111

2903          KK   2I183
2904          KM        ADD HYDROGRAPHS AT CP183
2905          HC       2   26.21

2906          KK   CP183
2907          KM        ADD HYDROGRAPHS AT CP183
2908          HC       2   27.07

2909          KK    R183
2910          KM        ROUTE FLOW FROM CP183 TO CP184
2911          RS      28              -1       0
2912          RC     .08      .08     .08    4520   .0035
2913          RX    1000     1001    1215    1910    2630    3250    3499    3500
2914          RY    1101     1101    1100    1098    1098    1100    1101    1101
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2915          KK     184
2916          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 184
2917          BA     .79
2918          LG     .50      .00    4.74     .51     .00
2919          UI     33.      33.     33.     53.    110.    130.    154.    170.    186.    200.
2920          UI    221.     245.    268.    321.    389.    431.    371.    326.    293.    269.
2921          UI    248.     221.    201.    182.    164.    148.    121.     94.     63.     58.
2922          UI     55.      54.     43.     33.     33.     33.     15.     10.     10.     10.
2923          UI     10.      10.     10.     10.     10.     10.     10.     10.      0.      0.
2924          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

2925          KK   1I184
2926          KM        ADD HYDROGRAPHS AT CP184
2927          HC       2   27.86

2928          KK   2I184
2929          KM        ADD HYDROGRAPHS AT CP184
2930          HC       2   40.32

2931          KK    D152
2932          KM        RETURN DIVERT AT CP152
2933          DR   DI155

2934          KK    R152
2935          KM        ROUTE FLOW FROM CP152 TO CP155
2936          RS      14              -1       0
2937          RC    .075      .04     .04    2640   .0019
2938          RX    1000     1040    1580    2090    2360    2363    2364    2365
2939          RY  1135.2     1134    1132    1130    1130    1131    1131    1131
              *

2940          KK     155
2941          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 155
2942          BA     .26
2943          LG     .50      .00    7.30     .17     .00
2944          UI     15.      15.     29.     56.     72.     83.     93.    107.    122.    156.
2945          UI    195.     177.    147.    129.    113.     98.     85.     73.     57.     39.
2946          UI     27.      26.     23.     15.     15.      8.      5.      5.      5.      5.
2947          UI      5.       5.      5.      0.      0.      0.      0.      0.      0.      0.
2948          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

2949          KK   CP155
2950          KM        ADD HYDROGRAPHS AT CP155
2951          HC       2   24.27
```

```
2952          KK    R155
2953          KM        ROUTE FLOW FROM CP155 TO CP169
2954          RS      17              -1       0
2955          RC     .04     .04     .07    5280   .0036
2956          RX    1000    1001    1002    1020    1690    2220    2269    2270
2957          RY    1117    1117    1117    1116    1116    1118    1119    1119
```



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

2958          KK    D152
2959          KM        RETURN DIVERT AT CP152
2960          DR   1D169

2961          KK    R152
2962          KM        ROUTE FLOW FROM CP152 TO CP169
2963          RS       7              -1       0
2964          RC     .08     .08     .08    5928   .0040
2965          RX    1000    1001    1002    1190    2510    2898    2899    2900
2966          RY    1121    1121    1121    1120    1120    1121    1121    1121
              *

2967          KK     169
2968          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 169
2969          BA     .51
2970          LG     .50     .00    7.30     .17     .00
2971          UI     21.     21.     21.     35.     72.     84.    100.    110.    120.    130.
2972          UI    143.    159.    174.    209.    253.    278.    239.    210.    189.    174.
2973          UI    160.    142.    130.    117.    106.     95.     77.     61.     39.     38.
2974          UI     35.     35.     27.     21.     21.     21.      9.      7.      7.      7.
2975          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
2976          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

2977          KK   1I169
2978          KM        ADD HYDROGRAPHS AT CP169
2979          HC       2   24.52

2980          KK   2I169
2981          KM        ADD HYDROGRAPHS AT CP169
2982          HC       2   25.13

2983          KK    D168
2984          KM        RETURN DIVERT AT CP168
2985          DR   2D169

2986          KK    R168
2987          KM        ROUTE FLOW FROM CP168 TO CP169
2988          RS       9              -1       0
2989          RC     .08    .035    .035    2640   .0023
2990          RX    1000    1001    1440    1890    2100    2148    2149    2150
2991          RY    1116    1116    1114    1112    1112    1113    1113    1113

2992          KK   CP169
2993          KM        ADD HYDROGRAPHS AT CP169
2994          HC       2   27.24

2995          KK    R169
2996          KM        ROUTE FLOW FROM CP169 TO CP184
2997          RS      10              -1       0
2998          RC     .08     .04     .04    5280   .0032
2999          RX    1000    1001    1002    1020    1100    1670    2099    2100
3000          RY    1111    1111    1111    1110    1110    1112    1113    1113
```



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

3001          KK   CP184
3002          KM        ADD HYDROGRAPHS AT CP184
3003          HC       2   41.09

3004          KK   1D184
3005          KM        DIVERT TO CP197 FROM CP184
3006          DT   DI197
3007          DI       0     350    1274    2834    4789    7664
```

```
3008          DQ       0     140     509    1134    1916    3066

3009          KK   2D184
3010          KM        DIVERT TO CP198 FROM CP184
3011          DT   DI198
3012          DI       0     210     765    1700    2873    4598
3013          DQ       0     140     509    1134    1911    3066

3014          KK    R184
3015          KM        ROUTE REMAINDER FROM CP184 TO CP185
3016          RS       8              -1       0
3017          RC    .075     .04     .04    1400   .0007
3018          RX    1000    1001    1170    1970    2260    2308    2309    2310
3019          RY    1095    1095    1094    1092    1092    1093    1093    1093
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2J WITH NEW SOILS*****
              * ************************************************************************
              *

3020          KK     170
3021          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 170
3022          BA     .29
3023          LG     .41     .04    7.30     .16    5.00
3024          UI     19.     19.     48.     77.     95.    110.    126.    148.    189.    242.
3025          UI    212.    175.    153.    130.    112.     94.     76.     49.     34.     32.
3026          UI     25.     19.     17.      6.      6.      6.      6.      6.      6.      6.
3027          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3028          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3029          KK    R170
3030          KM        ROUTE FLOW FROM CP170 TO CP185
3031          RS      16              -1       0
3032          RC    .035    .035    .035    5280   .0032
3033          RX    1000    1001    1002    2100    2280    2338    2339    2340
3034          RY    1101    1101    1101    1100    1100    1101    1101    1101
              *

3035          KK     185
3036          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 185
3037          BA     .69
3038          LG     .50     .00    5.10     .43     .00
3039          UI     30.     30.     30.     62.    105.    126.    145.    163.    176.    193.
3040          UI    216.    236.    277.    338.    395.    352.    304.    272.    248.    227.
3041          UI    202.    183.    164.    147.    129.    101.     78.     53.     52.     50.
3042          UI     48.     30.     30.     30.     19.      9.      9.      9.      9.      9.
```



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

3043          UI      9.      9.      9.      9.      9.      0.      0.      0.      0.      0.
3044          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3045          KK   1I185
3046          KM        ADD HYDROGRAPHS AT CP185
3047          HC       2     .98

3048          KK   CP185
3049          KM        ADD HYDROGRAPHS AT CP185
3050          HC       2   44.55

3051          KK    R185
3052          KM        ROUTE FLOW FROM CP185 TO CP198
3053          RS       9              -1       0
3054          RC    .075    .075    .075    5450   .0022
3055          RX    1000    1001    1090    1410    1950    2190    2219    2220
3056          RY    1086    1086    1084    1083    1083    1084    1085    1085

3057          KK   2D184
3058          KM        RETURN DIVERT AT CP184
3059          DR   DI198

3060          KK    R184
3061          KM        ROUTE FLOW FROM CP184 TO CP198
3062          RS      55              -1       0
3063          RC    .075    .075    .075    6630   .0020
```

```
                                                                                                LABCARQ
3064          RX    1000    1001    1025    1220    1990    2010    2099    2100
3065          RY    1085    1085    1084    1083    1083    1084    1085    1085
              *

3066          KK     198
3067          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 198
3068          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3069          KM    L=      1.3  Lca=       .6   S=   10.3  Kn= .091  LAG=  77.1
3070          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3071          BA     .90
3072          LG     .42     .09    4.80     .44   12.00
3073          UI     39.     39.     39.     80.    137.    165.    189.    213.    229.    252.
3074          UI    281.    308.    360.    441.    515.    461.    398.    356.    325.    298.
3075          UI    264.    239.    215.    192.    169.    133.    103.     70.     69.     65.
3076          UI     63.     39.     39.     39.     25.     12.     12.     12.     12.     12.
3077          UI     12.     12.     12.     12.     12.     12.      0.      0.      0.      0.
3078          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3079          KK  198OUT
3080          KM        DIVERSION-RETENTION
3081          DT  198RET   14.60
3082          DI       0   10000
3083          DQ       0   10000
```



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

3084          KK   1I198
3085          KM        ADD HYDROGRAPHS AT CP198
3086          HC       2   41.97

3087          KK   2I198
3088          KM        ADD HYDROGRAPHS AT CP198
3089          HC       2   42.95

3090          KK   1D184
3091          KM        RETURN DIVERT AT CP184
3092          DR   DI197

3093          KK    R184
3094          KM        ROUTE REMAINDER FROM CP184 TO CP197
3095          RS      18              -1       0
3096          RC     .04     .04     .08    5280   .0025
3097          RX    1000    1001    1002    1015    1870    2300    2699    2700
3098          RY    1087    1087    1087    1086    1086    1088    1089    1089
              *

3099          KK     197
3100          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 197
3101          BA    1.00
3102          LG     .50     .00    4.66     .53     .00
3103          UI     32.     32.     32.     32.     46.    106.    119.    135.    152.    164.
3104          UI    177.    187.    200.    216.    235.    250.    276.    318.    371.    423.
3105          UI    402.    355.    321.    296.    276.    259.    242.    222.    204.    191.
3106          UI    175.    161.    151.    133.    112.     93.     68.     57.     57.     53.
3107          UI     53.     52.     32.     32.     32.     32.     27.     10.     10.     10.
3108          UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
3109          UI     10.     10.      0.      0.      0.      0.      0.      0.      0.      0.
3110          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3111          KK   CP197
3112          KM        ADD HYDROGRAPHS AT CP197
3113          HC       2   42.06

3114          KK    R197
3115          KM        ROUTE FLOW FROM CP197 TO CP203
3116          RS       8              -1       0
3117          RC    .035    .035    .015    2650   .0004
3118          RX    1000    1001    1002    1030    1200    1350    1809    1810
3119          RY    1078    1078    1078  1077.5  1077.5    1078    1080    1080
              *

3120          KK     203
3121          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 203
3122          BA     .11
```

```
3123   LG     .35     .38    4.82     .29     .00
3124   UI     16.     60.     92.    131.    189.    135.     96.     62.     29.     19.
3125   UI      9.      5.      5.      0.      0.      0.      0.      0.      0.      0.
3126   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```



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

3127   KK  203OUT
3128   KM        DIVERSION-RETENTION
3129   DT  203RET    6.65
3130   DI       0   10000
3131   DQ       0   10000

3132   KK   CP203
3133   KM        ADD HYDROGRAPHS AT CP203
3134   HC       2   42.17

3135   KK   CP198
3136   KM        ADD HYDROGRAPHS AT CP198
3137   HC       2   44.06

3138   KK    R198
3139   KM        ROUTE FLOW FROM CP198 TO CP204
3140   RS       2              -1       0
3141   RC     .03    .025     .03    3120   .0029
3142   RX    1000    1050    1070    1090    1190    1220    1230    1270
3143   RY    1083    1082    1078    1076    1076    1078    1080    1083
       *
       * ************************************************************************
       * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 2K WITH NEW SOILS*****
       * ************************************************************************
       *

3144   KK     204
3145   KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 204
3146   BA     .27
3147   LG     .35     .37    4.82     .29     .00
3148   UI     42.    172.    257.    396.    462.    312.    214.    105.     61.     33.
3149   UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3150   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3151   KK   1I204
3152   KM        ADD HYDROGRAPHS AT CP204
3153   HC       2   44.33
       *

3154   KK     174
3155   KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 174
3156   BA     .45
3157   LG     .35     .33    4.58     .32     .00
3158   UI     62.    218.    346.    474.    735.    574.    418.    294.    145.     94.
3159   UI     57.     19.     19.     19.      0.      0.      0.      0.      0.      0.
3160   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3161   KK    R174
3162   KM        ROUTE FLOW FROM CP174 TO CP176
3163   RS       7              -1       0
3164   RC    .025    .025    .025    7020   .0073
3165   RX    1000    1040    1100    1200    1600    1620    1630    1750
3166   RY    1223    1222    1220    1218    1218    1220    1222    1224
       *
```



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

3167   KK     175
3168   KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175
3169   BA     .28
3170   LG     .35     .33    4.66    0.31     .00
3171   UI     38.    128.    207.    279.    440.    364.    267.    192.    103.     63.
3172   UI     38.     15.     12.     12.      0.      0.      0.      0.      0.      0.
3173   UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
3174          KK    D175
3175          KM        DIVERT TO CP175A FROM CP175
3176          DT  DI175A
3177          DI       0      53     200     459     854    1367    2544    4308    6658    9613
3178          DQ       0      53     200     459     854    1047    1478    2105    2915    3906

3179          KK    R175
3180          KM        ROUTE REMAINDER FROM CP175 TO CP176
3181          RS       5              -1       0
3182          RC    .025    .022    .022    6500   .0074
3183          RX    1000    1100    1300    1420    1470    1558    1559    1560
3184          RY    1226    1224    1222    1220    1220    1222    1222    1222
              *

3185          KK     176
3186          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 176
3187          BA     .67
3188          LG     .35     .34    4.20     .39     .00
3189          UI     66.    128.    279.    362.    449.    588.    817.    642.    515.    407.
3190          UI    319.    208.    115.     99.     66.     37.     20.     20.     20.     20.
3191          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3192          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3193          KK   1I176
3194          KM        ADD HYDROGRAPHS AT CP176
3195          HC       2     .95

3196          KK   CP176
3197          KM        ADD HYDROGRAPHS AT CP176
3198          HC       2    1.40

3199          KK    R176
3200          KM        ROUTE FLOW FROM CP176 TO CP191
3201          RS       5              -1       0
3202          RC    .035    .035    .075    5540   .0067
3203          RX    1000    1001    1002    1025    1100    1400    1720    2050
3204          RY    1163    1163    1163    1162    1162    1164    1166    1168

3205          KK    D175
3206          KM        RETURN DIVERT AT CP175
3207          DR  DI175A
```



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

3208          KK    R175
3209          KM        ROUTE FLOW FROM CP175 TO CP175A
3210          RS       2              -1       0
3211          RC    .022    .022    .025    1560   .0013
3212          RX    1000    1001    1002    1020    1055    1150    1190    1390
3213          RY    1136    1136    1136    1134    1134    1136    1138    1140
              *

3214          KK    175A
3215          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 175A
3216          BA     .47
3217          LG     .35     .33    4.20     .39     .00
3218          UI     42.     66.    162.    215.    258.    317.    439.    507.    388.    320.
3219          UI    258.    207.    147.     82.     69.     48.     41.     13.     13.     13.
3220          UI     13.     13.      0.      0.      0.      0.      0.      0.      0.      0.
3221          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3222          KK  CP175A
3223          KM        ADD HYDROGRAPHS AT CP175A
3224          HC       2     .75

3225          KK   R175A
3226          KM        ROUTE FLOW FROM CP175A TO CP189
3227          RS      11              -1       0
3228          RC    .022    .022    .025    3300   .0009
3229          RX    1000    1001    1002    1020    1035    1170    1460    1720
3230          RY    1233    1233    1233    1232    1232    1234    1236    1238

3231          KK     CP3
3232          KM        RETURN DIVERTED HYDROGRAPH AT CP3 (FROM  HEC-1 MODEL)
```

```
3233          DR   DI189

3234          KK      R3
3235          KM        ROUTE FLOW AT CP3 TO CP189
3236          RS       5              -1       0
3237          RC     .05     .035     .05    4500   .0038
3238          RX    1000     1040    1175    1250    1275    1350    1430    1750
3239          RY    1261     1260  1260.5    1258    1258  1260.5    1258    1261

3240          KK   1I189
3241          KM        ADD HYDROGRAPHS AT CP189
3242          HC       2    5.81
              *

3243          KK     189
3244          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 189
3245          BA     .51
3246          LG     .35      .35    4.44     .34     .00
3247          UI     52.     110.    229.    298.    372.    516.    631.    471.    376.    293.
3248          UI    219.     118.     88.     59.     43.     16.     16.     16.     16.      0.
3249          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
3250          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                                HEC-1 INPUT                                          PAGE 79

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

3251          KK   CP189
3252          KM        ADD HYDROGRAPHS AT CP189
3253          HC       2    6.32

3254          KK    R189
3255          KM        ROUTE FLOW FROM CP189 TO CP190
3256          RS       8              -1       0
3257          RC     .08     .035    .035    6900   .0057
3258          RX    1000     1270    1700    2040    2090    2118    2119    2120
3259          RY    1212     1210    1208    1206    1206    1207    1207    1207
              *

3260          KK     190
3261          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 190
3262          BA     .86
3263          LG     .50      .00    4.44     .74     .00
3264          UI     44.      44.     44.    141.    176.    209.    238.    261.    292.    331.
3265          UI    381.     482.    570.    492.    422.    374.    339.    297.    264.    232.
3266          UI    207.     167.    124.     77.     76.     72.     59.     44.     44.     31.
3267          UI     13.      13.     13.     13.     13.     13.     13.     13.     13.      0.
3268          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
3269          UI      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.

3270          KK   CP190
3271          KM        ADD HYDROGRAPHS AT CP190
3272          HC       2    7.18

3273          KK    R190
3274          KM        ROUTE FLOW FROM CP190 TO CP191
3275          RS       5              -1
3276          RC    .075     .035    .035    5280   .0076
3277          RX    1000     1260    2080    2310    2330    2358    2359    2360
3278          RY    1182     1180    1178    1176    1176    1177    1177    1177

3279          KK   D176A
3280          KM        RETURN DIVERT AT CP176A
3281          DR   DI191

3282          KK   R176A
3283          KM        ROUTE FLOW FROM CP176A TO CP191
3284          RS       4              -1       0
3285          RC    .035     .035     .08    5280   .0062
3286          RX    1000     1001    1002    1025    1100    1400    1720    2050
3287          RY    1163     1163    1163    1162    1162    1164    1166    1168

3288          KK   1I191
3289          KM        ADD HYDROGRAPHS AT CP191
3290          HC       3   11.39
              *
```

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

3291          KK     191
3292          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 191
3293          BA     .99
3294          LG     .50     .00    4.66     .53     .00
3295          UI     39.     39.     39.     40.    127.    144.    170.    189.    210.    223.
3296          UI    243.    267.    293.    322.    381.    459.    509.    443.    389.    353.
3297          UI    324.    301.    272.    247.    227.    204.    186.    166.    135.    111.
3298          UI     70.     68.     65.     63.     56.     39.     39.     39.     30.     12.
3299          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
3300          UI     12.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3301          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3302          KK   CP191
3303          KM        ADD HYDROGRAPHS AT CP191
3304          HC       2   12.38

3305          KK    D191
3306          KM        DIVERT TO CP208 FROM CP191
3307          DT   1D208
3308          DI       0      80     468    1339    2000    3000    4000    5000    6000
3309          DQ       0      80     468    1339    1339    1339    1339    1339    1339

3310          KK    R191
3311          KM        ROUTE REMAINDER FROM CP191 TO CP192A
3312          RS       5              -1       0
3313          RC     .08     .04     .04    2640   .0045
3314          RX    1000    1350    1800    2200    2225    2278    2279    2280
3315          RY    1148    1146    1144    1142    1142    1143    1143    1143
              *

3316          KK    192A
3317          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192A
3318          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3319          KM    L=      1.1  Lca=       .6   S=   31.3  Kn= .098  LAG=  61.4
3320          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3321          BA     .50
3322          LG     .45     .07    4.30     .60    5.00
3323          UI     27.     27.     38.     94.    116.    137.    153.    171.    197.    224.
3324          UI    289.    345.    306.    259.    229.    205.    177.    157.    136.    116.
3325          UI     86.     57.     48.     44.     38.     27.     27.     17.      8.      8.
3326          UI      8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
3327          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3328          KK  192AOT
3329          KM        DIVERSION-RETENTION
3330          DT  192ART    5.33
3331          DI       0   10000
3332          DQ       0   10000
```



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

3333          KK  CP192A
3334          KM        ADD HYDROGRAPHS AT CP192A
3335          HC       2   12.68

3336          KK   R192A
3337          KM        ROUTE REMAINDER FROM CP192A TO CP192
3338          RS       9              -1       0
3339          RC     .08     .04     .04    2640   .0045
3340          RX    1000    1350    1800    2200    2225    2278    2279    2280
3341          RY    1148    1146    1144    1142    1142    1143    1143    1143
              *

3342          KK     192
3343          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 192
3344          BA     .50
3345          LG     .50     .00    4.05     .72     .00
3346          UI     22.     22.     22.     51.     80.     96.    110.    123.    134.    147.
3347          UI    165.    182.    219.    270.    290.    245.    215.    193.    178.    159.
```

```
                                                                                LABCARQ
3348          UI    142.    129.    114.    104.     83.     64.     41.     40.     37.     37.
3349          UI     24.     22.     22.     16.      7.      7.      7.      7.      7.      7.
3350          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3351          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3352          KK   CP192
3353          KM        ADD HYDROGRAPHS AT CP192
3354          HC       2   13.38

3355          KK   1D192
3356          KM        DIVERT TO CP209 FROM CP192
3357          DT   1D209
3358          DI       0     126     480     965    3703    6169    9453
3359          DQ       0     126     419     853    3404    5491    8154

3360          KK   2D192
3361          KM        DIVERT TO CP210 FROM CP192
3362          DT   1D210
3363          DI       0      61     112     299     678    1299    2208
3364          DQ       0       0       0       0       0     433     736

3365          KK    R192
3366          KM        ROUTE REMAINDER FROM CP192 TO MIDSECTION LINE
3367          RS       5              -1       0
3368          RC     .08    .025    .022    2475   .0044
3369          RX    1000    1380    1800    2160    2195    2230    2275    2310
3370          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3371          KK   1D193
3372          KM        DIVERT AT MIDSECTION OF 193 TO CP211
3373          DT   DI211
3374          DI       0     100     200     400     600     800    1000    2000
3375          DQ       0      80     160     320     480     640     800    1600
1                                          HEC-1 INPUT                                                    PAGE 82

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

3376          KK   R192
3377          KM        ROUTE REMAINDER FROM D193 TO CP193
3378          RS       5              -1       0
3379          RC     .08    .025    .022    2475   .0044
3380          RX    1000    1380    1800    2160    2195    2230    2275    2310
3381          RY    1124    1122    1120    1118    1118    1119    1116    1119
              *

3382          KK     193
3383          KM        RUNOFF FROM SUBBASIN 193
3384          BA     .91
3385          LG     .50     .00    4.66     .53     .00
3386          UI     36.     36.     36.     38.    117.    133.    158.    175.    193.    206.
3387          UI    225.    247.    270.    299.    353.    426.    468.    405.    357.    324.
3388          UI    297.    277.    249.    226.    209.    186.    170.    151.    122.    100.
3389          UI     63.     63.     59.     58.     50.     36.     36.     36.     25.     11.
3390          UI     11.     11.     11.     11.     11.     11.     11.     11.     11.     11.
3391          UI     11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3392          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3393          KK   1I193
3394          KM        ADD HYDROGRAPHS AT CP193
3395          HC       2   14.29

3396          KK   1D179
3397          KM        RETURN DIVERT AT CP179
3398          DR   DI193

3399          KK    R179
3400          KM        ROUTE FLOW FROM CP179 TO CP193
3401          RS       7              -1       0
3402          RC    .022    .022     .06    5280   .0040
3403          RX    1000    1001    1002    1010    1050    1070    1150    1970
3404          RY    1113    1113    1113    1112    1112    1113    1112    1118

3405          KK   CP193
3406          KM        ADD HYDROGRAPHS AT CP193
```

```
3407          HC       2   39.17
              * DI212 HAS BEEN REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM        DIVERT TO CP212 FROM CP193
              * DT DI212
              * DI     0     500     520     580     650    1000    1500    2000    2347    30
              * DQ     0       0       4      27      67     332     768    1219    1535    21

3408          KK    R193
3409          KM        ROUTE REMAINDER FROM CP193 TO CP194
3410          RS       7              -1       0
3411          RC     .05    .020    .022    2640   .0015
3412          RX    1000    1940    1995    2020    2040    2050    2069    2070
3413          RY    1104    1100    1101    1098    1098    1100    1101    1101
1                                           HEC-1 INPUT                                                    PAGE 83

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


3414          KK   2D179
3415          KM        RETURN DIVERT AT CP179
3416          DR  DI194A

3417          KK    R179
3418          KM        ROUTE FLOW FROM CP179 TO CP194A
3419          RS       8              -1       0
3420          RC    .075    .075    .075    7500   .0039
3421          RX    1000    1001    1002    1360    2780    2998    2999    3000
3422          RY    1109    1109    1109    1108    1108    1109    1109    1109
              *

3423          KK    194A
3424          KM   BASIN 194A
3425          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3426          KM    L=       .7  Lca=       .4   S=   26.8  Kn= .120  LAG=  54.8
3427          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3428          BA     .25
3429          LG     .50     .00    3.75     .46     .00
3430          UI     15.     15.     32.     57.     73.     84.     95.    110.    128.    167.
3431          UI    198.    162.    138.    122.    104.     91.     77.     65.     46.     28.
3432          UI     26.     25.     15.     15.     10.      5.      5.      5.      5.      5.
3433          UI      5.      5.      0.      0.      0.      0.      0.      0.      0.      0.
3434          UI      0.      0.      0.      0.      0.      0.      0.      0.

3435          KK  CP194A
3436          KM        ADD HYDROGRAPHS AT CP194A
3437          HC       2   36.84
              *

3438          KK    194B
3439          KM   BASIN 194B
3440          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3441          KM    L=       .7  Lca=       .4   S=   23.9  Kn= .120  LAG=  56.0
3442          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3443          BA     .25
3444          LG     .50     .00    3.75     .46     .00
3445          UI     15.     15.     30.     55.     71.     81.     91.    105.    121.    158.
3446          UI    191.    167.    140.    123.    108.     92.     80.     69.     51.     34.
3447          UI     26.     25.     19.     15.     15.      5.      5.      5.      5.      5.
3448          UI      5.      5.      5.      0.      0.      0.      0.      0.      0.      0.
3449          UI      0.      0.      0.      0.      0.      0.      0.      0.

3450          KK  CP194B
              * KO     1                                  21
3451          KM        ADD HYDROGRAPHS AT CP194B
3452          HC       3   36.84

3453          KK  SR194B
              * KO     1                                  21
3454          KM        STORAGE ROUTE THROUGH 74-ACRE DETENTION BASIN 1 AT CP194B
3455          KM        BASIN MODIFIED TO INCORPORATE GOLF COURSE ROUGH GEOMETRY (SFC 3/31/95)
3456          KM        1 - 6' X 6' BOX CULVERT - INLET ELEVATION = 1089.85
3457          KM        DISCHARGES TO DYSART DRAIN
1                                           HEC-1 INPUT                                                    PAGE 84

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

```
3458          RS       1    STOR       0       0
3459          SV       0    13.5   41.42   83.54  133.61  216.27  563.72
3460          SQ       0      67     110     160     211     300     555
3461          SE  1089.9  1092.5  1093.5  1094.5  1095.5    1097    1102

3462          KK   R194B
3463          KM        ROUTE DETENTION BASIN FLOWS FROM CP194B TO CP194C
3464          RS       7              -1       0
3465          RC    .016    .016    .016    2640   .0011
3466          RX    2000    2007    2013    2020    2030    2037    2043    2050
3467          RY  1099.5  1096.2  1092.8  1089.5  1089.5  1092.8  1096.2  1099.5
              *

3468          KK    194C
3469          KM   BASIN 194C
3470          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
3471          KM    L=      1.1  Lca=       .6   S=   20.5  Kn= .120  LAG=  81.5
3472          KM    PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
3473          BA     .49
3474          LG     .50     .00    3.75     .46     .00
3475          UI     20.     20.     20.     32.     68.     80.     95.    104.    114.    123
3476          UI    136.    150.    164.    195.    236.    267.    232.    203.    183.    167
3477          UI    155.    138.    126.    114.    102.     94.     78.     58.     42.     36
3478          UI     34.     33.     29.     20.     20.     20.     12.      6.      6.      6
3479          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0
3480          UI      0.      0.      0.      0.      0.      0.      0.      0.
              *

3481          KK  CP194C
3482          KM        ADD HYDROGRAPHS AT CP194
3483          HC       2   37.33

3484          KK   R194C
3485          KM        ROUTE FLOW FROM CP194C TO CP195
3486          RS       2              -1       0
3487          RC    .016    .016    .016    3750   .0011
3488          RX    2000    2007    2013    2020    2030    2037    2043    2050
3489          RY  1094.5  1091.2  1087.8  1084.5  1084.5  1087.8  1091.2  1094.5

3490          KK    D180
3491          KM        RETURN DIVERT AT CP180
3492          DR   1D195

3493          KK    R180
3494          KM        ROUTE FLOW FROM CP180 TO CP195
3495          RS      40              -1       0
3496          RC     .08     .08     .08    7050   .0031
3497          RX    1000    1001    1002    1350    2300    2448    2449    2450
3498          RY    1101    1101    1100    1099    1099    1100    1101    1101
              *
```



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

3499          KK     195
3500          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 195
3501          BA     .49
3502          LG     .50     .00    4.82     .49     .00
3503          UI     16.     16.     16.     16.     27.     53.     61.     70.     77.     84.
3504          UI     90.     95.    102.    110.    121.    128.    145.    172.    193.    215.
3505          UI    190.    169.    154.    143.    133.    126.    115.    106.     98.     91.
3506          UI     83.     77.     70.     60.     46.     38.     29.     29.     27.     26.
3507          UI     26.     17.     16.     16.     16.     13.      5.      5.      5.      5.
3508          UI      5.      5.      5.      5.      5.      5.      5.      5.      5.      5.
3509          UI      5.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3510          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3511          KK   1I195
3512          KM        ADD HYDROGRAPHS AT CP195
3513          HC       2   33.41

3514          KK    D181
3515          KM        RETURN DIVERT AT CP181
3516          DR   2D195
```

```
3517          KK    R181
3518          KM        ROUTE FLOW FROM CP181 TO CP195
3519          RS       4              -1       0
3520          RC    .022     .022     .07    6400   .0033
3521          RX    1000     1001     1002   1040    1055    1080    1899    1900
3522          RY    1103     1103     1103   1098    1098    1102    1103    1103

3523          KK   CP195
3524          KM        ADD HYDROGRAPHS AT CP195
3525          HC       3   41.02

3526          KK    R195
3527          KM        ROUTE FLOW FROM CP195 TO CP196
3528          RS       1              -1       0
3529          RC    .016     .016     .016   2800   .0011
3530          RX    1000     1006     1013   1020    1030    1037    1043    1050
3531          RY    1085     1082     1078   1074    1074    1078    1082    1085

3532          KK    D182
3533          KM        RETURN DIVERT AT CP182
3534          DR   DI196

3535          KK    R182
3536          KM        ROUTE FLOW FROM CP182 TO CP196
3537          RS      13              -1       0
3538          RC    .025     .025     .04    5280   .0034
3539          RX    1000     1001     1002   1030    1060    1115    1220    1750
3540          RY    1097     1097     1097   1096    1096  1096.5  1095.5    1097
              *
```



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

3541          KK     196
3542          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 196
3543          BA     .47
3544          LG     .46      .03     4.58     .53    2.00
3545          UI     21.      21.      21.     50.     76.     92.    106.    117.    128.    142.
3546          UI    159.     176.     215.    264.    269.    227.    200.    181.    166.    147.
3547          UI    132.     118.     106.     93.     73.     56.     38.     37.     35.     32.
3548          UI     21.      21.      21.      9.      7.      7.      7.      7.      7.      7.
3549          UI      7.       7.       7.      7.      0.      0.      0.      0.      0.      0.
3550          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

3551          KK   1I196
3552          KM        ADD HYDROGRAPHS AT CP196
3553          HC       2   38.90

3554          KK   CP196
3555          KM        ADD HYDROGRAPHS AT CP196
3556          HC       2   51.58

3557          KK    R196
3558          KM        ROUTE FLOW FROM CP196 TO CP202
3559          RS       2              -1       0
3560          RC     .02     .016      .02   5460   .0015
3561          RX    1000     1001     1008   1020    1030    1042    1074    1075
3562          RY    1085     1078     1076   1070    1070    1076    1078    1085
              *

3563          KK     202
3564          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 202
3565          BA     .48
3566          LG     .50      .00     4.82     .49     .00
3567          UI     16.      16.      16.     16.     28.     52.     60.     69.     76.     83.
3568          UI     89.      95.     102.    110.    120.    128.    146.    175.    193.    209.
3569          UI    184.     165.     150.    139.    130.    122.    111.    103.     95.     88.
3570          UI     80.      75.      66.     55.     46.     33.     28.     28.     26.     26.
3571          UI     23.      16.      16.     16.     16.      9.      5.      5.      5.      5.
3572          UI      5.       5.       5.      5.      5.      5.      5.      5.      5.      5.
3573          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.
3574          UI      0.       0.       0.      0.      0.      0.      0.      0.      0.      0.

3575          KK   CP202
```

```
3576          KM        ADD HYDROGRAPHS AT CP202
3577          HC       2   52.06

3578          KK    R202
3579          KM        ROUTE FLOW FROM CP202 TO CP204
3580          RS       2             -1       0
3581          RC    .022    .016    .022    4200   .0009
3582          RX    1000    1001    1008    1020    1030    1042    1074    1075
3583          RY    1093    1083    1079    1073    1073    1079    1083    1093
```



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

3584          KK   CP204
3585          KM        ADD HYDROGRAPHS AT CP204
3586          HC       2   57.76

3587          KK    R204
3588          KM        ROUTE FLOW FROM CP204 TO CP205
3589          RS       1             -1       0
3590          RC    .022    .016    .022    1050  0.0009
3591          RX    1000    1001    1008    1020    1030    1042    1074    1075
3592          RY    1080    1080    1073    1067    1067    1073    1073    1078
              *

3593          KK     205
3594          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 205
3595          BA    .06
3596          LG    .35     .36    4.28     .38     .00
3597          UI    40.    117.    176.     90.     28.      9.      5.      0.      0.      0.
3598          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3599          KK   CP205
3600          KM        ADD HYDROGRAPHS AT CP205
3601          HC       2   57.82

3602          KK    R205
3603          KM        ROUTE FLOW FROM CP205 TO CP206
3604          RS       1             -1       0
3605          RC    .022    .016    .022    1100    .0009
3606          RX    1000    1001    1008    1020    1030    1042    1074    1075
3607          RY    1080    1080    1072    1066    1066    1072    1080    1080
              *

3608          KK     206
3609          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 206
3610          BA    .12
3611          LG    .35     .35    4.50     .33     .00
3612          UI    30.    102.    159.    252.    175.    112.     49.     27.     10.      7.
3613          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3614          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3615          KK   CP206
3616          KM        ADD HYDROGRAPHS AT CP206
3617          HC       2   58.31

3618          KK  RCP206
3619          KM        ADD HYDROGRAPHS AT RCP206
3620          HC       2   68.69

3621          KK   RR206
3622          KM        RIVER ROUTE RCP206 TO RCP228A
3623          RS       1             -1       0
3624          RC    .035    .035    .035    2500   .0036
3625          RX    1000    1001    1002    1042    2042    2082    2083    2084
3626          RY    1070    1070    1070    1060    1060    1070    1070    1070
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3627          KK    228A
3628          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 228A
3629          BA    .08
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```
3630          LG     .35      .35     4.32     .37       6
3631          UI     27.      86.     150.     170.     102.     47.     22.      7.      5.      0.
3632          UI      0.       0.       0.       0.      0.      0.      0.      0.      0.      0.
3633          UI      0.       0.       0.       0.      0.      0.      0.      0.      0.      0.

3634          KK   AFR2K
3635          KM        ADD HYDROGRAPHS AT RCP228A
3636          HC       2   68.77

3637          KK   R228A
3638          KM        RIVER ROUTE RCP228A TO RCP245
3639          RS      11              -1       0
3640          RC    .035    .035    .035   10560   .0025
3641          RX    1000    1001    1002    1042    2042    2082    2083    2084
3642          RY    1066    1066    1066    1050    1050    1066    1066    1066
              * Sam Hanna 2/1/01
              * KK2R228A
              * KM      THIS IS AN ARTIFICALLY DIVERTED HYDROGRAPH TO BE RETRIEVED LATER
              * DTDR228A
              * DI     0    1000    2000    4000    6000    8000
              * DQ     0    1000    2000    4000    6000    8000
              *
              * ************************************************************************
              * ***THE FOLLOWING SECTION TAKEN FROM NEW SUPER BASIN 3  WITH NEW SOILS*****
              * ************************************************************************
              *
              * 1D10 AND 2D10 ARE MODIFICATIONS PER FLOODPLAIN ANALYSIS BY URS

3643          KK    1D10
3644          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3645          DR  1DI188

3646          KK    2D10
3647          KM        RETURN DIVERTED HYDROGRAPH FROM WT#3 HEC-1 MODEL
3648          DR  2DI188

3649          KK   1I188
3650          KM   ADD ORIGINAL DIVERT 2DI188 (DI188) WITH ADDED DIVERT 1DI188
3651          HC       2   11.08

3652          KK     R10
3653          KM        ROUTE FLOW AT CP10 TO CP188
3654          RS       1              -1       0
3655          RC     .06     .04     .06    1000   .0044
3656          RX    1000    1050    1150    1240    1300    1350    1400    1405
3657          RY    1228  1227.5    1226    1225    1225    1226  1227.5    1228
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3658          KK     188
3659          KM        RUNOFFF HYDROGRAPH FROM SUB-BASIN 188
3660          BA     .19
3661          LG     .35     .33    4.44     .34     .00
3662          UI     29.    120.    179.    274.    326.    221.    152.     76.     44.     24.
3663          UI      9.      9.      0.      0.      0.      0.      0.      0.      0.      0.
3664          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3665          KK   CP188
3666          KM        ADD HYDROGRAPHS AT CP188
3667          HC       2   11.08

3668          KK    R188
3669          KM        ROUTE FLOW FROM CP188 TO CP207A
3670          RS       3              -1
3671          RC    .025    .022    .025    5460   .0079
3672          RX    1000    1100    1200    1210    1230    1335    1355    1510
3673          RY    1240    1214    1212    1210    1210    1212    1214    1240
              *

3674          KK    207A
3675          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207A
3676          BA     .50
3677          LG     .35     .34    4.15     .40     .00
```

```
                                                                                LABCARQ
3678          UI     53.    124.    244.    314.    400.    593.    595.    448.    350.    270.
3679          UI    176.     93.     76.     53.     20.     16.     16.     16.      0.      0.
3680          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3681          KK  CP207A
3682          KM        ADD HYDROGRAPHS AT CP207A
3683          HC       2   11.58

3684          KK   R207A
              * KO     1                                21
3685          KM        ROUTE FLOW FROM CP207A TO CP214
3686          RS       2              -1
3687          RC    .022    .022    .025    3200   .0069
3688          RX    1000    1020    1030    1045    1065    1085    1325    1490
3689          RY    1179    1176    1172    1170    1170    1172    1174    1176
              *

3690          KK     214
              * KO     1                                21
3691          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 214
3692          BA     .16
3693          LG     .35     .35    4.16     .40     .00
3694          UI     22.     81.    127.    176.    267.    201.    146.    100.     47.     31.
3695          UI     18.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3696          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

3697          KK   CP214
              * KO     1                                21
3698          KM        ADD HYDROGRAPHS AT CP214
3699          HC       2   11.74

3700          KK    R214
3701          KM        ROUTE FLOW FROM CP214 TO CP215
3702          RS       1              -1
3703          RC    .022    .022    .025    2250   .0049
3704          RX    1000    1010    1030    1045    1070    1150    1190    1310
3705          RY    1061    1060    1058    1056    1056    1058    1060    1062
              *

3706          KK    215A
3707          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215A
3708          BA     .45
3709          LG     .35     .33    4.32     .37     .00
3710          UI     47.    103.    209.    271.    341.    487.    551.    410.    325.    252.
3711          UI    178.     95.     77.     47.     29.     14.     14.     14.     14.      0.
3712          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3713          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3714          KK   R215A
3715          KM        ROUTE FLOW FROM CP215A TO CP215
3716          RS       2              -1
3717          RC    .025     .02    .025    2800   .0046
3718          RX    1000    1190    1425    1435    1455    1478    1479    1480
3719          RY    1158    1156    1154    1152    1152    1159    1159    1159
              *

3720          KK     215
3721          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 215
3722          BA     .35
3723          LG     .35     .34    4.66     .31     .00
3724          UI     39.     95.    181.    233.    303.    457.    398.    306.    235.    177.
3725          UI     98.     65.     45.     29.     12.     12.     12.     12.      0.      0.
3726          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *
              * THE FOLLOWING DIVERSIONS ARE SPECIFIC TO EXISTING SUB BASIN BOUDNARIES AS
              * WELL AS THE 100-YEAR 24-HOUR STORM EVENT.  ANY FUTURE  MODELS BASED
              * ON THIS ADMP UPDATE MUST RE-EVALUATE ALL OF THE DIVERSIONS ASSOCIATED WITH
              * PERRYVILLE ROAD AND 185TH AVENUE FOLLOWING BELOW.
              *

3727          KK   1I215
3728          KM        ADD HYDROGRAPHS AT CP215
```

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3729          HC       2     .80

3730          KK   2I215
3731          KM        ADD HYDROGRAPHS AT CP215
3732          HC       2   12.54
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3733          KK   3I215
3734          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3735          DT  1DI216
3736          DI       0    1297    2784    4733
3737          DQ       0       0    1559    2741

3738          KK   4I215
3739          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3740          DT  2DI216
3741          DI       0      52    1225    1992
3742          DQ       0       0     722    1150

3743          KK   5I215
3744          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3745          DT  3DI216
3746          DI       0     190     503     842
3747          DQ       0       0       0       0

3748          KK   CP215
3749          KM   DIVERT FLOWS THAT WILL OVERTOP PERRYVILLE ROAD NORTH OF BETHANY
3750          DT  4DI216
3751          DI       0      51     516     842
3752          DQ       0       0     154     194

3753          KK    R215
3754          KM        ROUTE FLOW FROM CP215 TO CP233
3755          RS       3              -1
3756          RC     .02     .02    .025    5280   .0032
3757          RX    1000    1010    1020    1030    1050    1070    1190    1540
3758          RY    1043    1042    1040    1038    1038    1040    1042    1044
              *

3759          KK     233
3760          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 233
3761          BA     .50
3762          LG     .35     .35    4.10     .41     .00
3763          UI     49.     94.    206.    267.    331.    430.    604.    483.    386.    306.
3764          UI    242.    163.     86.     76.     49.     31.     15.     15.     15.     15.
3765          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
3766          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3767          KK   CP233
3768          KM        ADD HYDROGRAPHS AT CP233
3769          HC       2   13.04

3770          KK    R233
3771          KM        ROUTE FLOW FROM CP233 TO CP234
3772          RS       2              -1
3773          RC    .075    .035    .035    2640   .0057
3774          RX    1000    1200    1540    1930    1965    1980    2009    2010
3775          RY    1031    1030    1028    1026    1026    1028    1029    1029
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3776          KK     216
3777          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 216
3778          BA     .51
3779          LG     .46     .09    4.10     .63     .00
3780          UI     26.     26.     27.     88.    108.    128.    145.    160.    180.    203.
3781          UI    240.    304.    342.    285.    246.    220.    198.    172.    154.    134.
3782          UI    117.     89.     63.     47.     44.     43.     27.     26.     26.      9.
3783          UI      8.      8.      8.      8.      8.      8.      8.      8.      0.      0.
3784          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
* SPLIT SUB BASIN 216 INTO OVERLAND FLOW SEGMENTS FOR COMBINATION AT EACH DIVERT
* LOCATION ALONG 183RD AVENUE

KK  1D216I
KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
DT  1OL216
DI       0      50    1000
DQ       0      50      50

KK  2D216I
KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
DT  2OL216
DI       0      50    1000
DQ       0      50      50

KK  3D216I
KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
DT  3OL216
DI       0      50    1000
DQ       0      50      50

KK  4D216I
KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
DT  4OL216
DI       0      50    1000
DQ       0      50      50

KK  5D216I
KM   DIVERT 216 OVERLAND FLOW (ASSUME 50 CFS ADDITIONAL OVERLAND FLOW AT
KM   EACH SUCCESSIVE CP DOWNSTREAM ALONG 83RD AVENUE
DT  5OL216
DI       0      50    1000
DQ       0      50      50

KK   1D215
KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
DR  1DI216
* PERRYVILLE ROAD IS ALSO 186TH AVENUE
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  1DI186
KM   ASSUME APPROX. 17% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
KM   183RD AVENUE
DT   3D183
DI       0    1560    2500
DQ       0    1285    2060

KK   1I216
KM   COMBINE HYDROGRAPHS AT 183RD AVE.
HC       2   13.58

KK   1D216
KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
DT  1DI217
DI       0      72     325     553    1560    1600
DQ       0       0     142     282     900     930

KK   1216I
KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
DR  1OL216

KK  1DI183
KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
DR   3D183

KK   2I216
KM   COMBINE HYDROGRAPHS AT 183RD AVE.
HC       3   13.58
* PERRYVILLE ROAD IS ALSO 186TH AVENUE
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3841          KK  2DI186
3842          KM   ASSUME APPROX. 28% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3843          KM   183RD AVENUE
3844          DT   4D183
3845          DI       0    1285    2500
3846          DQ       0     925    1800

3847          KK   2D216
3848          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3849          DT  2DI217
3850          DI       0     132     556     945    1560    1600
3851          DQ       0       0     237     414     680     690

3852          KK   2216I
3853          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3854          DR  2OL216

3855          KK  2DI183
3856          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3857          DR   4D183
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3858          KK   3I216
3859          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3860          HC       3   13.58
              * PERRYVILLE ROAD IS ALSO 186TH AVENUE

3861          KK  3DI186
3862          KM   ASSUME APPROX. 41% OF PERRYVILLE BREAK FROM SEC 18 TO 16 FLOWS EAST TO
3863          KM   183RD AVENUE
3864          DT   5D183
3865          DI       0     925    2500
3866          DQ       0     380    1030

3867          KK   3D216
3868          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3869          DT  3DI217
3870          DI       0     800     831    1413    1560    1600
3871          DQ       0       0       7      55      58      60

3872          KK   3216I
3873          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3874          DR  3OL216

3875          KK  3DI183
3876          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3877          DR   5D183

3878          KK   4I216
3879          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3880          HC       3   13.58

3881          KK   2D215
3882          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3883          DR  2DI216

3884          KK   2I216
3885          KM   COMBINE WITH FLOWS FROM THE WEST AT 183RD AVE.
3886          HC       2   13.58

3887          KK   3D215
3888          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3889          DR  3DI216

3890          KK   3I216
3891          KM   COMBINE WITH FLOW FROM WEST JUST US OF CP216
3892          HC       2   13.58

3893          KK   4D216
3894          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3895          DT  4DI217
3896          DI       0    1008    2008    3413
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3897          DQ       0       0     151     457
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3898          KK   4D215
3899          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE AND ROUTE TO SOUTHEAST IN SUB 216
3900          DR  4DI216

3901          KK   5I216
3902          KM   COMBINE WITH FLOW FROM WEST JUST US CP216
3903          HC       2   13.58

3904          KK   4216I
3905          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3906          DR  4OL216

3907          KK   6I216
3908          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3909          HC       2   13.58

3910          KK   5D216
3911          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3912          DT  5DI217
3913          DI       0     308    2532    4304
3914          DQ       0       0     911    1538

3915          KK   5216I
3916          KM    RETURN DIVERT EAST SIDE OF PERRYVILLE IN SUB 216
3917          DR  5OL216

3918          KK   7I216
3919          KM   COMBINE HYDROGRAPHS AT 183RD AVE.
3920          HC       2   13.58

3921          KK   6D216
3922          KM   DIVERT FLOWS THAT WILL OVERTOP 183RD NORTH OF BETHANY
3923          DT  6DI217
3924          DI       0     123    1247    2766
3925          DQ       0       0     424     980
              * KK CP216
              * KM COMBINE HYDROGRAPHS AT CP216
              * HC     2   13.58
              * KK RD215
              * KM ROUTE FLOW PERRYVILLE OVERLAND THROUGH SUB 216
              * RS   4.3              -1
              * RC 0.035   0.035   0.035    4745  0.0053
              * RX     0     290     355     452     524     568     750     868
              * RY  1163    1162    1160    1160    1162    1162    1160  1162.5

3926          KK    R216
3927          KM        ROUTE FLOW FROM CP216 TO CP234
3928          RS       4              -1
3929          RC     .02     .02     .04    5280   .0044
3930          RX    1000    1015    1020    1035    1070    1080    1140    1400
3931          RY    1031    1030    1028    1026    1026    1028    1030    1032
              *
1                                   HEC-1 INPUT                                                          PAGE 96

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

3932          KK     234
3933          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 234
3934          BA     .53
3935          LG     .50     .00    4.05     .72     .00
3936          UI     22.     22.     22.     35.     74.     87.    103.    113.    124.    134.
3937          UI    148.    164.    179.    214.    259.    289.    250.    219.    197.    181.
3938          UI    167.    149.    136.    122.    110.    100.     82.     63.     43.     39.
3939          UI     37.     36.     30.     22.     22.     22.     11.      7.      7.      7.
3940          UI      7.      7.      7.      7.      7.      7.      7.      7.      0.      0.
3941          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3942          KK   1I234
3943          KM        ADD HYDROGRAPHS AT CP234
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3944          HC       2    1.04

3945          KK   CP234
3946          KM        ADD HYDROGRAPHS AT CP234
3947          HC       2   14.08

3948          KK    D234
3949          KM        DIVERT FROM CP234 TO CP248
3950          DT   1D248
3951          DI       0     290     677    3521   13393
3952          DQ       0       0     174    1824   10224

3953          KK    R234
3954          KM        ROUTE REMAINDER FROM CP234 TO CP235
3955          RS       3      -1
3956          RC     .06    .025    .025    2640   .0023
3957          RX    1000    1460    1900    1915    1930    1958    1959    1960
3958          RY    1018    1016    1016    1014    1014    1015    1015    1015
              *

3959          KK     207
3960          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 207
3961          BA    1.00
3962          LG     .50     .00    4.20     .66     .00
3963          UI     39.     39.     39.     39.    125.    143.    169.    187.    209.    222.
3964          UI    241.    263.    291.    316.    374.    445.    510.    454.    399.    358.
3965          UI    329.    306.    280.    252.    231.    210.    191.    174.    145.    111.
3966          UI     83.     68.     66.     63.     63.     40.     39.     39.     39.     14.
3967          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
3968          UI     12.     12.      0.      0.      0.      0.      0.      0.      0.      0.
3969          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3970          KK    D207
3971          KM        DIVERT FROM CP207 TO CP208
3972          DT   2D208
3973          DI       0    1709   12182
3974          DQ       0    1314    6607
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3975          KK    R207
3976          KM        ROUTE REMAINDER FROM CP207 TO CP217
3977          RS       8      -1
3978          RC    .035    .035    .075    5280   .0057
3979          RX    1000    1001    1002    1015    1060    1490    1740    2250
3980          RY    1151    1151    1151    1150    1150    1152    1154    1156
              *

3981          KK     217
3982          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 217
3983          BA     .49
3984          LG     .50     .00    4.66     .53     .00
3985          UI     22.     22.     22.     54.     81.     98.    112.    124.    135.    150.
3986          UI    167.    188.    233.    278.    278.    235.    207.    188.    172.    152.
3987          UI    137.    122.    109.     95.     73.     54.     40.     38.     37.     31.
3988          UI     22.     22.     22.      7.      7.      7.      7.      7.      7.      7.
3989          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
3990          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

3991          KK   1D216
3992          KM   RETURN DIVERT EAST AT 183RD AVE
3993          DR  1DI217

3994          KK   2I216
3995          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
3996          HC       2   12.54

3997          KK   2D216
3998          KM   RETURN DIVERT EAST AT 183RD AVE
3999          DR  2DI217

4000          KK   3I216
4001          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4002          HC       2   12.54
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4003          KK   3D216
4004          KM   RETURN DIVERT EAST AT 83RD AVE
4005          DR  3DI217

4006          KK   4I216
4007          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4008          HC       2   12.54

4009          KK   4D216
4010          KM   RETURN DIVERT EAST AT 83RD AVE
4011          DR  4DI217

4012          KK   5I216
4013          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4014          HC       2   12.54
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


4015          KK   5D216
4016          KM   RETURN DIVERT EAST AT 83RD AVE
4017          DR  5DI217

4018          KK   6I216
4019          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4020          HC       2   12.54

4021          KK   6D216
4022          KM   RETURN DIVERT EAST AT 83RD AVE
4023          DR  6DI217

4024          KK   7I216
4025          KM   COMBINE DIVERTED FLOW AT 183RD AND ROUTE TO CP217
4026          HC       2   12.54

4027          KK   RD216
4028          KM   ROUTE FLOW 183RD OVERLAND THROUGH SUB 217
4029          RS     2.8          -1
4030          RC   0.035   0.035   0.035  4949.7  0.0057
4031          RX       0     849  1113.6    1552    1981    2488    2616    2990
4032          RY    1156    1154    1153    1153  1151.5    1152    1154    1156

4033          KK   CP217
4034          KM        ADD HYDROGRAPHS AT CP217
4035          HC       2   14.03

4036          KK    D217
4037          KM         DIVERT FROM CP217 TO CP218
4038          DT   DI218
4039          DI       0      90     884    6576   28127
4040          DQ       0      51     163    1840   10674

4041          KK    R217
4042          KM         ROUTE REMAINDER FROM CP217 TO CP235
4043          RS       7          -1
4044          RC     .02     .03    .075    5280   .0036
4045          RX    1000    1020    1035    1040    1050    1300    1640    1790
4046          RY    1015    1014    1015    1014    1014    1016    1018    1019
              *

4047          KK     235
4048          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 235
4049          BA    .47
4050          LG    .50     .00    4.00     .74     .00
4051          UI    19.     19.     19.     28.     63.     74.     89.     98.    106.    115.
4052          UI   126.    140.    152.    178.    216.    251.    228.    198.    177.    162.
4053          UI   150.    135.    122.    112.     99.     91.     79.     62.     49.     34.
4054          UI    33.     31.     31.     21.     19.     19.     19.      6.      6.      6.
4055          UI     6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
4056          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4057          UI     0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1                                   HEC-1 INPUT                                          PAGE 99

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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4058          KK   1I235
4059          KM        ADD HYDROGRAPHS AT CP235
4060          HC       2    1.96

4061          KK   CP235
4062          KM        ADD HYDROGRAPHS AT CP235
4063          HC       2   16.04

4064          KK    D235
4065          KM        DIVERT FROM CP235 TO CP248
4066          DT   2D248
4067          DI       0     158     313    4490    9737
4068          DQ       0       0     155    2380    5077

4069          KK    R235
4070          KM        ROUTE REMAINDER FROM CP235 TO CP236
4071          RS       5              -1
4072          RC     .04     .02     .02    5280   .0051
4073          RX    1000    1640    1660    1675    1685    1778    1779    1780
4074          RY    1097    1094    1095    1094    1094    1095    1095    1095

4075          KK    D191
4076          KM        RETURN DIVERTED HYDROGRAPH AT CP291 IN THE WTPHS1 HEC-1 MODEL
4077          DR   1D208

4078          KK    R191
4079          KM        ROUTE FLOW FROM CP191 TO CP208
4080          RS       5              -1       0
4081          RC    .022    .022    .050    5280   .0040
4082          RX    1000    1001    1002    1045    1110    1130    1160    1890
4083          RY    1143    1143    1143    1142    1142    1143  1141.5    1150
              *

4084          KK     208
4085          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 208
4086          BA    1.00
4087          LG     .50     .00    4.20     .66     .00
4088          UI     40.     40.     40.     57.    133.    156.    188.    206.    224.    243.
4089          UI    265.    294.    320.    371.    453.    523.    489.    424.    379.    346.
4090          UI    321.    290.    262.    239.    215.    195.    172.    137.    110.     72.
4091          UI     72.     67.     67.     50.     40.     40.     40.     17.     12.     12.
4092          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.      0.
4093          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4094          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4095          KK   1I208
4096          KM        ADD HYDROGRAPHS AT CP208
4097          HC       2   13.18
```



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

4098          KK    D207
4099          KM        RETURN DIVERT AT CP207
4100          DR   2D208

4101          KK    R207
4102          KM        ROUTE FLOW FROM CP207 TO CP208
4103          RS       8              -1
4104          RC    .075    .035    .035    5280   .0059
4105          RX    1000    1001    1350    2000    2020    2038    2039    2040
4106          RY    1056    1056    1054    1052    1052    1053    1053    1053

4107          KK   CP208
4108          KM        ADD HYDROGRAPHS AT CP208
4109          HC       2   14.18

4110          KK   1D208
4111          KM        DIVERT FROM CP208 TO CP219
4112          DT   1D219
4113          DI       0     599    5129    9299
4114          DQ       0     406    1039    1295
```

```
4115          KK   2D208
4116          KM        DIVERT FROM CP208 TO CP209A
4117          DT  DI209A
4118          DI       0     193    4090    8004
4119          DQ       0     193    4066    7610

4120          KK    R208
4121          KM        ROUTE REMAINDER FROM CP208 TO CP218
4122          RS      13              -1
4123          RC    .025    .025    .035    5280   .0047
4124          RX    1000    1001    1002    1010    1040    1055    1100    2010
4125          RY    1123    1123    1123    1122    1122    1125    1124    1130
              *

4126          KK     218
4127          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 218
4128          BA    1.00
4129          LG     .50     .00    4.05     .72     .00
4130          UI     39.     39.     39.     41.    128.    145.    172.    191.    212.    225.
4131          UI    246.    269.    295.    325.    385.    463.    514.    447.    393.    356.
4132          UI    327.    304.    275.    249.    229.    206.    188.    168.    136.    112.
4133          UI     71.     69.     65.     64.     57.     39.     39.     39.     31.     12.
4134          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
4135          UI     12.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4136          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4137          KK   1I218
4138          KM        ADD HYDROGRAPHS AT CP218
4139          HC       2   15.18
```



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

4140          KK    D217
4141          KM        RETURN DIVERT AT CP217
4142          DR   DI218

4143          KK    R217
4144          KM        ROUTE FLOW FROM CP217 TO CP218
4145          RS      10              -1
4146          RC    .075    .035    .035    5280   .0047
4147          RX    1000    1190    1650    1980    2030    2048    2049    2050
4148          RY    1123    1122    1120    1118    1118    1119    1119    1119

4149          KK   CP218
4150          KM        ADD HYDROGRAPHS AT CP218
4151          HC       2   28.21

4152          KK   1D218
4153          KM        DIVERT FROM CP218 TO CP237
4154          DT   DI237
4155          DI       0      68    1086   10670
4156          DQ       0      68     664    2533

4157          KK   2D218
4158          KM        DIVERT FROM CP218 TO CP219
4159          DT   2D219
4160          DI       0       0     422    8137
4161          DQ       0       0      99    2461

4162          KK    R218
4163          KM        ROUTE REMAINDER FROM CP218 TO CP236
4164          RS       5              -1
4165          RC     .02     .02    .075    5280   .0040
4166          RX    1000    1001    1002    1020    1090    1100    1210    1720
4167          RY    1097    1097    1097    1096    1096    1099    1098    1102
              *

4168          KK     236
4169          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 236
4170          BA    1.00
4171          LG     .50     .00    4.44     .59     .00
4172          UI     38.     38.     38.     38.    113.    137.    160.    180.    199.    214.
4173          UI    229.    251.    276.    297.    343.    419.    470.    474.    411.    366.
4174          UI    334.    310.    288.    261.    236.    220.    196.    181.    161.    132.
```

```
                                                                                LABCARQ
4175          UI    108.     70.     67.     64.     62.     60.     38.     38.     38.     38.
4176          UI     12.     12.     12.     12.     12.     12.     12.     12.     12.     12.
4177          UI     12.     12.     12.      0.      0.      0.      0.      0.      0.      0.
4178          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4179          KK   1I236
4180          KM        ADD HYDROGRAPHS AT CP236
4181          HC       2   16.67
1                                          HEC-1 INPUT                                          PAGE102

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


4182          KK   CP236
4183          KM        ADD HYDROGRAPHS AT CP236
4184          HC       2   26.34

4185          KK   1D236
4186          KM        DIVERT FROM CP236 TO CP249
4187          DT   DI249
4188          DI       0     236     411    6597   30351
4189          DQ       0       0      38    2223    8777

4190          KK   2D236
4191          KM        DIVERT FROM CP236 TO CP250
4192          DT   1D250
4193          DI       0     236     373    4374   21574
4194          DQ       0       0     124    2251    8636

4195          KK    R236
4196          KM        ROUTE REMAINDER FROM CP236 TO CP237
4197          RS       2              -1
4198          RC     .02     .02     .02    2640   .0038
4199          RX    1000    1070    1100    1120    1150    1178    1179    1180
4200          RY    1079    1075    1082    1076    1076    1077    1077    1077
              *

4201          KK    209A
4202          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 209A
4203          BA     .50
4204          LG     .50     .00    4.10     .70     .00
4205          UI     22.     22.     22.     42.     75.     89.    103.    115.    124.    137.
4206          UI    152.    166.    191.    238.    275.    260.    224.    199.    181.    167.
4207          UI    149.    134.    121.    108.     99.     80.     62.     40.     38.     36.
4208          UI     35.     26.     22.     22.     20.      7.      7.      7.      7.      7.
4209          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
4210          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4211          KK   1D208
4212          KM        RETURN DIVERT AT CP208
4213          DR  DI209A

4214          KK    R208
4215          KM        ROUTE FLOW FROM CP208 TO CP209A
4216          RS       2              -1
4217          RC     .75     .03     .03    2640   .0045
4218          RX    1000    1490    1890    1950    1970    1998    1999    2000
4219          RY    1130    1128    1126    1124    1124    1125    1125    1125

4220          KK  CP209A
4221          KM        ADD HYDROGRAPHS AT CP209A
4222          HC       2   14.68
1                                          HEC-1 INPUT                                          PAGE103

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


4223          KK  1D209A
4224          KM        DIVERT FROM CP209A TO CP220
4225          DT   1D220
4226          DI       0      57    5215   28650
4227          DQ       0      39    1907    3775

4228          KK  2D209A
4229          KM        DIVERT FROM CP209A TO CP209
4230          DT   2D209
```

```
4231          DI       0      18    3308   24875
4232          DQ       0       0     900   10854

4233          KK   R209A
4234          KM        ROUTE REMAINDER FROM CP209A TO CP219
4235          RS       7              -1
4236          RC    .035    .035    .075    5280   .0045
4237          RX    1000    1001    1002    1010    1200    1500    1880    2100
4238          RY    1113    1113    1113    1112    1112    1114    1116    1117

4239          KK   2D208
4240          KM        RETURN DIVERT AT CP208
4241          DR   1D219

4242          KK    R208
4243          KM        ROUTE FLOW FROM CP208 TO CP219
4244          RS      22              -1
4245          RC    .075    .075    .075    6070   .0059
4246          RX    1000    1001    1002    1270    2570    2698    2699    2700
4247          RY    1115    1115    1115    1114    1114    1115    1115    1115
              *

4248          KK     219
4249          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 219
4250          BA     .50
4251          LG     .50     .00    4.05     .72     .00
4252          UI     22.     22.     22.     45.     77.     92.    105.    119.    128.    140.
4253          UI    158.    173.    202.    247.    289.    253.    220.    196.    180.    164.
4254          UI    146.    132.    119.    106.     93.     72.     55.     39.     38.     36.
4255          UI     33.     22.     22.     22.     12.      7.      7.      7.      7.      7.
4256          UI      7.      7.      7.      7.      7.      0.      0.      0.      0.      0.
4257          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4258          KK   1I219
4259          KM        ADD HYDROGRAPHS AT CP219
4260          HC       2   14.68

4261          KK   2I219
4262          KM        ADD HYDROGRAPHS AT CP219
4263          HC       2   15.18
```



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


4264          KK   2D218
4265          KM        RETURN DIVERT AT CP218
4266          DR   2D219

4267          KK    R218
4268          KM        ROUTE FLOW FROM CP218 TO CP219
4269          RS      12              -1
4270          RC    .075     .04     .04    2640   .0045
4271          RX    1000    1110    1290    1600    2050    2108    2109    2110
4272          RY    1101    1100    1098    1096    1096    1097    1097    1097

4273          KK   CP219
4274          KM        ADD HYDROGRAPHS AT CP219
4275          HC       2   29.21

4276          KK   1D219
4277          KM        DIVERT FROM CP219 TO CP238
4278          DT   DI238
4279          DI       0      70    1410   16774
4280          DQ       0      68     990   10452

4281          KK   2D219
4282          KM        DIVERT FROM CP219 TO CP220
4283          DT   2D220
4284          DI       0       2     420    6322
4285          DQ       0       0     174    3073

4286          KK    R219
4287          KM        ROUTE REMAINDER FROM CP219 TO CP237
4288          RS      14              -1
4289          RC    .035    .035    .075    5280   .0036
```

```
4290          RX    1000    1001    1002    1020    1300    1820    2099    2100
4291          RY    1087    1087    1087    1086    1086    1088    1089    1089

4292          KK   1D218
4293          KM         RETURN DIVERT AT CP218
4294          DR   DI237

4295          KK    R218
4296          KM         ROUTE FLOW FROM CP218 TO CP237
4297          RS      14              -1
4298          RC    .035    .035    .075    6700   .0046
4299          RX    1000    1001    1002    1020    1300    1820    2099    2100
4300          RY    1087    1087    1087    1086    1086    1088    1089    1089
              *

4301          KK     237
4302          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 237
4303          BA     .50
4304          LG     .50     .00    4.90     .51     .00
4305          UI     20.     20.     20.     23.     65.     74.     88.     98.    108.    115.
4306          UI    126.    139.    151.    169.    204.    241.    255.    219.    195.    176.
4307          UI    162.    150.    135.    123.    113.    100.     93.     80.     62.     49.
4308          UI     35.     35.     32.     32.     23.     20.     20.     20.      9.      6.
1                                                HEC-1 INPUT                                          PAGE105

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

4309          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
4310          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4311          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4312          KK   1I237
4313          KM         ADD HYDROGRAPHS AT CP237
4314          HC       2   16.17

4315          KK   2I237
4316          KM         ADD HYDROGRAPHS AT CP237
4317          HC       2   17.17

4318          KK   CP237
4319          KM         ADD HYDROGRAPHS AT CP237
4320          HC       2   27.84

4321          KK   1D237
4322          KM         DIVERT FROM CP237 TO CP250
4323          DT   2D250
4324          DI       0     292     346     629    3340   24038
4325          DQ       0       0       0     103    1577   11878

4326          KK   2D237
4327          KM         DIVERT FROM CP237 TO CP250A
4328          DT  1D250A
4329          DI       0     292     346     526    1763   12160
4330          DQ       0       0      54     203     974    3738

4331          KK    R237
4332          KM         ROUTE REMAINDER FROM CP237 TO CP238
4333          RS       1              -1
4334          RC     .04     .02     .02    2640   .0049
4335          RX    1000    1545    1560    1570    1585    1618    1619    1620
4336          RY    1069    1066    1067  1062.5  1062.5    1067    1067    1067

4337          KK   1D192
4338          KM         RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4339          DR   1D209

4340          KK    R192
4341          KM         ROUTE FLOW FROM CP192 TO CP209
4342          RS       5              -1       0
4343          RC    .035    .035     .15    5280   .0045
4344          RX    1000    1001    1002    1015    1200    1470    1840    2300
4345          RY    1111    1111    1111    1110    1110    1112    1114    1116
              *

4346          KK     209
4347          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 209
```

```
4348          BA     .50
4349          LG     .50     .00    4.58     .55     .00
4350          UI     22.     22.     22.     51.     80.     97.    111.    123.    134.    148.
4351          UI    166.    183.    221.    273.    289.    244.    215.    193.    178.    158.
4352          UI    141.    128.    113.    103.     82.     64.     40.     40.     37.     37.
4353          UI     23.     22.     22.     14.      7.      7.      7.      7.      7.      7.
```



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

4354          UI      7.      7.      7.      7.      0.      0.      0.      0.      0.      0.
4355          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4356          KK   1I209
4357          KM        ADD HYDROGRAPHS AT CP209
4358          HC       2   13.68

4359          KK  2D209A
4360          KM        RETURN DIVERT AT CP209A
4361          DR   2D209

4362          KK   R209A
4363          KM        ROUTE FLOW FROM CP209A TO CP209
4364          RS       7              -1
4365          RC    .075    .035    .035    2640   .0057
4366          RX    1000    1240    1700    1980    1990    3028    3029    3030
4367          RY    1117    1116    1114    1112    1112    1113    1113    1113

4368          KK   CP209
4369          KM        ADD HYDROGRAPHS AT CP209
4370          HC       2   16.18

4371          KK   1D209
4372          KM        DIVERT FROM CP209 TO CP221
4373          DT   1D221
4374          DI       0      39    3983   16787
4375          DQ       0      34    1666    5085

4376          KK   2D209
4377          KM        DIVERT FROM CP209 TO CP210
4378          DT   2D210
4379          DI       0       5    2317   11702
4380          DQ       0       0     703    5354

4381          KK    R209
4382          KM        ROUTE REMAINDER FROM CP209 TO CP220
4383          RS       7              -1
4384          RC    .035    .035    .075    5280   .0040
4385          RX    1000    1001    1002    1015    1180    1560    1820    2050
4386          RY    1091    1091    1091    1090    1090    1092    1094    1095

4387          KK  1D209A
4388          KM        RETURN DIVERT AT CP209A
4389          DR   1D220

4390          KK   R209A
4391          KM        ROUTE FLOW FROM CP209A TO CP220
4392          RS      12              -1
4393          RC    .075    .075    .075    6230   .0058
4394          RX    1000    1001    1002    1090    1280    1298    1299    1300
4395          RY    1140    1107    1107    1106    1106    1107    1107    1140
              *
```



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

4396          KK     220
4397          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 220
4398          BA     .50
4399          LG     .50     .00    4.20     .66     .00
4400          UI     22.     22.     22.     41.     74.     89.    103.    115.    124.    136.
4401          UI    151.    166.    189.    237.    272.    262.    224.    199.    182.    167.
4402          UI    150.    134.    122.    109.    100.     81.     62.     42.     38.     36.
4403          UI     35.     27.     22.     22.     21.      7.      7.      7.      7.      7.
4404          UI      7.      7.      7.      7.      7.      7.      0.      0.      0.      0.
```

```
4405          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4406          KK   1I220
4407          KM        ADD HYDROGRAPHS AT CP220
4408          HC       2   15.18

4409          KK   2I220
4410          KM        ADD HYDROGRAPHS AT CP220
4411          HC       2   16.68

4412          KK   2D219
4413          KM          RETURN DIVERT AT CP219
4414          DR   2D220

4415          KK    R219
4416          KM         ROUTE FLOW FROM CP219 TO CP220
4417          RS       3            -1
4418          RC    .075    .020    .020    2640   .0045
4419          RX    1000    1460    1670    1700    1730    1768    1769    1770
4420          RY    1088    1085    1087    1080    1080    1087    1087    1087

4421          KK   CP220
4422          KM        ADD HYDROGRAPHS AT CP220
4423          HC       2   30.71

4424          KK   1D220
4425          KM        DIVERT FROM CP220 TO CP239
4426          DT   DI239
4427          DI       0     735    9080   34764
4428          DQ       0     537    3765    9314

4429          KK   2D220
4430          KM        DIVERT FROM CP220 TO CP221
4431          DT   2D221
4432          DI       0     198    5315   25450
4433          DQ       0     174    4011   17035

4434          KK    R220
4435          KM         ROUTE REMAINDER FROM CP220 TO CP238
4436          RS      15            -1
4437          RC    .035    .035    .075    5280   .0038
4438          RX    1000    1001    1002    1020    1150    1670    1869    1870
4439          RY    1033    1033    1033    1032    1032    1034    1036    1036
```



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

4440          KK   1D219
4441          KM         RETURN DIVERT AT CP219
4442          DR   DI238

4443          KK    R219
4444          KM         ROUTE FLOW FROM CP219 TO CP238
4445          RS       8            -1
4446          RC    .035    .035    .075    6230   .0051
4447          RX    1000    1001    1002    1020    1150    1670    1869    1870
4448          RY    1033    1033    1033    1032    1032    1034    1036    1036
              *

4449          KK     238
4450          KM         RUNOFF HYDROGRAPH FROM SUB-BASIN 238
4451          BA     .50
4452          LG     .50     .00    4.90     .47     .00
4453          UI     21.     21.     21.     34.     70.     83.     98.    108.    118.    127.
4454          UI    140.    156.    170.    204.    247.    273.    234.    206.    185.    170.
4455          UI    157.    140.    127.    115.    104.     93.     76.     60.     39.     37.
4456          UI     35.     34.     27.     21.     21.     21.      9.      6.      6.      6.
4457          UI      6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
4458          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4459          KK   1I238
4460          KM         ADD HYDROGRAPHS AT CP238
4461          HC       2   17.17

4462          KK   2I238
```

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4463          KM        ADD HYDROGRAPHS AT CP238
4464          HC       2   18.67

4465          KK   CP238
4466          KM        ADD HYDROGRAPHS AT CP238
4467          HC       2   30.34

4468          KK   1D238
4469          KM        DIVERT FROM CP238 TO CP250A
4470          DT  2D250A
4471          DI       0     180     568    2711    8584   18252
4472          DQ       0       0       0     184     837    2617

4473          KK   2D238
4474          KM        DIVERT FROM CP238 TO CP251
4475          DT   1D251
4476          DI       0     180     568    2527    7747   15635
4477          DQ       0       0       0     522    2262    4829

4478          KK    R238
4479          KM        ROUTE REMAINDER FROM CP238 TO CP239
4480          RS       4              -1
4481          RC    .075     .02     .02    2640   .0023
4482          RX    1000    1230    1780    1790    1800    1810    1829    1830
4483          RY    1062    1060    1058    1056    1056    1058    1059    1059
```

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

4484          KK   2D192
4485          KM        RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
4486          DR   1D210

4487          KK    R192
4488          KM        ROUTE FLOW FROM CP192 TO CP210
4489          RS       7              -1       0
4490          RC     .15     .15     .15    5900   .0054
4491          RX    1000    1001    1002    1050    2400    2548    2549    2550
4492          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5
              *

4493          KK     210
4494          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 210
4495          BA     .46
4496          LG     .50     .00    4.66     .53     .00
4497          UI     20.     20.     20.     42.     71.     85.     97.    110.    118.    130.
4498          UI    146.    160.    188.    230.    266.    232.    202.    180.    165.    151.
4499          UI    133.    121.    108.     97.     84.     65.     49.     36.     35.     33.
4500          UI     29.     20.     20.     20.      9.      6.      6.      6.      6.      6.
4501          UI      6.      6.      6.      6.      6.      0.      0.      0.      0.      0.
4502          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4503          KK   1I210
4504          KM        ADD HYDROGRAPHS AT CP210
4505          HC       2   13.64

4506          KK   2D209
4507          KM        RETURN DIVERT AT CP209
4508          DR   2D210

4509          KK    R209
4510          KM        ROUTE FLOW FROM CP209 TO CP210
4511          RS       6              -1
4512          RC    .075    .035    .035    2560   .0030
4513          RX    1000    1001    1630    2120    2250    2268    2269    2270
4514          RY    1102    1102    1100    1098    1098    1099    1099    1099

4515          KK   CP210
4516          KM        ADD HYDROGRAPHS AT CP210
4517          HC       2   16.58

4518          KK    R210
4519          KM        ROUTE FLOW FROM CP210 TO CP221
4520          RS      14              -1
4521          RC    .035    .035    .075    5450   .0033
```

```
                                                                                                                LABCARQ
4522          RX    1000    1001    1002    1020    1280    1880    2469    2470
4523          RY    1083    1083    1083    1082    1082    1084    1086    1088
1                                                HEC-1 INPUT                                                          PAGE110

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


4524          KK   1D209
4525          KM        RETURN DIVERT AT CP209
4526          DR   1D221

4527          KK    R209
4528          KM        ROUTE FLOW FROM CP209 TO CP221
4529          RS      22              -1
4530          RC    .075    .075    .075    5910   .0044
4531          RX    1000    1001    1002    1120    2150    2278    2279    2280
4532          RY    1091    1091    1091    1090    1090    1091    1091    1091
              *

4533          KK     221
4534          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 221
4535          BA     .48
4536          LG     .50     .00    4.90     .47     .00
4537          UI     20.     20.     20.     36.     69.     82.     96.    106.    116.    126.
4538          UI    139.    154.    172.    210.    250.    258.    220.    194.    176.    162.
4539          UI    147.    132.    120.    107.     97.     84.     66.     50.     36.     35.
4540          UI     33.     33.     20.     20.     20.     15.      6.      6.      6.      6.
4541          UI      6.      6.      6.      6.      6.      6.      6.      0.      0.      0.
4542          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4543          KK   1I221
4544          KM        ADD HYDROGRAPHS AT CP221
4545          HC       2   16.66

4546          KK   2I221
4547          KM        ADD HYDROGRAPHS AT CP221
4548          HC       2   17.06

4549          KK   2D220
4550          KM        RETURN DIVERT AT CP220
4551          DR   2D221

4552          KK    R220
4553          KM        ROUTE FLOW FROM CP220 TO CP221
4554          RS       4              -1
4555          RC    .075    .035    .035    2200   .0023
4556          RX    1000    1001    1470    1870    2160    2178    2179    2180
4557          RY    1082    1082    1080    1078    1078    1081    1081    1081

4558          KK   CP221
4559          KM        ADD HYDROGRAPHS AT CP221
4560          HC       2   31.65

4561          KK    R221
4562          KM        ROUTE FLOW FROM CP221 TO CP239
4563          RS      20              -1
4564          RC    .075    .075    .075    5750   .0032
4565          RX    1000    1001    1002    1320    2850    2998    2999    2999
4566          RY    1100    1071    1071    1070    1070    1071    1071    1100
1                                                HEC-1 INPUT                                                          PAGE111

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


4567          KK   1D220
4568          KM        RETURN DIVERT AT CP220
4569          DR   DI239

4570          KK    R220
4571          KM        ROUTE FLOW FROM CP220 TO CP239
4572          RS      21              -1
4573          RC    .075    .075    .075    5750   .0045
4574          RX    1000    1001    1002    1320    2850    2998    2999    3000
4575          RY    1071    1071    1071    1070    1070    1071    1071    1071
              *
```

```
4576          KK     239
4577          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 239
4578          BA     .48
4579          LG     .50     .00    4.90     .47     .00
4580          UI     21.     21.     21.     41.     72.     86.    100.    112.    120.    133.
4581          UI    148.    161.    188.    231.    269.    247.    213.    191.    173.    159.
4582          UI    142.    128.    115.    104.     92.     74.     59.     37.     37.     34.
4583          UI     34.     23.     21.     21.     17.      6.      6.      6.      6.      6.
4584          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4585          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4586          KK   1I239
4587          KM        ADD HYDROGRAPHS AT CP239
4588          HC       2   18.65

4589          KK   2I239
4590          KM        ADD HYDROGRAPHS AT CP239
4591          HC       2   19.59

4592          KK   CP239
4593          KM        ADD HYDROGRAPHS AT CP239
4594          HC       2   31.76

4595          KK   1D239
4596          KM        DIVERT FROM CP239 TO CP251
4597          DT   2D251
4598          DI       0     283     389     786    3215
4599          DQ       0       0      69     333    2481

4600          KK   2D239
4601          KM        DIVERT FROM CP239 TO CP252
4602          DT   DI252
4603          DI       0     283     320     632    3061
4604          DQ       0       0     0.0   179.0    2327

4605          KK    R239
4606          KM        ROUTE REMAINDER FROM CP239 TO CP240
4607          RS       5              -1
4608          RC     .05     .02     .02    2640   .0007
4609          RX    1000    1510    1755    1765    1775    1785    1809    1810
4610          RY    1058    1056    1054    1052    1052    1054    1055    1055
              *
```

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

4611          KK     240
4612          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 240
4613          BA     .40
4614          LG     .50     .00    4.74     .51     .00
4615          UI     19.     19.     19.     53.     71.     89.     99.    110.    121.    136.
4616          UI    151.    180.    225.    249.    209.    182.    163.    149.    131.    117.
4617          UI    104.     92.     79.     59.     41.     34.     32.     32.     21.     19.
4618          UI     19.     11.      6.      6.      6.      6.      6.      6.      6.      6.
4619          UI      6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4620          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4621          KK   CP240
4622          KM        ADD HYDROGRAPHS AT CP240
4623          HC       2   32.16

4624          KK    R240
4625          KM        ROUTE FLOW FROM CP240 TO CP241
4626          RS       5              -1
4627          RC    .025     .02     .02    3600   .0011
4628          RX    1000    1280    1620    1745    1770    1798    1799    1800
4629          RY    1056    1054    1052    1050    1050    1051    1051    1051
              *

4630          KK     213
4631          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 213
4632          BA     .35
4633          LG     .35     .35    4.90     .28     .00
4634          UI     31.     51.    124.    164.    197.    244.    345.    374.    285.    235.
4635          UI    189.    151.    103.     56.     52.     32.     26.     10.     10.     10.
```

```
                                                                                                LABCARD
4636          UI     10.     10.      0.      0.      0.      0.      0.      0.      0.      0.
4637          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4638          KK    R213
4639          KM        ROUTE FLOW FROM CP213 TO CP212
4640          RS       8              -1
4641          RC    .025    .022    .025    4060   .0002
4642          RX    1000    1001    1140    1220    1290    1478    1479    1480
4643          RY  1077.7  1077.7    1076    1074    1074    1076  1077.7  1077.7
              *

4644          KK     212
4645          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 212
4646          BA     .54
4647          LG     .50     .00    4.82     .49     .00
4648          UI     18.     18.     18.     18.     34.     59.     69.     80.     87.     95.
4649          UI    102.    109.    116.    127.    137.    148.    171.    205.    226.    232.
4650          UI    203.    183.    167.    155.    146.    135.    124.    114.    106.     97.
4651          UI     89.     84.     70.     57.     49.     32.     32.     31.     30.     30.
4652          UI     22.     18.     18.     18.     17.      6.      6.      6.      6.      6.
4653          UI      6.      6.      6.      6.      6.      6.      6.      6.      6.      0.
4654          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4655          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              * DI212 REMOVED PER FIELD VISIT AND REVISED CALCULATIONS 4-16-01
              * KK 2D193
              * KM       RETURN DIVERTED HYDROGRAPH FROM WTPHS1 HEC-1 MODEL
              * DR DI212
              * KK  R193
              * KM       ROUTE FLOW FROM CP193 TO CP212
              * RS     5              -1       0
              * RC  .022    .022     .06    8500   .0038
              * RX  1000    1001    1002    1035    1070    1085    1140    2450
              * RY1095.5    1095    1095    1094    1094    1095    1094    1100
              * KK 1I212
              * KM       ADD HYDROGRAPHS AT CP212
              * HC     2   36.88
1                                          HEC-1 INPUT                                          PAGE113

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

4656          KK   SR212
4657          KM        STORAGE ROUTE THROUGH CP212
4658          RS       1    STOR       0       0
4659          SV       0    2.48   13.74   26.18   63.33
4660          SQ       0       0       0     483    6314
4661          SE  1077.1    1078  1079.4    1080    1081

4662          KK   CP212
4663          KM        ADD HYDROGRAPHS AT CP212
4664          HC       2   37.23

4665          KK    R212
4666          KM        ROUTE FLOW FROM CP212 TO CP221A
4667          RS      11              -1
4668          RC    .025    .022    .025    5000   .0002
4669          RX    1000    1001    1070    1090    1220    1287    1289    1290
4670          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4671          KK   1D193
4672          KM        RETURN DIVERTED HYDROGRAPH FROM
4673          DR   DI211

4674          KK    R193
4675          KM        ROUTE FLOW FROM DI211 TO CP211
4676          RS      17              -1       0
4677          RC     .15     .15     .15    5300   .0030
4678          RX    1000    1001    1002    1050    2400    2548    2549    2550
4679          RY  1113.5    1113    1113    1112    1112    1113    1113  1113.5

4680          KK     211
4681          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 211
4682          BA     .49
4683          LG     .50     .00    4.82     .49     .00
4684          UI     21.     21.     21.     40.     72.     86.    100.    112.    121.    132.
```

```
                                                                                                LABCARQ
4685          UI    147.    162.    183.    231.    264.    258.    220.    196.    178.    165.
4686          UI    147.    132.    120.    107.     98.     81.     60.     43.     37.     35.
4687          UI     35.     28.     21.     21.     21.      8.      6.      6.      6.      6.
4688          UI      6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
4689          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4690          KK   CP211
4691          KM        COMBINE DIVERT FROM 193
4692          HC       2   13.87

4693          KK    R211
4694          KM        ROUTE FLOW FROM TO CP221A
4695          RS       9              -1
4696          RC    .035    .035    .075    5400   .0009
4697          RX    1000    1001    1002    1020    1100    1620    2119    2120
4698          RY    1081    1081    1081    1080    1080    1082    1084    1084
              *
1                                          HEC-1 INPUT                                                          PAGE114

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


4699          KK    221A
4700          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 221A
4701          BA     .31
4702          LG     .50     .00    4.82     .49     .00
4703          UI     12.     12.     12.     12.     36.     43.     50.     57.     63.     67.
4704          UI     72.     79.     87.     94.    109.    132.    151.    145.    126.    113.
4705          UI    103.     96.     88.     80.     73.     67.     60.     56.     48.     38.
4706          UI     32.     21.     21.     20.     19.     17.     12.     12.     12.      9.
4707          UI      4.      4.      4.      4.      4.      4.      4.      4.      4.      4.
4708          UI      4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
4709          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4710          KK  1I221A
4711          KM        ADD HYDROGRAPHS AT CP221A
4712          HC       2     .80

4713          KK  SR221A
4714          KM        STORAGE ROUTE THROUGH CP221A
4715          RS       1    STOR       0       0
4716          SV       0    1.31    8.04   28.16      40
4717          SQ       0       0       0    2250    5262
4718          SE    1077    1078  1078.9    1080  1080.5

4719          KK  CP221A
4720          KM        ADD HYDROGRAPHS AT CP221A
4721          HC       2   38.03

4722          KK   R221A
4723          KM        ROUTE FLOW FROM CP221A TO CP222
4724          RS       6              -1
4725          RC    .025    .022    .022    7800   .0024
4726          RX    1000    1001    1070    1090    1220    1287    1289    1290
4727          RY    1077    1077    1076    1074    1074    1079    1079    1079
              *

4728          KK     222
4729          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 222
4730          BA    1.10
4731          LG     .31     .35    4.82     .28   15.00
4732          UI     34.     34.     34.     34.     34.    112.    121.    135.    158.    168.
4733          UI    184.    194.    205.    219.    237.    257.    272.    305.    354.    407.
4734          UI    455.    414.    370.    337.    311.    291.    274.    257.    236.    218.
4735          UI    204.    189.    173.    163.    148.    130.     98.     87.     60.     60.
4736          UI     58.     56.     56.     47.     34.     34.     34.     34.     24.     10.
4737          UI     10.     10.     10.     10.     10.     10.     10.     10.     10.     10.
4738          UI     10.     10.     10.     10.      0.      0.      0.      0.      0.      0.
4739          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.

4740          KK   CP222
4741          KM        ADD HYDROGRAPHS AT CP222
4742          HC       2   39.13
1                                          HEC-1 INPUT                                                          PAGE115

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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4743          KK    R222
4744          KM        ROUTE FLOW FROM CP222 TO CP241
4745          RS       8            -1
4746          RC     .03    .025     .03    5770   .0022
4747          RX    1000    1100    1320    1540    2350    2470    2630    2710
4748          RY    1057    1056    1054    1052    1052    1054    1056    1057
              *

4749          KK     226
4750          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 226
4751          BA    1.18
4752          LG     .15     .26    4.82     .36   17.00
4753          UI    134.    343.    641.    827.   1094.   1619.   1306.   1008.    765.    549.
4754          UI    283.    214.    134.     68.     41.     41.     41.      0.      0.      0.
4755          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *
              *         STORAGE ROUTE REMOVED BY HDR 7/7/04 TO REPRESENT DIRECT CHANNELING OF
              *         KK SR226
              *         KM      STORAGE ROUTE THROUGH CP226
              *         RS     1     STOR       0       0
              *         SV     0     0.24    3.34   18.04   51.44  102.84  171.74
              *         SQ     0        0      21     136     428     875    1487
              *         SE1075.2  1075.5    1076  1076.5    1077  1077.5    1078
              *
              *         201 HYDROGRAPH MOVED TO HERE BY HDR 7/8/04

4756          KK     201
4757          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 201
4758          BA     .34
4759          LG     .35     .35    4.82     .29     .00
4760          UI     38.     96.    180.    233.    304.    457.    381.    294.    225.    166.
4761          UI     86.     64.     40.     24.     12.     12.     12.      0.      0.      0.
4762          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *         HYDROGRAPH COMBINE 226 + 201 BY HDR 7/7/04

4763          KK   1I226
4764          KM        ADD HYDROGRAPHS (226 + 201)
4765          HC       2     1.52
              *
              *         CHANNEL X-SECTION CHANGED TO REPRESENT PROPOSED CHANNEL BY HDR 7/7/04

4766          KK    R226
4767          KM        ROUTE FLOW FROM CP226 TO CP223
4768          RS       3            -1       0
4769          RC    .018    .018    .018    8000   .0010
4770          RX    1000    1005    1010    1014    1084    1088    1093    1098
4771          RY    1078    1077    1077    1069    1069    1077    1077    1078
              *
              *
              *
              *         ROUTING CHANNEL REMOVED BY HDR 7/8/04
              *         KK   R201
              *         KM      ROUTE FLOW FROM CP201 TO CP223
              *         RS    19            -1       0
              *         RC   .05    .035    .050    7000   .0017
              *         RX  1000    1200    1300    1500    1600    1800    1900    2000
              *         RY  1078  1074.5    1074    1073    1073    1074  1074.5    1078
              *
```



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

4772          KK     223
4773          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 223
4774          BA    1.26
4775          LG     .12     .33    5.52     .19   72.00
4776          UI    119.    218.    491.    643.    786.   1003.   1453.   1254.    993.    797.
4777          UI    634.    465.    257.    200.    140.    112.     37.     37.     37.     37.
4778          UI     37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
4779          UI      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
              *         HC CARD FOR 201 + 223 REMOVED FROM HERE BY HDR 7/8/04

4780          KK   CP223
```

```
4781          KM        ADD HYDROGRAPHS AT CP223 (223 + 226)
4782          HC       2   54.67

4783          KK    R223
4784          KM        ROUTE REMAINDER FROM CP223 TO CP224
4785          RS       4              -1
4786          RC     .03     .025     .03     2900   .0017
4787          RX    1000     1120    1350     1590    1780    1960    2129    2130
4788          RY    1067     1066    1064     1063    1063    1064  1065.5  1065.5
              *

4789          KK     224
4790          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 224
4791          BA     .80
4792          LG     .35      .32    5.64      .20       6
4793          UI     94.     258.    469.     606.    833.   1145.    854.    655.    492.    310.
4794          UI    163.     121.     79.      29.     29.     29.     29.      0.      0.      0.
4795          UI      0.       0.      0.       0.      0.      0.      0.      0.      0.      0.

4796          KK   CP224
4797          KM        ADD HYDROGRAPHS AT CP224 (224 + 223)
4798          HC       2   55.47

4799          KK    R224
4800          KM        ROUTE FLOW FROM CP224 TO CP241
4801          RS       7              -1
4802          RC     .03     .025     .03     5460   .0027
4803          RX    1000     1100    1320     1540    2350    2470    2630    2710
4804          RY    1057     1056    1054     1052    1052    1054    1056    1057
              *

4805          KK     241
4806          KM        RUNOFF HYDROGRAPH FROM SUB-BASIN 241
4807          BA    1.51
4808          LG     .38      .28    4.74      .34     .00
4809          UI    133.     206.    513.     682.    817.   1005.   1376.   1635.   1253.   1036.
4810          UI    834.     673.    488.     276.    223.    162.    133.     50.     41.     41.
4811          UI     41.      41.      0.       0.      0.      0.      0.      0.      0.      0.
4812          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

4813          KK   1I241
4814          KM        ADD HYDROGRAPHS AT CP241 (241 + 224)
4815          HC       2   56.98

4816          KK   2I241
4817          KM        ADD HYDROGRAPHS AT CP241 (241 + 222)
4818          HC       2   59.77

4819          KK   CP241
4820          KM        ADD HYDROGRAPHS AT CP241 (241 + 240)
4821          HC       2   78.75

4822          KK   SR241
4823          KM        STORAGE ROUTE THROUGH CP241
4824          RS       1    STOR       0       0
4825          SV       0     .09     .65     .94    8.45   16.94
4826          SQ       0       4     280     324    1773    7505
4827          SE  1042.2    1044    1046  1046.3    1048    1049
4828          ZZ
```

1

```
        SCHEMATIC DIAGRAM OF STREAM NETWORK

 INPUT
  LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.    (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    55          1
                V
                V
    66        RCP1
                .
                .
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 72          .          2
             .          .
             .          .
 81       CP2............
            V
            V
 84      RCP2
             .
             .
 90          .         3A
             .          V
             .          V
 97          .      RCP3A
             .          .
             .          .
103          .          .          3
             .          .          .
             .          .          .
110          .      I1CP3............
             .          .
             .          .
113       CP3............
             .
             .
120          .-------->   DI189
116       D3
            V
            V
123      RCP3
             .
             .
129          .          4
             .          .
             .          .
136          .          .          5
             .          .          .
             .          .          .
143          .        CP5............
             .          V
             .          V
146          .       RCP5
             .          .
             .          .
152          .          .          6
             .          .          .
             .          .          .
158          .        CP6............
             .          V
             .          V
161          .       RCP6
             .          .
             .          .
167          .          .          7
             .          .          .
             .          .          .
173          .        CP7............
             .          V
             .          V
176          .       RCP7
             .          .
             .          .
182          .          .          9
             .          .          .
             .          .          .
189          .      I1CP9............
             .          .
             .          .
192          .          .          8
             .          .          .
             .          .          .
199          .        CP9............
             .          V
             .          V
202          .       RCP9
             .          .
             .          .
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208          .           .          10
             .           .           .
             .           .           .
217          .      I1CP10............
             .           .
             .           .
220       CP10............
             .
             .
225          .-------> 1DI188
223       1D10
             .
             .
231          .-------> 2DI188
228       2D10
             V
             V
234      RCP10
             .
             .
240          .          12
             .           .
             .           .
248       CP12............
             V
             V
251      RCP12
             .
             .
257          .          11
             .           V
             .           V
265          .       RCP11
             .           .
             .           .
271          .           .          13
             .           .           .
             .           .           .
279          .        CP13............
             .           V
             .           V
282          .       RCP13
             .           .
             .           .
288          .           .          14
             .           .           V
             .           .           V
295          .           .       RCP14
             .           .           .
             .           .           .
301          .           .           .          15
             .           .           .           .
             .           .           .           .
309          .           .      I1CP15............
             .           .           .
             .           .           .
312          .           .           .          16
             .           .           .           V
             .           .           .           V
320          .           .           .        SR16
             .           .           .           .
             .           .           .           .
326          .           .        CP15............
             .           .           V
             .           .           V
329          .           .       RCP15
             .           .           .
             .           .           .
335          .           .           .          17
             .           .           .           .
             .           .           .           .
342          .           .      I1CP17............
             .           .           .
             .           .           .
345          .        CP17............
             .           V
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                 .          V
348              .       RCP17
                 .          .
                 .          .
354              .          .        WT3
                 .          .          .
                 .          .          .
362              .      I1CWT3...........
                 .          .
                 .          .
365         CPWT3...........
                V
                V
368         SRWT3
                 .
                 .
381              .        116
                 .          .
                 .          .
392              .          .-------> 116RET
390              .      116OUT
                 .          V
                 .          V
395              .       R116
                 .          .
                 .          .
401              .          .        117
                 .          .          .
                 .          .          .
413              .          .          .-------> 117RET
411              .          .     117OUT
                 .          .          .
                 .          .          .
416              .      CP117...........
                 .          V
                 .          V
419              .       R117
                 .          .
                 .          .
425              .          .        123
                 .          .          .
                 .          .          .
438              .          .          .------->  DI134
435              .          .       D123
                 .          .          V
                 .          .          V
441              .          .       R123
                 .          .          .
                 .          .          .
447              .          .          .        124
                 .          .          .          .
                 .          .          .          .
458              .          .     CP124...........
                 .          .          .
                 .          .          .
463              .          .          .------->  DI136
461              .          .     1D124
                 .          .          .
                 .          .          .
469              .          .          .------->  DI135
466              .          .     2D124
                 .          .          V
                 .          .          V
472              .          .       R124
                 .          .          .
                 .          .          .
478              .          .          .        125
                 .          .          .          .
                 .          .          .          .
486              .          .     1I125...........
                 .          .          .
                 .          .          .
489              .      CP125...........
                 .          .
                 .          .
494              .          .------->  DI137
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492          .      1D125
             .          .
             .          .
499          .          .-------->   DI138
497          .      2D125
             .          V
             .          V
502          .       R125
             .          .
             .          .
508          .          .         118
             .          .           .
             .          .           .
519          .          .           .-------->  118RET
517          .          .     118OUT
             .          .           V
             .          .           V
522          .          .       R118
             .          .           .
             .          .           .
528          .          .           .         126
             .          .           .           .
             .          .           .           .
540          .          .           .           .-------->  126RET
538          .          .           .     126OUT
             .          .           .           .
             .          .           .           .
543          .          .      1I126............
             .          .           .
             .          .           .
546          .      CP126............
             .          .
             .          .
552          .          .-------->   DI139
549          .       D126
             .          V
             .          V
555          .       R126
             .          .
             .          .
561          .          .        100A
             .          .           V
             .          .           V
569          .          .      R100A
             .          .           .
             .          .           .
575          .          .           .        102A
             .          .           .           .
             .          .           .           .
586          .          .     1I102A............
             .          .           .
             .          .           .
589          .          .           .         101
             .          .           .           V
             .          .           .           V
599          .          .           .        R101
             .          .           .           .
             .          .           .           .
605          .          .     CP102A............
             .          .           .
             .          .           .
612          .          .           .-------->  102ART
608          .          .     102AOT
             .          .           V
             .          .           V
615          .          .      R102A
             .          .           .
             .          .           .
621          .          .           .         106
             .          .           .           .
             .          .           .           .
634          .          .           .           .-------->  106RET
632          .          .           .     106OUT
             .          .           .           .
             .          .           .           .
637          .          .      CP106............
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                 .         .         V
                 .         .         V
640              .         .      R106
                 .         .         .
653              .         .         .        105
                 .         .         .          V
                 .         .         .          V
663              .         .         .       R105
                 .         .         .          .
669              .         .         .          .        112
                 .         .         .          .          .
681              .         .         .          .          .-------> 112RET
679              .         .         .          .     1120UT
                 .         .         .          .          .
684              .         .         .      CP112...........
                 .         .         .          .
689              .         .         .          .------->   DI120
687              .         .         .      1D112
                 .         .         .          .
694              .         .         .          .-------> 1D121A
692              .         .         .      2D112
                 .         .         .          V
697              .         .         .       R112
                 .         .         .          .
703              .         .         .          .       113A
                 .         .         .          .          .
715              .         .         .          .          .-------> 113ART
713              .         .         .          .     113AOT
                 .         .         .          .          .
718              .         .         .      CP113A..........
                 .         .         .          .
723              .         .         .          .-------> 2D121A
721              .         .         .      D113A
                 .         .         .          V
726              .         .         .      R113A
                 .         .         .          .
732              .         .         .          .        114
                 .         .         .          .          .
745              .         .         .          .          .-------> 114RET
743              .         .         .          .     1140UT
                 .         .         .          .          .
748              .         .      CP114.......................
                 .         .         .
753              .         .         .-------> DI122B
751              .         .      D114
                 .         .         V
756              .         .      R114
                 .         .         .
762              .         .         .        115
                 .         .         .          .
775              .         .         .          .-------> 115RET
773              .         .         .      1150UT
                 .         .         .          .
778              .         .      CP115...........
                 .         .         V
                 .         .         V
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781          .          .        R115
             .          .          .
787          .          .          .        122A
             .          .          .          .
800          .          .          .          .-------> 122ART
797          .          .          .      122AOT
             .          .          .          .
803          .          .      1I122A............
             .          .          .
808          .          .          .          .<------- DI122B
806          .          .          .        D114
             .          .          .          V
             .          .          .          V
809          .          .          .        R114
             .          .          .          .
815          .          .          .          .        122B
             .          .          .          .          .
828          .          .          .          .          .-------> 122BRT
825          .          .          .          .      122BOT
             .          .          .          .          .
831          .          .          .      CP122B............
             .          .          .          V
             .          .          .          V
834          .          .          .       R122B
             .          .          .          .
840          .          .      CP122A............
             .          .          V
             .          .          V
843          .          .      1R122A
             .          .          V
             .          .          V
850          .          .      2R122A
             .          .          .
857          .          .          .         111
             .          .          .          .
869          .          .          .          .-------> 111RET
867          .          .          .      111OUT
             .          .          .          V
             .          .          .          V
872          .          .          .        R111
             .          .          .          .
878          .          .          .          .         104
             .          .          .          .          V
             .          .          .          .          V
888          .          .          .          .        R104
             .          .          .          .          .
894          .          .          .          .          .        111A
             .          .          .          .          .          .
909          .          .          .          .          .          .-------> 111ART
907          .          .          .          .          .      111AOT
             .          .          .          .          .          .
912          .          .          .      CP111A.......................
             .          .          .          V
             .          .          .          V
915          .          .          .       R111A
             .          .          .          .
921          .          .          .          .         119
             .          .          .          .          .
933          .          .          .          .          .-------> DI128
931          .          .          .          .        D119
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                                                  V
                                                  V
936                                            R119
                                                  .
                                                  .
942                                                .        119A
                                                  .           .
                                                  .           .
953                                         CP119A............
                                                  .
                                                  .-------->   DI130
958
956                                         D119A
                                                  V
                                                  V
963                                         R119A
                                                  .
                                                  .
969                                               .         120
                                                  .           .
                                                  .           .
980                                      1I120......................
                                                  .
                                                  .
985                                               .<-------   DI120
983                                         1D112
                                                  V
                                                  V
986                                            R112
                                                  .
                                                  .
992                                      CP120............
                                                V
                                                V
995                                       R120
                                                .
                                                .
1003                                            .<-------   DI128
1001                                           D119
                                                V
                                                V
1004                                           R119
                                                .
                                                .
1010                                            .         128
                                                .           .
                                                .           .
1019                                        CP128............
                                                V
                                                V
1022                                           R128
                                                .
                                                .
1030                                            .           .<-------   DI130
1028                                            .       D119A
                                                .           V
                                                .           V
1031                                            .       R119A
                                                .           .
                                                .           .
1037                                            .           .         130
                                                .           .           .
                                                .           .           .
1048                                        1I130......................
                                                .
                                                .
1051                                            .         129
                                                .           V
                                                .           V
1060                                            .       R129
                                                .           .
                                                .           .
1066                                     CP130......................
                                                .
                                                .
1071                                            .------->   DI144
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1069          .          .          .        D130
              .          .          .           V
              .          .          .           V
1074          .          .          .        R130
              .          .          .           .
              .          .          .           .
1080          .          .          .           .        131A
              .          .          .           .           .
              .          .          .           .           .
1090          .          .          .      CP131A............
              .          .          .           V
              .          .          .           V
1093          .          .          .      R131A
              .          .          .           .
              .          .          .           .
1099          .          .          .           .         131
              .          .          .           .           .
              .          .          .           .           .
1109          .          .          .      1I131............
              .          .          .           .
              .          .          .           .
1114          .          .          .           .           .<-------  1D121A
1112          .          .          .           .      2D112
              .          .          .           .          V
              .          .          .           .          V
1115          .          .          .           .       R112
              .          .          .           .           .
              .          .          .           .           .
1121          .          .          .           .           .        121A
              .          .          .           .           .           .
              .          .          .           .           .           .
1130          .          .          .           .     1I121A............
              .          .          .           .           .
              .          .          .           .           .
1135          .          .          .           .           .           .<-------  2D121A
1133          .          .          .           .           .      D113A
              .          .          .           .           .          V
              .          .          .           .           .          V
1136          .          .          .           .           .      R113A
              .          .          .           .           .           .
              .          .          .           .           .           .
1142          .          .          .           .     CP121A............
              .          .          .           .           V
              .          .          .           .           V
1145          .          .          .           .      R121A
              .          .          .           .           .
              .          .          .           .           .
1151          .          .          .           .           .         121
              .          .          .           .           .           .
              .          .          .           .           .           .
1160          .          .          .           .      CP121............
              .          .          .           .           V
              .          .          .           .           V
1163          .          .          .           .       R121
              .          .          .           .           .
              .          .          .           .           .
1169          .          .          .      CP131............
              .          .          .           .
              .          .          .           .
1174          .          .          .           .------->   DI145
1172          .          .          .       D131
              .          .          .           V
              .          .          .           V
1177          .          .          .       R131
              .          .          .           .
              .          .          .           .
1183          .          .          .           .         132
              .          .          .           .           .
              .          .          .           .           .
1193          .          .          .      CP132............
              .          .          .           V
              .          .          .           V
1196          .          .          .       R132
              .          .          .           .
              .          .          .           .
1202          .          .          .           .         133
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1216                                                  .-------> 133RET
1214                                          133OUT
1219                                   1I133...........
1222                             CP133...........
1227                                 .-------> DI146
1225                             1D133
1232                                 .-------> 1D147
1230                             2D133
                                    V
                                    V
1235                              R133
1241                                        134
1253                                                  .<-------  DI134
1251                                                D123
                                                       V
                                                       V
1254                                                R123
1260                             CP134......................
1265                                 .-------> 2D147
1263                              D134
                                    V
                                    V
1268                              R134
1276                                             .<-------  DI135
1274                                   1D124
                                          V
                                          V
1277                                    R124
1283                                             135
1297                                                  .-------> 135RET
1295                                          135OUT
1300                             CP135......................
1305                                 .-------> DI148
1303                              D135
                                    V
                                    V
1308                              R135
1316                                             .<-------  DI136
1314                                   2D124
                                          V
                                          V
1317                                    R124
1323                                             136
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1333                                  1I136............
1336                             CP136............
                                    V
                                    V
1339                              R136
1347                                                 .<-------   DI137
1345                                  1D125
                                          V
                                          V
1348                                   R125
1354                                                          137
1366                             CP137........................
1371                                  .------->   DI149
1369                             1D137
1376                                  .------->   DI153
1374                             2D137
                                    V
                                    V
1379                              R137
1387                                                 .<-------   DI138
1385                                  2D125
                                          V
                                          V
1388                                   R125
1394                                                          138
1407                                  1I138............
1410                             CP138............
                                    V
                                    V
1413                              R138
1419                                   138A
1431                                                 .------->  138ART
1429                                 138AOT
1434                            1I138A............
1437                       2I138A............
1442                                 .<-------   DI153
1440                             2D137
                                    V
                                    V
1443                              R137
1449                                   153
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1460                CP153...........
                       .
1463            CP138A..........
                       .
1468                   .-------> DI154
1466             D138A
                    V
                    V
1471             R138A
                       .
1479                   .<-------  DI154
1477                CP138A
                       V
                       V
1480                 RLLE
                       .
1486                   .        154
                       .          .
1494                 LLE1..........
                       V
                       V
1497                RLLE1
                       .
1503                   .        157
                       .          .
1517                   .          .-------> 157RET
1515                   .     157OUT
                       .          .
1520                1I157..........
                       .
1523             2I157..........
                       .
1526                  127
                       V
                       V
1532                 R127
                       .
1538                   .        139
                       .          .
1550                   .          .-------> 139RET
1548                   .     139OUT
                       .          .
1553                1I139..........
                       .
1558                   .          .<-------  DI139
1556                   .       D126
                       .          V
                       .          V
1559                   .        RLE
                       .          .
1565                2I139..........
                       .
1568                   .        140
                       .          .
1576                  LE1..........
                       V
                       V
1579                 RLE1
                       .
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1585                                  156
                                        .
1594                            LE2.........
                                  V
                                  V
1597                           RLE2
                                  .
                                  .
1603                      LE3.........
                            V
                            V
1606                    1RLE3
                            V
                            V
1612                    2RLE3
                            .
                            .
1618                            172
                                  .
                                  .
1626                      LE4.........
                            V
                            V
1629                     R172
                            .
                            .
1635                            173
                                  .
                                  .
1645                    CP173.........
                            .
                            .
1648                           156A
                                  V
                                  V
1655                          R156A
                                  .
                                  .
1661                                  158
                                        .
                                        .
1673                                    .-------> 158RET
1671                                158OUT
                                        .
                                        .
1676                          CP158.........
                                  V
                                  V
1679                           R158
                                  .
                                  .
1685                                  173B
                                        .
                                        .
1694                         CP173B.........
                                  .
                                  .
1697                    AFR2E.........
                            V
                            V
1700                    RR173
                            .
                            .
1706                            171
                                  V
                                  V
1718                           R171
                                  .
                                  .
1724                                  173A
                                        .
                                        .
1733                         CP173A.........
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1736        .     AFR2F1...........
            .         V
            .         V
1739        .     RR173A
            .         .
            .         .
1745        .         .        186
            .         .          V
            .         .          V
1756        .         .       R186
            .         .          .
            .         .          .
1762        .         .          .        187
            .         .          .          .
            .         .          .          .
1768        .         .     CP187...........
            .         .          .
            .         .          .
1771        .     AFR2F2...........
            .         V
            .         V
1774        .      RR187
            .         .
            .         .
1780        .         .        199
            .         .          V
            .         .          V
1790        .         .       R199
            .         .          .
            .         .          .
1796        .         .          .        200
            .         .          .          .
            .         .          .          .
1805        .         .     CP200...........
            .         .          .
            .         .          .
1808        .     AFR2F3...........
            .         V
            .         V
1811        .      RR200
            .         .
            .         .
1817        .         .        141
            .         .          V
            .         .          V
1824        .         .       R141
            .         .          .
            .         .          .
1830        .         .          .       141A
            .         .          .          .
            .         .          .          .
1837        .         .    CP141A...........
            .         .          V
            .         .          V
1840        .         .      R141A
            .         .          .
            .         .          .
1846        .         .          .        142
            .         .          .          .
            .         .          .          .
1856        .         .     CP142...........
            .         .          V
            .         .          V
1859        .         .       R142
            .         .          .
            .         .          .
1865        .         .          .        143
            .         .          .          .
            .         .          .          .
1875        .         .     CP143...........
            .         .          V
            .         .          V
1878        .         .       R143
            .         .          .
            .         .          .
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1886                                  .<-------   DI144
1884                           D130
                                  V
                                  V
1887                           R130
                                  .
                                  .
1893                                  .         144
                                  .           .
                                  .           .
1903                           1I144............
                                  .
                                  .
1906                        CP144............
                                  .
                                  .
1911                              .-------> DI164A
1909                         D144
                                  V
                                  V
1914                         R144
                                  .
                                  .
1920                           145A
                                  .
                                  .
1930                       CP145A............
                                  V
                                  V
1933                        R145A
                                  .
                                  .
1941                                  .<-------   DI145
1939                           D131
                                  V
                                  V
1942                           R131
                                  .
                                  .
1948                                  .         145
                                  .           .
                                  .           .
1958                           1I145............
                                  .
                                  .
1961                        CP145............
                                  .
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1966                              .------->   DI164
1964                        1D145
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1971                              .------->   DI165
1969                        2D145
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                                  V
1974                        R145B
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1982                              .-------> DI165B
1980                        3D145
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                                  V
1985                        R145C
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1993                              .-------> DI165C
1991                        4D145
                                  V
                                  V
1996                        R145D
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2004                                  .<-------   DI146
2002                           1D133
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2005                            R133
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2011                               .          146
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2022                            1I146............
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2025                        CP146...........
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2030                               .------->   1D166
2028                         D146
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                                V
2033                        R146A
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2041                               .          .<-------  DI165C
2039                            4D145
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                                   V
2042                            R145E
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2048                        1D165...........
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2053                               .------->   DIRB1
2051                        D146B
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                                V
2056                        R146B
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2064                               .          .<-------  DI165B
2062                            3D145
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                                   V
2065                            R145F
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2071                        2D165...........
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2076                               .------->   DIRB2
2074                        D146C
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2079                        R146C
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2085                               .        159
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2092                               .       R159
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2161             .          .      CP163............
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2166             .          .          .-------> DI176A
2164             .          .       D163
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                 .          .          V
2169             .          .       R163
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2177             .          .          .          .<-------  DI164A
2175             .          .          .       D144
                 .          .          .          V
                 .          .          .          V
2178             .          .          .       R144
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2184             .          .          .          .        164A
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2197             .          .     CP164A............
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2200             .          .      R164A
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2221             .          .          .          .<-------   DI164
2219             .          .          .      1D145
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                 .          .          .          V
2222             .          .          .       R145
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2228             .          .      CP164............
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2233             .          .          .------->   DI177
2231             .          .       D164
                 .          .          V
                 .          .          V
2236             .          .       R164
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2244             .          .          .          .<-------   DI165
2242             .          .          .      2D145
                 .          .          .          V
                 .          .          .          V
2245             .          .          .       R145
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2251             .          .          .          .         165
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2262                                  1I165...........
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2265                              2I165...........
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2268                        CP165...........
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2273                                  .------->   DI180
2271                         D165
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2276                         R165
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2284                                  .<-------  DI176A
2282                              D163
                                     V
                                     V
2285                              R163
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2307                                  .------->   DI191
2305                             D176A
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                                     V
2310                             R176A
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2326                            CP177A...........
                                     V
                                     V
2329                             R177A
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2348                                  .        D164
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2379                              R178
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2403          .           .           .------->   DI193
2401          .           .       1D179
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2408          .           .           .------->  DI194A
2406          .           .       2D179
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              .           .           V
2411          .           .        R179
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2428          .           .       1I180............
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2433          .           .           .          .<-------   1D147
2431          .           .           .       2D133
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2434          .           .           .        R133
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2450          .           .           .       1I147............
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2455          .           .           .           .           .<-------   2D147
2453          .           .           .           .        D134
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              .           .           .           .           V
2456          .           .           .           .        R134
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2462          .           .           .      CP147 ............
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2467          .           .           .           .------->   2D166
2465          .           .           .        D147
              .           .           .           V
              .           .           .           V
2470          .           .           .        R147
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2486          .           .           .       1I148............
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2491          .           .           .           .           .<-------   DI148
2489          .           .           .           .        D135
              .           .           .           .           V
              .           .           .           .           V
2492          .           .           .           .        R135
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2498          .           .           .       CP148............
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2503          .           .           .           .------->   DI150
2501          .           .           .        D148
              .           .           .           V
              .           .           .           V
2506          .           .           .        R148
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2515                                            R147
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2550                                          D166
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2555                                          R166
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2561                                            D165
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2564                                            R165
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2640              CP150...........
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2643                R150
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2658              1I151...........
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2663                  .          .<-------   DI149
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2664                  .       R137
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2670                  .          .        149
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2680                  .      CP149...........
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2683                  .       R149
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2689              CP151...........
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2694                  .------->   1D168
2692              1D151
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2699                  .------->   DI152
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2702                R151
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2719              1I167...........
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2725                  .       R166
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2731              CP167...........
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2736                  .------->   1D183
2734              1D167
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2741                  .------->   2D168
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2744                R167
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2760                                                                      CP181A...........
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2765                                                                              .------->   2D183
2763                                                                      D181A
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2768                                                                      R181A
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2791                                                                       R151
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2807                                                                      CP152...........
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2860                                                                      CP168...........
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2865                                                                              .------->   2D169
2863                                                                       D168
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2876          .           .           .           .<-------   1D183
2874          .           .           .       1D167
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2877          .           .           .        R167
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2906          .           .           .      CP183............
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2909          .           .           .        R183
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2933          .           .           .           .<-------   DI155
2931          .           .           .        D152
              .           .           .          V
              .           .           .          V
2934          .           .           .        R152
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2949          .           .           .      CP155............
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2952          .           .           .        R155
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2960          .           .           .           .           .<-------   1D169
2958          .           .           .           .        D152
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3534                   .<-------   DI196
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3535                 R182
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3575                CP202............
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3578                 R202
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3584            CP204............
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3587             R204
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3599            CP205............
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                 V
                 V
3621         RR206
                 .
                 .
3627             .       228A
                 .         .
                 .         .
3634         AFR2K............
                 V
                 V
3637         R228A
                 .
                 .
3645             .<-------  1DI188
3643             .       1D10
                 .         .
                 .         .
3648             .         .<-------  2DI188
```

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3646                    2D10
                          .
3649            1I188.........
                    V
                    V
3652              R10
                    .
                    .
3658                188
                    .
3665            CP188.........
                    V
                    V
3668             R188
                    .
                    .
3674                207A
                    .
3681           CP207A.........
                    V
                    V
3684            R207A
                    .
                    .
3690                214
                    .
3697            CP214.........
                    V
                    V
3700             R214
                    .
                    .
3706                215A
                      V
                      V
3714               R215A
                    .
                    .
3720                .          215
                    .            .
                    .            .
3727               1I215.........
                    .
                    .
3730            2I215.........
                    .
                    .-------> 1DI216
3735
3733            3I215
                    .
                    .-------> 2DI216
3740
3738            4I215
                    .
                    .-------> 3DI216
3745
3743            5I215
                    .
                    .-------> 4DI216
3750
3748            CP215
                    V
                    V
3753             R215
                    .
                    .
3759                233
                    .
3767            CP233.........
                    V
                    V
```

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3770          .           .        R233
              .           .           .
3776          .           .           .        216
              .           .           .          .
3788          .           .           .          .-------> 1OL216
3785          .           .           .     1D216I
              .           .           .          .
3794          .           .           .          .-------> 2OL216
3791          .           .           .     2D216I
              .           .           .          .
3800          .           .           .          .-------> 3OL216
3797          .           .           .     3D216I
              .           .           .          .
3806          .           .           .          .-------> 4OL216
3803          .           .           .     4D216I
              .           .           .          .
3812          .           .           .          .-------> 5OL216
3809          .           .           .     5D216I
              .           .           .          .
3817          .           .           .          .          .<-------  1DI216
3815          .           .           .          .      1D215
              .           .           .          .          .
3821          .           .           .          .          .------->   3D183
3818          .           .           .          .     1DI186
              .           .           .          .          .
3824          .           .           .      1I216...........
              .           .           .          .
3829          .           .           .          .-------> 1DI217
3827          .           .           .      1D216
              .           .           .          .
3834          .           .           .          .          .<-------  1OL216
3832          .           .           .          .      1216I
              .           .           .          .          .
3837          .           .           .          .          .          .<-------   3D183
3835          .           .           .          .          .     1DI183
              .           .           .          .          .          .
3838          .           .           .      2I216......................
              .           .           .          .
3844          .           .           .          .------->   4D183
3841          .           .           .     2DI186
              .           .           .          .
3849          .           .           .          .-------> 2DI217
3847          .           .           .      2D216
              .           .           .          .
3854          .           .           .          .          .<-------  2OL216
3852          .           .           .          .      2216I
              .           .           .          .          .
3857          .           .           .          .          .          .<-------   4D183
3855          .           .           .          .          .     2DI183
              .           .           .          .          .          .
3858          .           .           .      3I216......................
              .           .           .          .
3864          .           .           .          .------->   5D183
3861          .           .           .     3DI186
              .           .           .          .
3869          .           .           .          .-------> 3DI217
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3867                                  3D216
                                        .
3874                                    .<-------  3OL216
3872                                  3216I
                                        .
3877                                    .<-------   5D183
3875                                    .     3DI183
                                        .         .
3878                                  4I216.......................
                                        .
3883                                    .<-------  2DI216
3881                                  2D215
                                        .
3884                                  2I216............
                                        .
3889                                    .<-------  3DI216
3887                                  3D215
                                        .
3890                                  3I216............
                                        .
3895                                    .-------> 4DI217
3893                                  4D216
                                        .
3900                                    .<-------  4DI216
3898                                  4D215
                                        .
3901                                  5I216............
                                        .
3906                                    .<-------  4OL216
3904                                  4216I
                                        .
3907                                  6I216............
                                        .
3912                                    .-------> 5DI217
3910                                  5D216
                                        .
3917                                    .<-------  5OL216
3915                                  5216I
                                        .
3918                                  7I216............
                                        .
3923                                    .-------> 6DI217
3921                                  6D216
                                        V
                                        V
3926                                   R216
                                        .
3932                                    .         234
                                        .           .
3942                                  1I234............
                                        .
3945                             CP234...........
                                        .
3950                                    .------->  1D248
3948                                D234
                                        V
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                                  V
3953                            R234
                                   .
3959                                207
                                   .
3972                               .-------> 2D208
3970                            D207
                                   V
                                   V
3975                            R207
                                   .
3981                                .        217
                                   .          .
3993                               .          .          .<-------  1DI217
3991                               .          .     1D216
                                   .          .          .
3994                               .      2I216...........
                                   .          .
3999                               .          .          .<-------  2DI217
3997                               .          .     2D216
                                   .          .          .
4000                               .      3I216...........
                                   .          .
4005                               .          .          .<-------  3DI217
4003                               .          .     3D216
                                   .          .          .
4006                               .      4I216...........
                                   .          .
4011                               .          .          .<-------  4DI217
4009                               .          .     4D216
                                   .          .          .
4012                               .      5I216...........
                                   .          .
4017                               .          .          .<-------  5DI217
4015                               .          .     5D216
                                   .          .          .
4018                               .      6I216...........
                                   .          .
4023                               .          .          .<-------  6DI217
4021                               .          .     6D216
                                   .          .          .
4024                               .      7I216...........
                                   .          V
4027                               .      RD216
                                   .          .
4033                            CP217...........
                                   .
4038                               .-------> DI218
4036                            D217
                                   V
                                   V
4041                            R217
                                   .
4047                                .        235
                                   .          .
4058                            1I235...........
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4061                CP235............
                                 .
4066                             .-------->   2D248
4064                         D235
                                V
                                V
4069                         R235
                                 .
4077                             .<-------   1D208
4075                         D191
                                V
                                V
4078                         R191
                                 .
4084                             .         208
                                 .           .
                                 .           .
4095                        1I208............
                                 .
                                 .
4100                             .           .<-------   2D208
4098                             .        D207
                                 .           V
                                 .           V
4101                             .        R207
                                 .           .
                                 .           .
4107                        CP208............
                                 .
                                 .
4112                             .-------->   1D219
4110                        1D208
                                 .
                                 .
4117                             .-------->  DI209A
4115                        2D208
                                V
                                V
4120                         R208
                                 .
                                 .
4126                             .         218
                                 .           .
                                 .           .
4137                        1I218............
                                 .
                                 .
4142                             .           .<-------   DI218
4140                             .        D217
                                 .           V
                                 .           V
4143                             .        R217
                                 .           .
                                 .           .
4149                        CP218............
                                 .
                                 .
4154                             .-------->   DI237
4152                        1D218
                                 .
                                 .
4159                             .-------->   2D219
4157                        2D218
                                V
                                V
4162                         R218
                                 .
                                 .
4168                             .         236
                                 .           .
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4179                  1I236...........
                                 .
4182             CP236...........
                                 .
4187                  .------->  DI249
4185             1D236
                                 .
4192                  .------->  1D250
4190             2D236
                    V
                    V
4195              R236
                                 .
4201                   209A
                                 .
4213                                      .<-------  DI209A
4211                            1D208
                                    V
                                    V
4214                             R208
                                    .
4220                  CP209A...........
                                 .
4225                  .------->  1D220
4223                  1D209A
                                 .
4230                  .------->  2D209
4228                  2D209A
                         V
                         V
4233                   R209A
                                 .
4241                                      .<-------  1D219
4239                            2D208
                                    V
                                    V
4242                             R208
                                    .
4248                                      .         219
                                                      .
4258                            1I219...........
                                    .
4261                   2I219...........
                                 .
4266                                      .<-------  2D219
4264                            2D218
                                    V
                                    V
4267                             R218
                                    .
4273                   CP219...........
                                 .
4278                  .------->  DI238
4276                   1D219
                                 .
4283                  .------->  2D220
4281                   2D219
                         V
                         V
4286                    R219
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                 .          .          .          .
4294             .          .          .          .<-------   DI237
4292             .          .          .       1D218
                 .          .          .          V
                 .          .          .          V
4295             .          .          .       R218
                 .          .          .          .
                 .          .          .          .
4301             .          .          .          .         237
                 .          .          .          .           .
                 .          .          .          .           .
4312             .          .          .       1I237............
                 .          .          .          .
                 .          .          .          .
4315             .          .       2I237............
                 .          .          .
                 .          .          .
4318             .          .   CP237............
                 .          .          .
                 .          .          .
4323             .          .          .-------->   2D250
4321             .          .   1D237
                 .          .          .
                 .          .          .
4328             .          .          .-------->  1D250A
4326             .          .   2D237
                 .          .      V
                 .          .      V
4331             .          .   R237
                 .          .          .
                 .          .          .
4339             .          .          .<-------   1D209
4337             .          .       1D192
                 .          .          V
                 .          .          V
4340             .          .       R192
                 .          .          .
                 .          .          .
4346             .          .          .         209
                 .          .          .          .
                 .          .          .          .
4356             .          .       1I209............
                 .          .          .
                 .          .          .
4361             .          .          .          .<-------   2D209
4359             .          .          .      2D209A
                 .          .          .          V
                 .          .          .          V
4362             .          .          .       R209A
                 .          .          .          .
                 .          .          .          .
4368             .          .       CP209............
                 .          .          .
                 .          .          .
4373             .          .          .-------->   1D221
4371             .          .       1D209
                 .          .          .
                 .          .          .
4378             .          .          .-------->   2D210
4376             .          .       2D209
                 .          .          V
                 .          .          V
4381             .          .       R209
                 .          .          .
                 .          .          .
4389             .          .          .          .<-------   1D220
4387             .          .          .      1D209A
                 .          .          .          V
                 .          .          .          V
4390             .          .          .       R209A
                 .          .          .          .
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4396             .          .          .          .         220
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4406                                  1I220............
                                         .
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4409                              2I220............
                                         .
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4414                                     .<-------   2D220
4412                                  2D219
                                         V
                                         V
4415                                   R219
                                         .
                                         .
4421                              CP220............
                                         .
                                         .
4426                                     .------->   DI239
4424                              1D220
                                         .
                                         .
4431                                     .------->   2D221
4429                              2D220
                                         V
                                         V
4434                                   R220
                                         .
                                         .
4442                                     .<-------   DI238
4440                                  1D219
                                         V
                                         V
4443                                   R219
                                         .
                                         .
4449                                     .         238
                                         .           .
                                         .           .
4459                                  1I238............
                                         .
                                         .
4462                              2I238............
                                         .
                                         .
4465                           CP238............
                                         .
                                         .
4470                                     .------->  2D250A
4468                           1D238
                                         .
                                         .
4475                                     .------->   1D251
4473                           2D238
                                         V
                                         V
4478                            R238
                                         .
                                         .
4486                                     .<-------   1D210
4484                              2D192
                                         V
                                         V
4487                                   R192
                                         .
                                         .
4493                                     .         210
                                         .           .
                                         .           .
4503                              1I210............
                                         .
                                         .
4508                                     .<-------   2D210
4506                                  2D209
                                         V
                                         V
4509                                   R209
                                         .
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4515                CP210............
                       V
                       V
4518                R210
                       .
4526                   .<-------   1D221
4524                1D209
                       V
                       V
4527                R209
                       .
                       .
4533                   .         221
                       .           .
                       .           .
4543                1I221............
                       .
                       .
4546                2I221............
                       .
4551                   .<-------   2D221
4549                2D220
                       V
                       V
4552                R220
                       .
                       .
4558                CP221............
                       V
                       V
4561                R221
                       .
4569                   .<-------   DI239
4567                1D220
                       V
                       V
4570                R220
                       .
                       .
4576                   .         239
                       .           .
                       .           .
4586                1I239............
                       .
                       .
4589                2I239............
                       .
4592             CP239............
                    .
                    .-------->   2D251
4597
4595             1D239
                    .
                    .-------->   DI252
4602
4600             2D239
                    V
                    V
4605              R239
                    .
                    .
4611                   240
                       .
                       .
4621             CP240............
                    V
                    V
4624              R240
                    .
                    .
4630                   213
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                 .         .         .         V
                 .         .         .         V
4638             .         .         .      R213
                 .         .         .         .
4644             .         .         .         .        212
                 .         .         .         .          V
                 .         .         .         .          V
4656             .         .         .         .      SR212
                 .         .         .         .          .
4662             .         .         .         .          .
                 .         .         .      CP212............
                 .         .         .         V
                 .         .         .         V
4665             .         .         .      R212
                 .         .         .         .
4673             .         .         .         .          .<-------   DI211
4671             .         .         .         .      1D193
                 .         .         .         .          V
                 .         .         .         .          V
4674             .         .         .         .      R193
                 .         .         .         .          .
4680             .         .         .         .          .         211
                 .         .         .         .          .           .
4690             .         .         .         .      CP211............
                 .         .         .         .          V
                 .         .         .         .          V
4693             .         .         .         .      R211
                 .         .         .         .          .
4699             .         .         .         .          .       221A
                 .         .         .         .          .           .
4710             .         .         .         .     1I221A............
                 .         .         .         .          V
                 .         .         .         .          V
4713             .         .         .         .     SR221A
                 .         .         .         .          .
4719             .         .         .      CP221A............
                 .         .         .         V
                 .         .         .         V
4722             .         .         .      R221A
                 .         .         .         .
4728             .         .         .         .        222
                 .         .         .         .          .
4740             .         .         .         .          .
                 .         .         .      CP222............
                 .         .         .         V
                 .         .         .         V
4743             .         .         .      R222
                 .         .         .         .
4749             .         .         .         .        226
                 .         .         .         .          .
4756             .         .         .         .          .         201
                 .         .         .         .          .           .
4763             .         .         .         .      1I226............
                 .         .         .         .          V
                 .         .         .         .          V
4766             .         .         .         .      R226
                 .         .         .         .          .
4772             .         .         .         .          .         223
                 .         .         .         .          .           .
4780             .         .         .         .      CP223............
                 .         .         .         .          V
                 .         .         .         .          V
4783             .         .         .         .      R223
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                .         .         .         .         .
 4789           .         .         .         .         .        224
                .         .         .         .         .          .
                .         .         .         .         .          .
 4796           .         .         .         .      CP224...........
                .         .         .         .          V
                .         .         .         .          V
 4799           .         .         .         .       R224
                .         .         .         .         .
                .         .         .         .         .
 4805           .         .         .         .         .        241
                .         .         .         .         .          .
                .         .         .         .         .          .
 4813           .         .         .         .      1I241...........
                .         .         .         .         .
                .         .         .         .         .
 4816           .         .         .      2I241........
                .         .         .         .
                .         .         .         .
 4819           .         .      CP241........
                .         .         V
                .         .         V
 4822           .         .      SR241
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             JUN   1998               *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   08JUL04  TIME  07:34:45  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

LOOP 303 CORRIDOR-WHITE TANKS AREA DRAINAGE MASTER PLAN UPDATE
EXISTING CONDITION HYDROLOGY MODEL 'WITHOUT PROJECTS IN PLACE'

PER DIRECTION AND BY PROVISION OF THE FCDMC, URS HAS ADDED THE
PROVIDED DIVERT DATA FOR THE EXISTING DIVERSION (PREVIOUSLY
TURNED OFF) AT DI189.

THE RESULTS OF THE FLOODPLAIN FLOW SPLIT ANALYSIS
AT PERRYVILLE & 83RD AVE BETWEEN GLENDALE AND BETHANY
HOME ROAD HAVE BEEN INCORPORATED INTO THIS MODEL

REVISED BY URS DATE: 01-14-04
FILE: L303M1L.DAT

NOTES:
1. THIS HEC-1 MODEL CONTAINS THE FOLLOWING SUPER BASINS: WHITE TANKS 3, 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2 & 3, 4 THRU 26.
2. REVISED TO REFLECT UPDATED SOILS MAPS AND NEW DEVELOPMENT.
3. AVERAGE XKSAT VALUES FOR EACH SUBBASIN WAS RECEIVED FROM FCDMC GIS DATA AND THEN ADJUSTED FOR VEGETATION, OR LEFT AS ORIGINALLY IN THE WLB MODEL.
4. FOR NEW DEVELOPMENTS ONLY 80% OF REPORTED PROVIDED RETENTION WAS INCLUDED IN THIS MODEL (AS A CONSERVATIVE ESTIMATE). RETENTION CAPACITIES WERE ESTIMATED BY EEC FOR DEVELOPMENTS WITH NO DRAINAGE REPORTS.
5. REVISED DRAINAGE BOUNDARIES BASED UPON FIELD INSPECTION OF SUN CITY. GRAND. COMBINED SEVERAL BASINS TOGETHER TO MAKE NEW BASINS 114 &115. ALSO REROUTED SUBBASINS 100A, 101, 102A AND 106 TO THE SOUTH TO 113A.
6. CHANNEL ROUTE ALONG REEMS ROAD UPDATED TO REFLECT NEW CONSTRUCTION.
7. REVISED SCS TYPE II RAINFALL DISTRIBUTION FOR THE 24-HOUR GENERAL STORM.
8. REVISED RAINFALL DEPTH-AREA REDUCTION FACTORS.
9. PSIF WERE ADJUSTED BASED ON THE VALUES OF XKSAT AND WERE EDITED INTO THE DATA FILE BY THE FCDMC.
10. AVERAGE XKSAT VALUES FOR SUBBASINS WITH BORROW PITS (WHITE TANKS AREAS #3 & #4) WERE ESTIMATED BY EEC.

```
38 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ         600  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        0155  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL     .08 HOURS
                    TOTAL TIME BASE   49.92 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

40 JD          INDEX STORM NO. 1
                      STRM        4.03  PRECIPITATION DEPTH
                      TRDA         .00  TRANSPOSITION DRAINAGE AREA

41 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                    .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                    .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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51 JD          INDEX STORM NO. 2
                      STRM        3.79  PRECIPITATION DEPTH
                      TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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52 JD INDEX STORM NO. 3
STRM 3.51 PRECIPITATION DEPTH
TRDA 50.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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53 JD INDEX STORM NO. 4
STRM 3.39 PRECIPITATION DEPTH
TRDA 100.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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 54 JD          INDEX STORM NO. 5
                     STRM        3.29  PRECIPITATION DEPTH
                     TRDA      200.00  TRANSPOSITION DRAINAGE AREA

  0 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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WARNING --- ROUTED OUTFLOW (    879.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (    930.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (    971.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1001.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1022.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1035.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1040.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1038.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1028.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (   1009.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (    984.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (    954.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (    924.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    894.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    864.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    891.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    936.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    972.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    999.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1017.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1027.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1030.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1025.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1011.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    991.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    967.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    939.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    911.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    881.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    902.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    942.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    973.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    996.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1012.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1019.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1019.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (   1010.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    996.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    975.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    951.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    925.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    897.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    868.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    896.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    925.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    945.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    957.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    963.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    957.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    944.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    925.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    902.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    876.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    865.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    898.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    923.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    941.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    951.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    956.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    944.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    930.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    910.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    887.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    862.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    870.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    900.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    922.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    937.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    945.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    947.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    942.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    932.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    916.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    896.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    874.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    862.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    874.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    880.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    881.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    878.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    870.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    869.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    874.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (    869.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    864.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
WARNING --- ROUTED OUTFLOW (    868.) IS GREATER THAN MAXIMUM OUTFLOW (    860.) IN STORAGE-OUTFLOW TABLE
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WARNING --- ROUTED OUTFLOW (866.) IS GREATER THAN MAXIMUM OUTFLOW (860.) IN STORAGE-OUTFLOW TABLE

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	1	1573.	12.50	222.	61.	30.	1.94		
+	ROUTED TO	RCP1	1386.	12.83	222.	61.	30.	1.94		
+	HYDROGRAPH AT	2	1339.	12.75	237.	66.	32.	1.82		
+	2 COMBINED AT	CP2	2657.	12.75	456.	126.	61.	3.76		
+	ROUTED TO	RCP2	2458.	12.92	455.	126.	61.	3.76		
+	HYDROGRAPH AT	3A	313.	12.33	31.	8.	4.	.29		
+	ROUTED TO	RCP3A	250.	12.50	31.	8.	4.	.29		
+	HYDROGRAPH AT	3	863.	12.33	89.	22.	11.	.81		
+	2 COMBINED AT	I1CP3	1048.	12.42	119.	30.	14.	1.10		
+	2 COMBINED AT	CP3	2655.	12.92	571.	155.	75.	4.86		
+	DIVERSION TO	DI189	548.	12.92	54.	14.	7.	4.86		
+	HYDROGRAPH AT	D3	2107.	12.92	517.	141.	68.	4.86		
+	ROUTED TO	RCP3	2038.	13.08	517.	141.	68.	4.86		
+	HYDROGRAPH AT	4	396.	12.25	36.	10.	5.	.30		
+	HYDROGRAPH AT	5	927.	12.25	86.	23.	11.	.72		
+	2 COMBINED AT	CP5	1315.	12.25	121.	33.	16.	1.02		
+	ROUTED TO	RCP5	1312.	12.25	121.	33.	16.	1.02		
+	HYDROGRAPH AT	6	746.	12.08	52.	14.	7.	.45		
+	2 COMBINED AT	CP6	1854.	12.17	172.	47.	23.	1.47		
+	ROUTED TO	RCP6	1784.	12.17	172.	47.	23.	1.47		
+	HYDROGRAPH AT	7	494.	12.08	36.	10.	5.	.31		
+	2 COMBINED AT	CP7	2245.	12.17	206.	57.	27.	1.78		

+	ROUTED TO	RCP7	1947.	12.33	206.	57.	27.	1.78
+	HYDROGRAPH AT	9	1402.	12.33	161.	44.	21.	1.40
+	2 COMBINED AT	I1CP9	3324.	12.33	364.	100.	48.	3.18
+	HYDROGRAPH AT	8	890.	12.33	93.	26.	12.	.81
+	2 COMBINED AT	CP9	4190.	12.33	455.	125.	60.	3.99
+	ROUTED TO	RCP9	3543.	12.75	454.	125.	60.	3.99
+	HYDROGRAPH AT	10	1357.	12.75	237.	62.	30.	2.02
+	2 COMBINED AT	I1CP10	4868.	12.75	686.	185.	89.	6.01
+	2 COMBINED AT	CP10	6522.	12.75	1189.	323.	156.	10.87
+	DIVERSION TO	1DI188	958.	12.75	174.	47.	23.	10.87
+	HYDROGRAPH AT	1D10	5564.	12.75	1014.	276.	133.	10.87
+	DIVERSION TO	2DI188	1596.	12.75	215.	54.	26.	10.87
+	HYDROGRAPH AT	2D10	3968.	12.75	799.	222.	107.	10.87
+	ROUTED TO	RCP10	3822.	12.83	799.	222.	107.	10.87
+	HYDROGRAPH AT	12	1214.	12.50	167.	43.	21.	1.38
+	2 COMBINED AT	CP12	4459.	12.83	953.	261.	126.	12.25
+	ROUTED TO	RCP12	4085.	13.00	952.	261.	126.	12.25
+	HYDROGRAPH AT	11	1559.	12.42	202.	54.	26.	1.56
+	ROUTED TO	RCP11	1268.	12.75	201.	54.	26.	1.56
+	HYDROGRAPH AT	13	1223.	12.42	145.	36.	17.	1.30
+	2 COMBINED AT	CP13	2062.	12.58	344.	89.	43.	2.86
+	ROUTED TO	RCP13	2035.	12.67	344.	89.	43.	2.86
+	HYDROGRAPH AT	14	1548.	12.33	173.	47.	23.	1.47
+	ROUTED TO	RCP14	1392.	12.58	173.	47.	23.	1.47
+	HYDROGRAPH AT	15	1272.	12.42	149.	40.	19.	1.26
	2 COMBINED AT							

+		I1CP15	2485.	12.50	319.	86.	42.	2.73
+	HYDROGRAPH AT	16	1206.	12.42	149.	41.	20.	1.13
+	ROUTED TO	SR16	0.	.00	0.	0.	0.	1.13
+	2 COMBINED AT	CP15	2485.	12.50	319.	86.	42.	3.90
+	ROUTED TO	RCP15	2108.	12.75	318.	86.	41.	3.90
+	HYDROGRAPH AT	17	1036.	12.33	108.	27.	13.	1.07
+	2 COMBINED AT	I1CP17	2480.	12.67	423.	112.	54.	4.97
+	2 COMBINED AT	CP17	4474.	12.67	761.	200.	96.	7.83
+	ROUTED TO	RCP17	4407.	12.75	761.	200.	96.	7.83
+	HYDROGRAPH AT	WT3	383.	12.50	50.	13.	6.	.44
+	2 COMBINED AT	I1CWT3	4657.	12.75	809.	212.	102.	8.27
+	2 COMBINED AT	CPWT3	7618.	12.92	1684.	453.	218.	20.52
+	ROUTED TO	SRWT3	0.	.00	0.	0.	0.	20.52
+	HYDROGRAPH AT	116	872.	12.33	111.	33.	16.	.66
+	DIVERSION TO	116RET	872.	12.33	93.	25.	12.	.66
+	HYDROGRAPH AT	116OUT	233.	12.67	27.	8.	4.	.66
+	ROUTED TO	R116	110.	13.17	26.	8.	4.	.66
+	HYDROGRAPH AT	117	920.	12.58	158.	47.	23.	.92
+	DIVERSION TO	117RET	920.	12.58	130.	35.	17.	.92
+	HYDROGRAPH AT	117OUT	364.	13.08	41.	12.	6.	.92
+	2 COMBINED AT	CP117	454.	13.08	65.	20.	10.	1.65
+	ROUTED TO	R117	248.	13.67	62.	20.	10.	1.65
+	HYDROGRAPH AT	123	320.	13.00	69.	17.	8.	.44
+	DIVERSION TO	DI134	0.	.00	0.	0.	0.	.44
+	HYDROGRAPH AT	D123	320.	13.00	69.	17.	8.	.44
+	ROUTED TO	R123	293.	13.33	69.	17.	8.	.44

+	HYDROGRAPH AT	124	331.	13.33	89.	22.	11.	.57
+	2 COMBINED AT	CP124	618.	13.33	156.	39.	19.	1.65
+	DIVERSION TO	DI136	296.	13.33	81.	20.	10.	1.65
+	HYDROGRAPH AT	1D124	323.	13.33	76.	19.	9.	1.65
+	DIVERSION TO	DI135	131.	13.33	23.	6.	3.	1.65
+	HYDROGRAPH AT	2D124	191.	13.33	52.	13.	6.	1.65
+	ROUTED TO	R124	178.	13.83	52.	13.	6.	1.65
+	HYDROGRAPH AT	125	934.	12.50	118.	29.	14.	1.00
+	2 COMBINED AT	1I125	930.	12.50	169.	42.	20.	2.01
+	2 COMBINED AT	CP125	924.	12.50	222.	61.	29.	3.66
+	DIVERSION TO	DI137	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	1D125	616.	12.50	148.	41.	20.	3.66
+	DIVERSION TO	DI138	308.	12.50	74.	21.	10.	3.66
+	HYDROGRAPH AT	2D125	309.	12.50	74.	20.	10.	3.66
+	ROUTED TO	R125	273.	12.75	73.	20.	10.	3.66
+	HYDROGRAPH AT	118	326.	12.08	42.	14.	7.	.16
+	DIVERSION TO	118RET	321.	12.08	25.	7.	4.	.16
+	HYDROGRAPH AT	118OUT	253.	12.17	23.	7.	3.	.16
+	ROUTED TO	R118	72.	13.83	21.	7.	3.	.16
+	HYDROGRAPH AT	126	1038.	12.50	159.	47.	23.	.95
+	DIVERSION TO	126RET	1038.	12.50	121.	32.	15.	.95
+	HYDROGRAPH AT	126OUT	522.	12.83	51.	15.	7.	.95
+	2 COMBINED AT	1I126	522.	12.83	70.	21.	10.	1.11
+	2 COMBINED AT	CP126	776.	12.83	139.	41.	20.	4.75
+	DIVERSION TO	DI139	776.	12.83	139.	41.	20.	4.75

+	HYDROGRAPH AT	D126	0.	.00	0.	0.	0.	4.75
+	ROUTED TO	R126	0.	.00	0.	0.	0.	4.75
+	HYDROGRAPH AT	100A	173.	12.50	23.	6.	3.	.18
+	ROUTED TO	R100A	145.	13.08	23.	6.	3.	.18
+	HYDROGRAPH AT	102A	462.	12.50	60.	15.	7.	.51
+	2 COMBINED AT	1I102A	462.	12.50	83.	21.	10.	.69
+	HYDROGRAPH AT	101	215.	12.25	20.	5.	2.	.16
+	ROUTED TO	R101	211.	12.25	20.	5.	2.	.16
+	2 COMBINED AT	CP102A	597.	12.42	102.	25.	12.	.75
+	DIVERSION TO	102ART	597.	12.42	61.	15.	7.	.75
+	HYDROGRAPH AT	102AOT	372.	12.83	41.	10.	5.	.75
+	ROUTED TO	R102A	265.	13.42	41.	10.	5.	.75
+	HYDROGRAPH AT	106	712.	12.50	96.	24.	11.	.77
+	DIVERSION TO	106RET	712.	12.50	66.	17.	8.	.77
+	HYDROGRAPH AT	106OUT	413.	12.83	29.	7.	4.	.77
+	2 COMBINED AT	CP106	409.	12.83	68.	17.	8.	1.70
+	ROUTED TO	R106	281.	13.83	67.	17.	8.	1.70
+	HYDROGRAPH AT	105	306.	12.25	27.	7.	3.	.21
+	ROUTED TO	R105	264.	12.42	27.	7.	3.	.21
+	HYDROGRAPH AT	112	846.	12.25	99.	29.	14.	.63
+	DIVERSION TO	112RET	846.	12.25	83.	22.	11.	.63
+	HYDROGRAPH AT	112OUT	241.	12.67	23.	7.	3.	.63
+	2 COMBINED AT	CP112	393.	12.67	48.	13.	6.	.82
+	DIVERSION TO	DI120	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	1D112	263.	12.67	32.	9.	4.	.82
	DIVERSION TO							

+		1D121A	131.	12.67	16.	4.	2.	.82
+	HYDROGRAPH AT	2D112	132.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	77.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	113A	772.	12.25	92.	27.	13.	.50
+	DIVERSION TO	113ART	489.	12.08	33.	9.	5.	.50
+	HYDROGRAPH AT	113AOT	772.	12.25	67.	18.	9.	.50
+	2 COMBINED AT	CP113A	766.	12.25	81.	22.	11.	1.34
+	DIVERSION TO	2D121A	43.	12.25	1.	0.	0.	1.34
+	HYDROGRAPH AT	D113A	723.	12.25	80.	22.	10.	1.34
+	ROUTED TO	R113A	562.	12.50	78.	22.	10.	1.34
+	HYDROGRAPH AT	114	2117.	12.75	423.	125.	60.	2.47
+	DIVERSION TO	114RET	2117.	12.75	365.	97.	47.	2.47
+	HYDROGRAPH AT	114OUT	600.	13.42	92.	28.	13.	2.47
+	3 COMBINED AT	CP114	860.	13.50	225.	65.	31.	5.26
+	DIVERSION TO	DI122B	597.	13.50	107.	27.	13.	5.26
+	HYDROGRAPH AT	D114	263.	13.50	118.	38.	18.	5.26
+	ROUTED TO	R114	240.	14.00	116.	38.	18.	5.26
+	HYDROGRAPH AT	115	2122.	12.67	408.	121.	58.	2.40
+	DIVERSION TO	115RET	2122.	12.67	369.	99.	47.	2.40
+	HYDROGRAPH AT	115OUT	376.	13.58	71.	23.	11.	2.40
+	2 COMBINED AT	CP115	513.	13.58	180.	60.	29.	7.59
+	ROUTED TO	R115	428.	14.08	179.	60.	29.	7.59
+	HYDROGRAPH AT	122A	587.	12.25	76.	23.	11.	.38
+	DIVERSION TO	122ART	587.	12.25	57.	15.	7.	.38
+	HYDROGRAPH AT	122AOT	274.	12.50	26.	8.	4.	.38
+	2 COMBINED AT	1I122A	442.	14.08	195.	66.	32.	8.33

PLAN 3 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	1174.00	1209.00	1212.10
STORAGE	0.	3012.	4041.
OUTFLOW	0.	0.	18460.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	1199.08	.00	844.	0.	.00	.00	.00

PLAN 4 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	1174.00	1209.00	1212.10
STORAGE	0.	3012.	4041.
OUTFLOW	0.	0.	18460.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	1198.72	.00	800.	0.	.00	.00	.00

PLAN 5 .....

	INITIAL VALUE	SPILLWAY CREST	TOP OF DAM
ELEVATION	1174.00	1209.00	1212.10
STORAGE	0.	3012.	4041.
OUTFLOW	0.	0.	18460.

RATIO OF PMF	MAXIMUM RESERVOIR W.S.ELEV	MAXIMUM DEPTH OVER DAM	MAXIMUM STORAGE AC-FT	MAXIMUM OUTFLOW CFS	DURATION OVER TOP HOURS	TIME OF MAX OUTFLOW HOURS	TIME OF FAILURE HOURS
1.00	1198.42	.00	763.	0.	.00	.00	.00

*** NORMAL END OF HEC-1 ***

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                ROUTED TO
+                        R222      472.   15.83       266.       78.       39.     39.13
                HYDROGRAPH AT
+                         226     1426.   12.33       172.       49.       24.      1.18
                HYDROGRAPH AT
+                         201      379.   12.33        39.       10.        5.       .34
                2 COMBINED AT
+                       1I226     1796.   12.33       210.       59.       28.      1.50
                ROUTED TO
+                        R226     1516.   12.58       210.       58.       28.      1.50
                HYDROGRAPH AT
+                         223     1689.   12.42       313.      105.       51.      1.26
                2 COMBINED AT
+                       CP223     2678.   12.50       465.      146.       71.     54.67
                ROUTED TO
+                        R223     2482.   12.75       464.      146.       71.     54.67
                HYDROGRAPH AT
+                         224     1022.   12.33       111.       29.       14.       .80
                2 COMBINED AT
+                       CP224     2753.   12.67       559.      171.       83.     55.47
                ROUTED TO
+                        R224     2549.   13.00       558.      171.       83.     55.47
                HYDROGRAPH AT
+                         241     1380.   12.50       169.       42.       20.      1.51
                2 COMBINED AT
+                       1I241     2816.   12.92       699.      206.      100.     56.98
                2 COMBINED AT
+                       2I241     2832.   12.92       925.      281.      137.     59.77
                2 COMBINED AT
+                       CP241     3142.   13.00      1278.      436.      214.     78.75
                ROUTED TO
+                       SR241     3135.   13.00      1277.      436.      214.     78.75
1                   SUMMARY OF DAM OVERTOPPING/BREACH ANALYSIS FOR STATION    SRWT3
                  (PEAKS SHOWN ARE FOR INTERNAL TIME STEP USED  DURING BREACH  FORMATION)

PLAN  1 ..............                    INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION          1174.00           1209.00          1212.10
                          STORAGE                 0.              3012.             4041.
                          OUTFLOW                 0.                 0.            18460.

                RATIO     MAXIMUM      MAXIMUM    MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                  OF     RESERVOIR     DEPTH     STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                 PMF     W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS      HOURS

                 1.00     1200.41        .00      1034.        0.        .00          .00        .00

PLAN  2 ..............                    INITIAL VALUE     SPILLWAY CREST     TOP OF DAM
                          ELEVATION          1174.00           1209.00          1212.10
                          STORAGE                 0.              3012.             4041.
                          OUTFLOW                 0.                 0.            18460.

                RATIO     MAXIMUM      MAXIMUM    MAXIMUM    MAXIMUM    DURATION    TIME OF     TIME OF
                  OF     RESERVOIR     DEPTH     STORAGE    OUTFLOW    OVER TOP   MAX OUTFLOW  FAILURE
                 PMF     W.S.ELEV    OVER DAM     AC-FT       CFS       HOURS        HOURS      HOURS

                 1.00     1199.90        .00       946.        0.        .00          .00        .00
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								LABCARQ
+		2D251	1285.	15.92	698.	180.	87.	31.76
+	HYDROGRAPH AT	1D239	578.	15.92	496.	182.	88.	31.76
+	DIVERSION TO	DI252	148.	15.92	101.	26.	12.	31.76
+	HYDROGRAPH AT	2D239	430.	15.92	395.	156.	75.	31.76
+	ROUTED TO	R239	429.	16.42	395.	156.	75.	31.76
+	HYDROGRAPH AT	240	266.	13.00	54.	14.	6.	.40
+	2 COMBINED AT	CP240	544.	13.00	424.	168.	81.	32.16
+	ROUTED TO	R240	529.	13.33	423.	168.	81.	32.16
+	HYDROGRAPH AT	213	335.	12.50	41.	10.	5.	.35
+	ROUTED TO	R213	193.	13.42	40.	10.	5.	.35
+	HYDROGRAPH AT	212	268.	13.42	74.	18.	9.	.54
+	ROUTED TO	SR212	187.	13.83	46.	12.	6.	.54
+	2 COMBINED AT	CP212	289.	13.75	74.	18.	9.	37.23
+	ROUTED TO	R212	247.	14.75	71.	18.	9.	37.23
+	HYDROGRAPH AT	1D193	68.	14.00	13.	3.	2.	13.38
+	ROUTED TO	R193	9.	25.83	8.	3.	2.	13.38
+	HYDROGRAPH AT	211	300.	13.08	67.	17.	8.	.49
+	2 COMBINED AT	CP211	287.	13.08	64.	19.	9.	13.87
+	ROUTED TO	R211	203.	14.33	63.	19.	9.	13.87
+	HYDROGRAPH AT	221A	172.	13.25	43.	11.	5.	.31
+	2 COMBINED AT	1I221A	266.	14.17	106.	31.	15.	.80
+	ROUTED TO	SR221A	261.	14.33	91.	27.	13.	.80
+	2 COMBINED AT	CP221A	451.	14.67	150.	41.	20.	38.03
+	ROUTED TO	R221A	417.	15.17	147.	41.	20.	38.03
+	HYDROGRAPH AT	222	493.	13.58	156.	44.	21.	1.10
+	2 COMBINED AT	CP222	499.	15.08	270.	78.	39.	39.13

+	HYDROGRAPH AT	2D238	893.	15.33	630.	191.	92.	30.34
+	ROUTED TO	R238	876.	15.75	629.	191.	92.	30.34
+	HYDROGRAPH AT	2D192	0.	.00	0.	0.	0.	13.38
+	ROUTED TO	R192	0.	.00	0.	0.	0.	13.38
+	HYDROGRAPH AT	210	283.	13.08	61.	15.	7.	.46
+	2 COMBINED AT	1I210	270.	13.08	59.	15.	7.	13.64
+	HYDROGRAPH AT	2D209	136.	14.17	42.	11.	5.	16.18
+	ROUTED TO	R209	131.	14.50	42.	11.	5.	16.18
+	2 COMBINED AT	CP210	277.	13.08	100.	25.	12.	16.58
+	ROUTED TO	R210	246.	13.92	100.	25.	12.	16.58
+	HYDROGRAPH AT	1D209	349.	14.17	128.	33.	16.	16.18
+	ROUTED TO	R209	317.	15.58	117.	33.	16.	16.18
+	HYDROGRAPH AT	221	292.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I221	322.	15.58	157.	48.	23.	16.66
+	2 COMBINED AT	2I221	454.	15.50	255.	73.	35.	17.06
+	HYDROGRAPH AT	2D220	249.	14.67	90.	23.	11.	30.71
+	ROUTED TO	R220	242.	15.00	89.	23.	11.	30.71
+	2 COMBINED AT	CP221	579.	15.42	326.	91.	44.	31.65
+	ROUTED TO	R221	536.	16.58	325.	91.	44.	31.65
+	HYDROGRAPH AT	1D220	600.	14.67	256.	65.	31.	30.71
+	ROUTED TO	R220	577.	16.00	237.	65.	31.	30.71
+	HYDROGRAPH AT	239	300.	13.08	66.	17.	8.	.48
+	2 COMBINED AT	1I239	594.	15.92	263.	83.	40.	18.65
+	2 COMBINED AT	2I239	1109.	16.33	596.	179.	86.	19.59
+	2 COMBINED AT	CP239	1863.	15.92	1195.	362.	174.	31.76
	DIVERSION TO							

+	DIVERSION TO	2D210	136.	14.17	42.	11.	5.	16.18
+	HYDROGRAPH AT	2D209	315.	14.17	101.	25.	12.	16.18
+	ROUTED TO	R209	299.	14.67	101.	25.	12.	16.18
+	HYDROGRAPH AT	1D209A	554.	13.67	173.	44.	21.	14.68
+	ROUTED TO	R209A	530.	14.58	172.	44.	21.	14.68
+	HYDROGRAPH AT	220	281.	13.08	62.	15.	7.	.50
+	2 COMBINED AT	1I220	557.	14.50	228.	58.	28.	15.18
+	2 COMBINED AT	2I220	844.	14.58	327.	83.	40.	16.68
+	HYDROGRAPH AT	2D219	130.	14.75	52.	13.	6.	29.21
+	ROUTED TO	R219	127.	14.92	52.	13.	6.	29.21
+	2 COMBINED AT	CP220	898.	14.67	360.	92.	44.	30.71
+	DIVERSION TO	DI239	600.	14.67	256.	65.	31.	30.71
+	HYDROGRAPH AT	1D220	298.	14.67	104.	26.	13.	30.71
+	DIVERSION TO	2D221	249.	14.67	90.	23.	11.	30.71
+	HYDROGRAPH AT	2D220	49.	14.67	14.	4.	2.	30.71
+	ROUTED TO	R220	40.	15.75	14.	4.	2.	30.71
+	HYDROGRAPH AT	1D219	756.	14.75	343.	99.	47.	29.21
+	ROUTED TO	R219	697.	15.33	340.	99.	47.	29.21
+	HYDROGRAPH AT	238	301.	13.17	69.	17.	8.	.50
+	2 COMBINED AT	1I238	729.	15.33	393.	118.	57.	17.17
+	2 COMBINED AT	2I238	758.	15.33	406.	121.	58.	18.67
+	2 COMBINED AT	CP238	1053.	15.33	682.	204.	98.	30.34
+	DIVERSION TO	2D250A	42.	15.33	14.	3.	2.	30.34
+	HYDROGRAPH AT	1D238	1011.	15.33	669.	201.	97.	30.34
+	DIVERSION TO	1D251	118.	15.33	38.	10.	5.	30.34

+		CP219	1083.	14.75	476.	133.	64.	29.21
+	DIVERSION TO	DI238	756.	14.75	343.	99.	47.	29.21
+	HYDROGRAPH AT	1D219	314.	14.75	127.	32.	16.	29.21
+	DIVERSION TO	2D220	130.	14.75	52.	13.	6.	29.21
+	HYDROGRAPH AT	2D219	184.	14.75	75.	19.	9.	29.21
+	ROUTED TO	R219	167.	15.58	74.	19.	9.	29.21
+	HYDROGRAPH AT	1D218	302.	13.25	130.	33.	16.	28.21
+	ROUTED TO	R218	290.	14.50	126.	33.	16.	28.21
+	HYDROGRAPH AT	237	280.	13.25	68.	17.	8.	.50
+	2 COMBINED AT	1I237	397.	14.00	187.	51.	24.	16.17
+	2 COMBINED AT	2I237	420.	14.75	253.	71.	34.	17.17
+	2 COMBINED AT	CP237	856.	14.08	490.	136.	66.	27.84
+	DIVERSION TO	2D250	226.	14.08	75.	19.	9.	27.84
+	HYDROGRAPH AT	1D237	629.	14.08	415.	118.	57.	27.84
+	DIVERSION TO	1D250A	267.	14.08	124.	31.	15.	27.84
+	HYDROGRAPH AT	2D237	362.	14.08	291.	86.	42.	27.84
+	ROUTED TO	R237	361.	14.17	290.	86.	42.	27.84
+	HYDROGRAPH AT	1D192	659.	13.83	149.	38.	18.	13.38
+	ROUTED TO	R192	548.	14.25	149.	38.	18.	13.38
+	HYDROGRAPH AT	209	308.	13.08	66.	16.	8.	.50
+	2 COMBINED AT	1I209	586.	14.25	211.	53.	26.	13.68
+	HYDROGRAPH AT	2D209A	248.	13.67	67.	17.	8.	14.68
+	ROUTED TO	R209A	244.	14.08	67.	17.	8.	14.68
+	2 COMBINED AT	CP209	800.	14.17	272.	69.	33.	16.18
+	DIVERSION TO	1D221	349.	14.17	128.	33.	16.	16.18
+	HYDROGRAPH AT	1D209	451.	14.17	144.	36.	17.	16.18

+	ROUTED TO	R218	122.	14.17	39.	10.	5.	28.21
+	HYDROGRAPH AT	236	516.	13.25	128.	32.	15.	1.00
+	2 COMBINED AT	1I236	578.	13.33	163.	41.	20.	16.67
+	2 COMBINED AT	CP236	1176.	14.00	449.	119.	57.	26.34
+	DIVERSION TO	DI249	308.	14.00	81.	20.	10.	26.34
+	HYDROGRAPH AT	1D236	868.	14.00	368.	99.	47.	26.34
+	DIVERSION TO	1D250	387.	14.00	121.	30.	15.	26.34
+	HYDROGRAPH AT	2D236	481.	14.00	247.	68.	33.	26.34
+	ROUTED TO	R236	478.	14.17	247.	68.	33.	26.34
+	HYDROGRAPH AT	209A	276.	13.08	60.	15.	7.	.50
+	HYDROGRAPH AT	1D208	1365.	13.58	378.	95.	46.	14.18
+	ROUTED TO	R208	1352.	13.75	377.	95.	46.	14.18
+	2 COMBINED AT	CP209A	1479.	13.67	433.	109.	52.	14.68
+	DIVERSION TO	1D220	554.	13.67	173.	44.	21.	14.68
+	HYDROGRAPH AT	1D209A	925.	13.67	260.	65.	31.	14.68
+	DIVERSION TO	2D209	248.	13.67	67.	17.	8.	14.68
+	HYDROGRAPH AT	2D209A	677.	13.67	193.	49.	23.	14.68
+	ROUTED TO	R209A	663.	14.17	193.	49.	23.	14.68
+	HYDROGRAPH AT	2D208	597.	13.58	275.	70.	34.	14.18
+	ROUTED TO	R208	584.	14.92	257.	70.	34.	14.18
+	HYDROGRAPH AT	219	278.	13.08	60.	15.	7.	.50
+	2 COMBINED AT	1I219	591.	14.92	284.	84.	41.	14.68
+	2 COMBINED AT	2I219	1070.	14.75	476.	133.	64.	15.18
+	HYDROGRAPH AT	2D218	39.	13.25	12.	3.	1.	28.21
+	ROUTED TO	R218	37.	14.50	12.	3.	1.	28.21
	2 COMBINED AT							

+	2 COMBINED AT	CP235	1956.	13.75	605.	156.	75.	16.04
+	DIVERSION TO	2D248	1030.	13.75	296.	74.	36.	16.04
+	HYDROGRAPH AT	D235	926.	13.75	309.	82.	40.	16.04
+	ROUTED TO	R235	889.	14.08	307.	82.	40.	16.04
+	HYDROGRAPH AT	D191	1339.	13.08	457.	115.	55.	12.38
+	ROUTED TO	R191	1339.	13.75	455.	115.	55.	12.38
+	HYDROGRAPH AT	208	530.	13.17	122.	31.	15.	1.00
+	2 COMBINED AT	1I208	1748.	13.33	568.	144.	69.	13.18
+	HYDROGRAPH AT	D207	391.	13.25	94.	24.	11.	1.00
+	ROUTED TO	R207	347.	13.75	94.	24.	11.	1.00
+	2 COMBINED AT	CP208	1969.	13.58	655.	166.	80.	14.18
+	DIVERSION TO	1D219	597.	13.58	275.	70.	34.	14.18
+	HYDROGRAPH AT	1D208	1372.	13.58	379.	96.	46.	14.18
+	DIVERSION TO	DI209A	1365.	13.58	378.	95.	46.	14.18
+	HYDROGRAPH AT	2D208	7.	13.58	2.	0.	0.	14.18
+	ROUTED TO	R208	7.	14.25	2.	0.	0.	14.18
+	HYDROGRAPH AT	218	498.	13.25	119.	30.	14.	1.00
+	2 COMBINED AT	1I218	476.	13.25	115.	29.	14.	15.18
+	HYDROGRAPH AT	D217	320.	13.42	80.	20.	10.	14.03
+	ROUTED TO	R217	291.	14.00	80.	20.	10.	14.03
+	2 COMBINED AT	CP218	468.	13.25	181.	46.	22.	28.21
+	DIVERSION TO	DI237	302.	13.25	130.	33.	16.	28.21
+	HYDROGRAPH AT	1D218	166.	13.25	51.	13.	6.	28.21
+	DIVERSION TO	2D219	39.	13.25	12.	3.	1.	28.21
+	HYDROGRAPH AT	2D218	127.	13.25	39.	10.	5.	28.21

+		D234	876.	13.17	311.	82.	40.	14.08
+	ROUTED TO	R234	828.	13.50	311.	82.	40.	14.08
+	HYDROGRAPH AT	207	508.	13.25	122.	31.	15.	1.00
+	DIVERSION TO	2D208	391.	13.25	94.	24.	11.	1.00
+	HYDROGRAPH AT	D207	117.	13.25	28.	7.	3.	1.00
+	ROUTED TO	R207	99.	13.92	28.	7.	3.	1.00
+	HYDROGRAPH AT	217	309.	13.00	66.	16.	8.	.49
+	HYDROGRAPH AT	1D216	76.	13.08	6.	1.	1.	13.58
+	2 COMBINED AT	2I216	372.	13.00	69.	17.	8.	12.54
+	HYDROGRAPH AT	2D216	106.	13.08	7.	2.	1.	13.58
+	2 COMBINED AT	3I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	3D216	0.	.00	0.	0.	0.	13.58
+	2 COMBINED AT	4I216	479.	13.08	76.	19.	9.	12.54
+	HYDROGRAPH AT	4D216	131.	13.08	12.	3.	1.	13.58
+	2 COMBINED AT	5I216	611.	13.08	89.	22.	11.	12.54
+	HYDROGRAPH AT	5D216	670.	13.08	122.	31.	15.	13.58
+	2 COMBINED AT	6I216	1286.	13.08	212.	53.	26.	12.54
+	HYDROGRAPH AT	6D216	445.	13.08	95.	24.	11.	13.58
+	2 COMBINED AT	7I216	1733.	13.08	308.	77.	37.	12.54
+	ROUTED TO	RD216	1379.	13.42	307.	77.	37.	12.54
+	2 COMBINED AT	CP217	1415.	13.42	330.	83.	40.	14.03
+	DIVERSION TO	DI218	320.	13.42	80.	20.	10.	14.03
+	HYDROGRAPH AT	D217	1096.	13.42	249.	62.	30.	14.03
+	ROUTED TO	R217	1063.	13.75	249.	62.	30.	14.03
+	HYDROGRAPH AT	235	243.	13.17	56.	14.	7.	.47
+	2 COMBINED AT	1I235	1269.	13.75	319.	80.	39.	1.96

+	HYDROGRAPH AT	3D216	642.	13.08	79.	20.	10.	13.58
+	HYDROGRAPH AT	3216I	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3DI183	448.	13.08	55.	14.	7.	13.58
+	3 COMBINED AT	4I216	1140.	13.08	144.	36.	17.	13.58
+	HYDROGRAPH AT	2D215	758.	13.58	244.	61.	29.	12.54
+	2 COMBINED AT	2I216	1872.	13.08	387.	97.	47.	13.58
+	HYDROGRAPH AT	3D215	0.	.00	0.	0.	0.	12.54
+	2 COMBINED AT	3I216	1872.	13.08	387.	97.	47.	13.58
+	DIVERSION TO	4DI217	131.	13.08	12.	3.	1.	13.58
+	HYDROGRAPH AT	4D216	1742.	13.08	375.	94.	45.	13.58
+	HYDROGRAPH AT	4D215	156.	13.58	51.	13.	6.	12.54
+	2 COMBINED AT	5I216	1894.	13.08	425.	106.	51.	13.58
+	HYDROGRAPH AT	4216I	50.	12.67	7.	2.	1.	.51
+	2 COMBINED AT	6I216	1944.	13.08	432.	108.	52.	13.58
+	DIVERSION TO	5DI217	670.	13.08	122.	31.	15.	13.58
+	HYDROGRAPH AT	5D216	1274.	13.08	309.	77.	37.	13.58
+	HYDROGRAPH AT	5216I	50.	12.75	4.	1.	0.	.51
+	2 COMBINED AT	7I216	1304.	13.08	313.	78.	38.	13.58
+	DIVERSION TO	6DI217	445.	13.08	95.	24.	11.	13.58
+	HYDROGRAPH AT	6D216	859.	13.08	218.	54.	26.	13.58
+	ROUTED TO	R216	846.	13.25	218.	54.	26.	13.58
+	HYDROGRAPH AT	234	280.	13.17	63.	16.	8.	.53
+	2 COMBINED AT	1I234	1155.	13.17	290.	72.	35.	1.04
+	2 COMBINED AT	CP234	1565.	13.17	467.	121.	58.	14.08
+	DIVERSION TO	1D248	689.	13.17	156.	39.	19.	14.08
	HYDROGRAPH AT							

+	DIVERSION TO	3OL216	50.	12.42	10.	3.	1.	.51
+	HYDROGRAPH AT	3D216I	151.	12.92	13.	3.	2.	.51
+	DIVERSION TO	4OL216	50.	12.67	7.	2.	1.	.51
+	HYDROGRAPH AT	4D216I	101.	12.92	6.	1.	1.	.51
+	DIVERSION TO	5OL216	50.	12.75	4.	1.	0.	.51
+	HYDROGRAPH AT	5D216I	51.	12.92	2.	0.	0.	.51
+	HYDROGRAPH AT	1D215	1190.	13.08	117.	29.	14.	12.54
+	DIVERSION TO	3D183	980.	13.08	96.	24.	12.	12.54
+	HYDROGRAPH AT	1DI186	210.	13.08	21.	5.	2.	12.54
+	2 COMBINED AT	1I216	207.	13.08	21.	5.	3.	13.58
+	DIVERSION TO	1DI217	76.	13.08	6.	1.	1.	13.58
+	HYDROGRAPH AT	1D216	131.	13.08	15.	4.	2.	13.58
+	HYDROGRAPH AT	1216I	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1DI183	980.	13.08	96.	24.	12.	12.54
+	3 COMBINED AT	2I216	1146.	13.08	129.	32.	15.	13.58
+	DIVERSION TO	4D183	825.	13.08	93.	23.	11.	13.58
+	HYDROGRAPH AT	2DI186	321.	13.08	36.	9.	4.	13.58
+	DIVERSION TO	2DI217	106.	13.08	7.	2.	1.	13.58
+	HYDROGRAPH AT	2D216	215.	13.08	29.	7.	3.	13.58
+	HYDROGRAPH AT	2216I	50.	12.25	13.	3.	2.	.51
+	HYDROGRAPH AT	2DI183	825.	13.08	93.	23.	11.	13.58
+	3 COMBINED AT	3I216	1090.	13.08	134.	34.	16.	13.58
+	DIVERSION TO	5D183	448.	13.08	55.	14.	7.	13.58
+	HYDROGRAPH AT	3DI186	642.	13.08	79.	20.	10.	13.58
+	DIVERSION TO	3DI217	0.	.00	0.	0.	0.	13.58

+		R207A	2423.	13.08	458.	118.	57.	11.58
+	HYDROGRAPH AT	214	196.	12.25	17.	4.	2.	.16
+	2 COMBINED AT	CP214	2423.	13.08	473.	122.	59.	11.74
+	ROUTED TO	R214	2377.	13.17	473.	122.	59.	11.74
+	HYDROGRAPH AT	215A	453.	12.42	49.	12.	6.	.45
+	ROUTED TO	R215A	436.	12.50	49.	12.	6.	.45
+	HYDROGRAPH AT	215	383.	12.33	40.	10.	5.	.35
+	2 COMBINED AT	1I215	793.	12.42	88.	22.	11.	.80
+	2 COMBINED AT	2I215	2432.	13.08	554.	142.	69.	12.54
+	DIVERSION TO	1DI216	1190.	13.08	117.	29.	14.	12.54
+	HYDROGRAPH AT	3I215	1289.	13.58	438.	113.	54.	12.54
+	DIVERSION TO	2DI216	758.	13.58	244.	61.	29.	12.54
+	HYDROGRAPH AT	4I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	3DI216	0.	.00	0.	0.	0.	12.54
+	HYDROGRAPH AT	5I215	531.	13.58	194.	52.	25.	12.54
+	DIVERSION TO	4DI216	156.	13.58	51.	13.	6.	12.54
+	HYDROGRAPH AT	CP215	376.	13.58	143.	40.	19.	12.54
+	ROUTED TO	R215	371.	12.83	143.	40.	19.	12.54
+	HYDROGRAPH AT	233	464.	12.42	52.	13.	6.	.50
+	2 COMBINED AT	CP233	722.	12.50	191.	52.	25.	13.04
+	ROUTED TO	R233	631.	12.75	191.	52.	25.	13.04
+	HYDROGRAPH AT	216	301.	12.92	56.	14.	7.	.51
+	DIVERSION TO	1OL216	50.	12.08	20.	5.	2.	.51
+	HYDROGRAPH AT	1D216I	251.	12.92	36.	9.	4.	.51
+	DIVERSION TO	2OL216	50.	12.25	13.	3.	2.	.51
+	HYDROGRAPH AT	2D216I	201.	12.92	23.	6.	3.	.51

	ROUTED TO							
+		R196	1480.	18.25	1219.	572.	281.	51.58
	HYDROGRAPH AT							
+		202	235.	13.42	66.	16.	8.	.48
	2 COMBINED AT							
+		CP202	1480.	18.25	1221.	586.	288.	52.06
	ROUTED TO							
+		R202	1477.	18.33	1220.	585.	288.	52.06
	2 COMBINED AT							
+		CP204	2295.	17.50	1922.	905.	448.	57.76
	ROUTED TO							
+		R204	2294.	17.58	1922.	905.	448.	57.76
	HYDROGRAPH AT							
+		205	112.	12.08	6.	2.	1.	.06
	2 COMBINED AT							
+		CP205	2294.	17.58	1922.	906.	449.	57.82
	ROUTED TO							
+		R205	0.	.00	0.	0.	0.	57.82
	HYDROGRAPH AT							
+		206	182.	12.17	13.	3.	2.	.12
	2 COMBINED AT							
+		CP206	153.	12.17	11.	3.	1.	58.31
	2 COMBINED AT							
+		RCP206	1406.	15.00	785.	303.	149.	68.69
	ROUTED TO							
+		RR206	1020.	15.75	701.	276.	136.	68.69
	HYDROGRAPH AT							
+		228A	129.	12.08	10.	3.	1.	.08
	2 COMBINED AT							
+		AFR2K	1020.	15.75	701.	278.	137.	68.77
	ROUTED TO							
+		R228A	962.	17.50	691.	277.	137.	68.77
	HYDROGRAPH AT							
+		1D10	958.	12.75	174.	47.	23.	10.87
	HYDROGRAPH AT							
+		2D10	1596.	12.75	215.	54.	26.	10.87
	2 COMBINED AT							
+		1I188	2551.	12.75	389.	101.	49.	11.08
	ROUTED TO							
+		R10	2512.	12.83	389.	101.	49.	11.08
	HYDROGRAPH AT							
+		188	256.	12.25	21.	5.	3.	.19
	2 COMBINED AT							
+		CP188	2517.	12.83	409.	106.	51.	11.08
	ROUTED TO							
+		R188	2435.	13.00	409.	106.	51.	11.08
	HYDROGRAPH AT							
+		207A	497.	12.42	53.	13.	6.	.50
	2 COMBINED AT							
+		CP207A	2469.	13.00	458.	118.	57.	11.58
	ROUTED TO							

+	ROUTED TO	R193	916.	14.75	499.	130.	63.	39.17
+	HYDROGRAPH AT	2D179	222.	14.00	144.	37.	18.	25.34
+	ROUTED TO	R179	152.	18.42	111.	37.	18.	25.34
+	HYDROGRAPH AT	194A	210.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	CP194A	192.	12.75	111.	45.	22.	36.84
+	HYDROGRAPH AT	194B	206.	12.75	35.	9.	4.	.25
+	3 COMBINED AT	CP194B	921.	14.75	584.	183.	88.	36.84
+	ROUTED TO	SR194B	284.	18.67	267.	176.	88.	36.84
+	ROUTED TO	R194B	284.	18.75	267.	176.	88.	36.84
+	HYDROGRAPH AT	194C	707.	13.42	122.	30.	15.	.49
+	2 COMBINED AT	CP194C	748.	13.42	290.	202.	101.	37.33
+	ROUTED TO	R194C	720.	13.58	288.	202.	101.	37.33
+	HYDROGRAPH AT	D180	1003.	16.50	761.	236.	113.	30.29
+	ROUTED TO	R180	983.	17.92	736.	235.	113.	30.29
+	HYDROGRAPH AT	195	239.	13.50	67.	17.	8.	.49
+	2 COMBINED AT	1I195	978.	17.92	736.	249.	120.	33.41
+	HYDROGRAPH AT	D181	240.	12.92	156.	50.	24.	30.66
+	ROUTED TO	R181	219.	13.17	155.	50.	24.	30.66
+	3 COMBINED AT	CP195	1360.	18.00	1083.	492.	241.	41.02
+	ROUTED TO	R195	1359.	18.00	1081.	492.	241.	41.02
+	HYDROGRAPH AT	D182	295.	14.17	196.	81.	39.	38.46
+	ROUTED TO	R182	288.	15.00	195.	80.	39.	38.46
+	HYDROGRAPH AT	196	284.	13.00	61.	16.	7.	.47
+	2 COMBINED AT	1I196	296.	15.00	208.	93.	46.	38.90
+	2 COMBINED AT	CP196	1483.	18.08	1221.	573.	281.	51.58

+	1I191	1559.	13.33	396.	99.	48.	11.39
+ HYDROGRAPH AT	191	545.	13.25	131.	33.	16.	.99
+ 2 COMBINED AT	CP191	2050.	13.25	518.	130.	63.	12.38
+ DIVERSION TO	1D208	1339.	13.08	457.	115.	55.	12.38
+ HYDROGRAPH AT	D191	711.	13.25	62.	15.	7.	12.38
+ ROUTED TO	R191	622.	13.58	62.	15.	7.	12.38
+ HYDROGRAPH AT	192A	327.	12.83	61.	16.	8.	.50
+ DIVERSION TO	192ART	146.	12.33	10.	3.	1.	.50
+ HYDROGRAPH AT	192AOT	327.	12.83	52.	13.	6.	.50
+ 2 COMBINED AT	CP192A	704.	13.58	110.	28.	13.	12.68
+ ROUTED TO	R192A	665.	13.83	110.	28.	13.	12.68
+ HYDROGRAPH AT	192	282.	13.08	60.	15.	7.	.50
+ 2 COMBINED AT	CP192	747.	13.83	166.	42.	20.	13.38
+ DIVERSION TO	1D209	659.	13.83	149.	38.	18.	13.38
+ HYDROGRAPH AT	1D192	88.	13.83	17.	4.	2.	13.38
+ DIVERSION TO	1D210	0.	.00	0.	0.	0.	13.38
+ HYDROGRAPH AT	2D192	88.	13.83	17.	4.	2.	13.38
+ ROUTED TO	R192	85.	14.00	17.	4.	2.	13.38
+ DIVERSION TO	DI211	68.	14.00	13.	3.	2.	13.38
+ HYDROGRAPH AT	1D193	17.	14.00	3.	1.	0.	13.38
+ ROUTED TO	R192	16.	14.25	3.	1.	0.	13.38
+ HYDROGRAPH AT	193	502.	13.25	121.	30.	15.	.91
+ 2 COMBINED AT	1I193	484.	13.25	119.	30.	14.	14.29
+ HYDROGRAPH AT	1D179	891.	14.00	423.	106.	51.	25.34
+ ROUTED TO	R179	868.	14.50	422.	106.	51.	25.34
+ 2 COMBINED AT	CP193	926.	14.42	499.	130.	63.	39.17

+	ROUTED TO	R174	351.	12.83	51.	13.	6.	.45
+	HYDROGRAPH AT	175	354.	12.25	32.	8.	4.	.28
+	DIVERSION TO	DI175A	354.	12.25	32.	8.	4.	.28
+	HYDROGRAPH AT	D175	0.	.00	0.	0.	0.	.28
+	ROUTED TO	R175	0.	.00	0.	0.	0.	.28
+	HYDROGRAPH AT	176	635.	12.42	71.	18.	9.	.67
+	2 COMBINED AT	1I176	633.	12.42	71.	18.	8.	.95
+	2 COMBINED AT	CP176	708.	12.50	121.	30.	14.	1.40
+	ROUTED TO	R176	618.	12.92	121.	30.	14.	1.40
+	HYDROGRAPH AT	D175	354.	12.25	32.	8.	4.	.28
+	ROUTED TO	R175	322.	12.42	32.	8.	4.	.28
+	HYDROGRAPH AT	175A	417.	12.50	50.	13.	6.	.47
+	2 COMBINED AT	CP175A	721.	12.42	82.	20.	10.	.75
+	ROUTED TO	R175A	683.	12.67	82.	20.	10.	.75
+	HYDROGRAPH AT	CP3	548.	12.92	54.	14.	7.	4.86
+	ROUTED TO	R3	372.	13.42	54.	14.	7.	4.86
+	2 COMBINED AT	1I189	683.	12.67	140.	35.	17.	5.81
+	HYDROGRAPH AT	189	514.	12.42	56.	14.	7.	.51
+	2 COMBINED AT	CP189	954.	12.58	188.	47.	23.	6.32
+	ROUTED TO	R189	796.	13.17	187.	47.	23.	6.32
+	HYDROGRAPH AT	190	534.	12.92	101.	25.	12.	.86
+	2 COMBINED AT	CP190	1224.	13.08	286.	72.	34.	7.18
+	ROUTED TO	R190	1152.	13.33	285.	72.	34.	7.18
+	HYDROGRAPH AT	D176A	0.	.00	0.	0.	0.	3.09
+	ROUTED TO	R176A	0.	.00	0.	0.	0.	3.09
	3 COMBINED AT							

+	HYDROGRAPH AT	185	443.	13.08	97.	24.	12.	.69
+	2 COMBINED AT	1I185	466.	13.58	149.	38.	18.	.98
+	2 COMBINED AT	CP185	486.	13.67	246.	84.	41.	44.55
+	ROUTED TO	R185	370.	15.33	225.	83.	41.	44.55
+	HYDROGRAPH AT	2D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	423.	17.00	262.	99.	49.	41.09
+	HYDROGRAPH AT	198	547.	13.08	129.	36.	17.	.90
+	DIVERSION TO	198RET	265.	12.50	26.	7.	4.	.90
+	HYDROGRAPH AT	198OUT	547.	13.08	109.	28.	14.	.90
+	2 COMBINED AT	1I198	485.	13.08	266.	121.	61.	41.97
+	2 COMBINED AT	2I198	686.	16.83	454.	204.	101.	42.95
+	HYDROGRAPH AT	1D184	434.	15.25	270.	102.	49.	41.09
+	ROUTED TO	R184	425.	16.17	268.	101.	49.	41.09
+	HYDROGRAPH AT	197	468.	13.50	133.	33.	16.	1.00
+	2 COMBINED AT	CP197	435.	16.17	319.	130.	64.	42.06
+	ROUTED TO	R197	431.	16.58	317.	129.	63.	42.06
+	HYDROGRAPH AT	203	145.	12.25	13.	3.	2.	.11
+	DIVERSION TO	203RET	145.	12.25	13.	3.	2.	.11
+	HYDROGRAPH AT	203OUT	0.	.00	0.	0.	0.	.11
+	2 COMBINED AT	CP203	431.	16.58	317.	129.	63.	42.17
+	2 COMBINED AT	CP198	1111.	16.75	745.	332.	164.	44.06
+	ROUTED TO	R198	1108.	16.92	745.	331.	164.	44.06
+	HYDROGRAPH AT	204	366.	12.25	31.	8.	4.	.27
+	2 COMBINED AT	1I204	1108.	16.92	744.	336.	167.	44.33
+	HYDROGRAPH AT	174	572.	12.25	51.	13.	6.	.45

+		R183	592.	15.42	339.	113.	54.	27.07
+	HYDROGRAPH AT	184	465.	13.17	106.	27.	13.	.79
+	2 COMBINED AT	1I184	602.	15.42	354.	136.	66.	27.86
+	2 COMBINED AT	2I184	846.	15.42	513.	207.	101.	40.32
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01
+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	155	255.	12.75	51.	13.	6.	.26
+	2 COMBINED AT	CP155	237.	12.75	47.	12.	6.	24.27
+	ROUTED TO	R155	187.	13.92	47.	12.	6.	24.27
+	HYDROGRAPH AT	D152	0.	.00	0.	0.	0.	24.01
+	ROUTED TO	R152	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	169	384.	13.17	100.	25.	12.	.51
+	2 COMBINED AT	1I169	358.	13.17	92.	23.	11.	24.52
+	2 COMBINED AT	2I169	370.	13.83	138.	35.	17.	25.13
+	HYDROGRAPH AT	D168	108.	13.58	51.	15.	7.	26.47
+	ROUTED TO	R168	105.	14.08	51.	15.	7.	26.47
+	2 COMBINED AT	CP169	463.	13.83	181.	50.	24.	27.24
+	ROUTED TO	R169	422.	14.50	178.	50.	24.	27.24
+	2 COMBINED AT	CP184	1085.	15.25	675.	254.	124.	41.09
+	DIVERSION TO	DI197	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	1D184	652.	15.25	405.	153.	74.	41.09
+	DIVERSION TO	DI198	434.	15.25	270.	102.	49.	41.09
+	HYDROGRAPH AT	2D184	218.	15.25	135.	51.	25.	41.09
+	ROUTED TO	R184	216.	15.67	135.	51.	25.	41.09
+	HYDROGRAPH AT	170	296.	12.67	53.	14.	7.	.29
+	ROUTED TO	R170	234.	13.75	53.	14.	7.	.29

+	2 COMBINED AT	CP152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	1D169	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	1D152	266.	13.00	117.	31.	15.	24.01
+	DIVERSION TO	DI155	0.	.00	0.	0.	0.	24.01
+	HYDROGRAPH AT	2D152	266.	13.00	117.	31.	15.	24.01
+	ROUTED TO	R152	259.	13.83	114.	31.	15.	24.01
+	HYDROGRAPH AT	1D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	150.	15.83	65.	20.	10.	23.66
+	HYDROGRAPH AT	168	312.	13.17	71.	18.	9.	.51
+	2 COMBINED AT	1I168	289.	13.17	107.	36.	17.	24.17
+	HYDROGRAPH AT	2D167	41.	13.75	18.	5.	2.	25.61
+	ROUTED TO	R167	38.	14.67	18.	5.	2.	25.61
+	2 COMBINED AT	2I168	289.	13.17	122.	41.	20.	26.12
+	2 COMBINED AT	CP168	424.	13.58	231.	72.	35.	26.47
+	DIVERSION TO	2D169	108.	13.58	51.	15.	7.	26.47
+	HYDROGRAPH AT	D168	316.	13.58	180.	56.	27.	26.47
+	ROUTED TO	R168	311.	13.92	179.	56.	27.	26.47
+	HYDROGRAPH AT	1D167	216.	13.75	94.	24.	12.	25.61
+	ROUTED TO	R167	211.	14.42	91.	24.	12.	25.61
+	HYDROGRAPH AT	183	226.	12.42	27.	7.	3.	.21
+	2 COMBINED AT	1I183	211.	14.42	96.	30.	14.	25.82
+	HYDROGRAPH AT	D181A	141.	13.83	78.	27.	13.	26.00
+	ROUTED TO	R181A	140.	14.08	78.	27.	13.	26.00
+	2 COMBINED AT	2I183	345.	14.25	166.	57.	27.	26.21
+	2 COMBINED AT	CP183	638.	14.17	340.	113.	54.	27.07
	ROUTED TO							

+	DIVERSION TO	DI152	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	2D151	191.	13.42	97.	34.	16.	23.66
+	ROUTED TO	R151	184.	14.25	96.	34.	16.	23.66
+	HYDROGRAPH AT	167	501.	13.33	133.	33.	16.	.97
+	2 COMBINED AT	1I167	531.	13.42	209.	65.	31.	24.63
+	HYDROGRAPH AT	D166	487.	13.42	382.	141.	68.	22.45
+	ROUTED TO	R166	460.	13.92	381.	141.	68.	22.45
+	2 COMBINED AT	CP167	924.	13.75	557.	202.	98.	25.61
+	DIVERSION TO	1D183	216.	13.75	94.	24.	12.	25.61
+	HYDROGRAPH AT	1D167	707.	13.75	463.	178.	87.	25.61
+	DIVERSION TO	2D168	41.	13.75	18.	5.	2.	25.61
+	HYDROGRAPH AT	2D167	666.	13.75	445.	174.	84.	25.61
+	ROUTED TO	R167	659.	14.00	444.	174.	84.	25.61
+	HYDROGRAPH AT	181A	227.	13.17	52.	13.	6.	.39
+	2 COMBINED AT	CP181A	736.	13.83	476.	185.	90.	26.00
+	DIVERSION TO	2D183	141.	13.83	78.	27.	13.	26.00
+	HYDROGRAPH AT	D181A	595.	13.83	397.	158.	77.	26.00
+	ROUTED TO	R181A	589.	14.17	396.	158.	77.	26.00
+	2 COMBINED AT	CP182	582.	14.17	386.	159.	77.	38.46
+	DIVERSION TO	DI196	295.	14.17	196.	81.	39.	38.46
+	HYDROGRAPH AT	D182	287.	14.17	190.	78.	38.	38.46
+	ROUTED TO	R182	279.	15.08	189.	78.	38.	38.46
+	HYDROGRAPH AT	2D151	170.	13.42	76.	20.	10.	23.66
+	ROUTED TO	R151	164.	13.92	75.	20.	10.	23.66
+	HYDROGRAPH AT	152	252.	12.92	50.	12.	6.	.35

+		CP180	1185.	16.50	893.	275.	132.	30.29
+	DIVERSION TO	1D195	1003.	16.50	761.	236.	113.	30.29
+	HYDROGRAPH AT	D180	182.	16.50	132.	39.	19.	30.29
+	ROUTED TO	R180	180.	16.92	131.	39.	19.	30.29
+	HYDROGRAPH AT	181	258.	12.92	49.	12.	6.	.37
+	2 COMBINED AT	CP181	240.	12.92	156.	50.	24.	30.66
+	DIVERSION TO	2D195	240.	12.92	156.	50.	24.	30.66
+	HYDROGRAPH AT	D181	0.	.00	0.	0.	0.	30.66
+	ROUTED TO	R181	0.	.00	0.	0.	0.	30.66
+	HYDROGRAPH AT	182	191.	12.75	31.	8.	4.	.24
+	2 COMBINED AT	1I182	172.	12.75	28.	7.	3.	30.90
+	HYDROGRAPH AT	D148	44.	13.00	11.	3.	1.	17.46
+	ROUTED TO	R148	35.	13.83	11.	3.	1.	17.46
+	HYDROGRAPH AT	150	188.	12.75	32.	8.	4.	.23
+	2 COMBINED AT	CP150	183.	12.75	41.	10.	5.	17.69
+	ROUTED TO	R150	160.	13.17	41.	10.	5.	17.69
+	HYDROGRAPH AT	151	200.	12.75	35.	9.	4.	.25
+	2 COMBINED AT	1I151	287.	12.92	73.	18.	9.	17.94
+	HYDROGRAPH AT	1D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	274.	13.83	134.	41.	20.	21.60
+	HYDROGRAPH AT	149	293.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	CP149	400.	13.67	186.	56.	27.	22.20
+	ROUTED TO	R149	392.	13.92	184.	56.	27.	22.20
+	2 COMBINED AT	CP151	531.	13.42	249.	74.	36.	23.66
+	DIVERSION TO	1D168	170.	13.42	76.	20.	10.	23.66
+	HYDROGRAPH AT	1D151	361.	13.42	173.	54.	26.	23.66

+	DIVERSION TO	2D166	367.	15.33	246.	80.	38.	15.92
+	HYDROGRAPH AT	D147	5.	15.33	2.	1.	0.	15.92
+	ROUTED TO	R147	4.	16.42	2.	1.	0.	15.92
+	HYDROGRAPH AT	148	307.	13.00	66.	16.	8.	.48
+	2 COMBINED AT	1I148	291.	13.00	64.	16.	8.	16.40
+	HYDROGRAPH AT	D135	35.	12.83	8.	2.	1.	17.92
+	ROUTED TO	R135	21.	14.58	8.	2.	1.	17.92
+	2 COMBINED AT	CP148	291.	13.00	73.	18.	9.	17.46
+	DIVERSION TO	DI150	44.	13.00	11.	3.	1.	17.46
+	HYDROGRAPH AT	D148	246.	13.00	61.	15.	7.	17.46
+	ROUTED TO	R148	172.	14.08	60.	15.	7.	17.46
+	HYDROGRAPH AT	D147	367.	15.33	246.	80.	38.	15.92
+	ROUTED TO	R147	346.	17.25	232.	80.	38.	15.92
+	HYDROGRAPH AT	166	496.	13.33	132.	33.	16.	.98
+	HYDROGRAPH AT	D146	249.	13.50	99.	25.	12.	18.49
+	ROUTED TO	R146	161.	16.58	88.	25.	12.	18.49
+	2 COMBINED AT	1I166	496.	13.33	207.	64.	31.	19.47
+	2 COMBINED AT	2I166	464.	13.33	337.	130.	63.	21.45
+	2 COMBINED AT	CP166	506.	13.42	392.	143.	69.	22.45
+	DIVERSION TO	DI167	487.	13.42	382.	141.	68.	22.45
+	HYDROGRAPH AT	D166	20.	13.42	10.	2.	1.	22.45
+	ROUTED TO	R166	16.	18.00	10.	2.	1.	22.45
+	HYDROGRAPH AT	D165	945.	15.17	307.	77.	37.	22.84
+	ROUTED TO	R165	663.	16.50	290.	77.	37.	22.84
+	2 COMBINED AT	1I180	618.	16.58	275.	73.	35.	30.29
	2 COMBINED AT							

+	2 COMBINED AT	1I177	684.	13.33	200.	50.	24.	4.07
+	HYDROGRAPH AT	D164	257.	13.25	73.	19.	9.	15.08
+	ROUTED TO	R164	224.	14.00	73.	19.	9.	15.08
+	2 COMBINED AT	CP177	738.	13.75	261.	66.	32.	16.68
+	ROUTED TO	R177	723.	13.92	260.	66.	32.	16.68
+	HYDROGRAPH AT	178	274.	13.08	59.	15.	7.	.44
+	2 COMBINED AT	CP178	810.	13.42	314.	80.	39.	17.12
+	ROUTED TO	R178	805.	13.83	312.	80.	39.	17.12
+	HYDROGRAPH AT	179	293.	13.08	64.	16.	8.	.46
+	2 COMBINED AT	1I179	938.	13.58	369.	95.	46.	17.58
+	2 COMBINED AT	CP179	1834.	14.00	1120.	314.	151.	25.34
+	DIVERSION TO	DI193	891.	14.00	423.	106.	51.	25.34
+	HYDROGRAPH AT	1D179	943.	14.00	696.	208.	100.	25.34
+	DIVERSION TO	DI194A	222.	14.00	144.	37.	18.	25.34
+	HYDROGRAPH AT	2D179	721.	14.00	552.	171.	82.	25.34
+	ROUTED TO	R179	716.	14.25	550.	171.	82.	25.34
+	HYDROGRAPH AT	180	515.	13.33	136.	34.	16.	.99
+	2 COMBINED AT	1I180	946.	14.00	642.	203.	97.	26.33
+	HYDROGRAPH AT	2D133	201.	14.42	101.	31.	15.	15.93
+	ROUTED TO	R133	190.	16.00	93.	31.	15.	15.93
+	HYDROGRAPH AT	147	325.	13.00	68.	17.	8.	.50
+	2 COMBINED AT	1I147	310.	13.00	134.	48.	23.	14.62
+	HYDROGRAPH AT	D134	316.	13.25	124.	33.	16.	16.87
+	ROUTED TO	R134	259.	14.17	121.	33.	16.	16.87
+	2 COMBINED AT	CP147	372.	15.33	249.	81.	39.	15.92

								LABCARQ
+		1D145	788.	14.00	228.	57.	27.	11.63
+	ROUTED TO	R145	772.	14.42	228.	57.	27.	11.63
+	2 COMBINED AT	CP164	1944.	13.25	656.	167.	80.	15.08
+	DIVERSION TO	DI177	257.	13.25	73.	19.	9.	15.08
+	HYDROGRAPH AT	D164	1639.	13.25	566.	144.	69.	15.08
+	ROUTED TO	R164	1516.	13.75	562.	144.	69.	15.08
+	HYDROGRAPH AT	2D145	746.	14.00	293.	73.	35.	11.63
+	ROUTED TO	R145	729.	15.25	282.	73.	35.	11.63
+	HYDROGRAPH AT	165	507.	13.25	122.	31.	15.	.90
+	2 COMBINED AT	1I165	740.	15.25	359.	102.	49.	12.53
+	2 COMBINED AT	2I165	1811.	13.67	907.	244.	117.	15.98
+	2 COMBINED AT	CP165	1945.	15.17	1107.	299.	144.	22.84
+	DIVERSION TO	DI180	945.	15.17	307.	77.	37.	22.84
+	HYDROGRAPH AT	D165	1000.	13.25	801.	222.	107.	22.84
+	ROUTED TO	R165	1000.	14.83	796.	222.	107.	22.84
+	HYDROGRAPH AT	D163	0.	.00	0.	0.	0.	2.47
+	ROUTED TO	R163	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	176A	327.	13.25	79.	20.	10.	.62
+	2 COMBINED AT	CP176A	322.	13.25	78.	20.	9.	3.09
+	DIVERSION TO	DI191	0.	.00	0.	0.	0.	3.09
+	HYDROGRAPH AT	D176A	322.	13.25	78.	20.	9.	3.09
+	ROUTED TO	R176A	298.	13.50	78.	20.	9.	3.09
+	HYDROGRAPH AT	177A	293.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP177A	493.	13.17	139.	35.	17.	3.58
+	ROUTED TO	R177A	488.	13.50	139.	35.	17.	3.58
+	HYDROGRAPH AT	177	291.	13.08	62.	15.	7.	.49

+	ROUTED TO	R146C	474.	15.08	237.	63.	30.	18.49
+	HYDROGRAPH AT	159	608.	12.33	61.	15.	7.	.58
+	ROUTED TO	R159	594.	12.42	61.	15.	7.	.58
+	HYDROGRAPH AT	160	409.	12.42	44.	11.	5.	.39
+	2 COMBINED AT	CP160	996.	12.42	105.	26.	13.	.97
+	ROUTED TO	R160	893.	12.58	105.	26.	13.	.97
+	HYDROGRAPH AT	161	310.	13.00	62.	15.	7.	.50
+	2 COMBINED AT	CP161	1087.	12.58	165.	41.	20.	1.47
+	ROUTED TO	R161	925.	13.08	165.	41.	20.	1.47
+	HYDROGRAPH AT	162	268.	12.50	34.	8.	4.	.25
+	ROUTED TO	R162	198.	13.17	34.	8.	4.	.25
+	HYDROGRAPH AT	163	492.	12.92	99.	25.	12.	.75
+	2 COMBINED AT	1I163	664.	13.00	132.	33.	16.	1.00
+	2 COMBINED AT	CP163	1565.	13.00	295.	74.	35.	2.47
+	DIVERSION TO	DI176A	0.	.00	0.	0.	0.	2.47
+	HYDROGRAPH AT	D163	1565.	13.00	295.	74.	35.	2.47
+	ROUTED TO	R163	1519.	13.17	295.	74.	35.	2.47
+	HYDROGRAPH AT	D144	93.	13.08	22.	5.	3.	7.68
+	ROUTED TO	R144	65.	16.00	22.	5.	3.	7.68
+	HYDROGRAPH AT	164A	309.	13.08	66.	17.	8.	.49
+	2 COMBINED AT	1I164A	302.	13.08	81.	22.	10.	8.17
+	2 COMBINED AT	CP164A	1765.	13.17	369.	94.	45.	10.64
+	ROUTED TO	R164A	1698.	13.25	368.	94.	45.	10.64
+	HYDROGRAPH AT	164	314.	13.08	68.	17.	8.	.49
+	2 COMBINED AT	1I164	1944.	13.25	431.	110.	53.	11.13
	HYDROGRAPH AT							

+	DIVERSION TO	DI165B	778.	14.42	360.	91.	44.	11.63
+	HYDROGRAPH AT	3D145	162.	14.42	147.	51.	24.	11.63
+	ROUTED TO	R145C	162.	14.50	147.	51.	24.	11.63
+	DIVERSION TO	DI165C	78.	14.50	62.	18.	9.	11.63
+	HYDROGRAPH AT	4D145	86.	15.58	86.	33.	16.	11.63
+	ROUTED TO	R145D	86.	15.67	85.	33.	16.	11.63
+	HYDROGRAPH AT	1D133	402.	14.42	203.	62.	30.	15.93
+	ROUTED TO	R133	388.	14.83	199.	62.	30.	15.93
+	HYDROGRAPH AT	146	523.	13.17	124.	31.	15.	.90
+	2 COMBINED AT	1I146	660.	13.50	304.	92.	44.	15.02
+	2 COMBINED AT	CP146	727.	13.50	376.	122.	59.	18.49
+	DIVERSION TO	1D166	249.	13.50	99.	25.	12.	18.49
+	HYDROGRAPH AT	D146	478.	13.50	277.	98.	47.	18.49
+	ROUTED TO	R146A	476.	13.58	277.	98.	47.	18.49
+	HYDROGRAPH AT	4D145	78.	14.50	62.	18.	9.	11.63
+	ROUTED TO	R145E	77.	15.00	61.	18.	9.	11.63
+	2 COMBINED AT	1D165	512.	13.58	330.	115.	55.	18.49
+	DIVERSION TO	DIRB1	178.	12.42	178.	76.	37.	18.49
+	HYDROGRAPH AT	D146B	334.	13.58	152.	39.	19.	18.49
+	ROUTED TO	R146B	333.	13.67	151.	39.	19.	18.49
+	HYDROGRAPH AT	3D145	778.	14.42	360.	91.	44.	11.63
+	ROUTED TO	R145F	761.	15.08	352.	91.	44.	11.63
+	2 COMBINED AT	2D165	962.	15.00	479.	127.	61.	18.49
+	DIVERSION TO	DIRB2	486.	15.00	242.	64.	31.	18.49
+	HYDROGRAPH AT	D146C	476.	15.00	237.	63.	30.	18.49

+		CP142	690.	12.50	127.	32.	15.	1.13
+	ROUTED TO	R142	645.	12.92	127.	32.	15.	1.13
+	HYDROGRAPH AT	143	300.	13.00	62.	16.	7.	.50
+	2 COMBINED AT	CP143	921.	12.92	188.	47.	23.	1.63
+	ROUTED TO	R143	900.	13.08	188.	47.	23.	1.63
+	HYDROGRAPH AT	D130	638.	13.42	165.	41.	20.	5.37
+	ROUTED TO	R130	603.	14.00	165.	41.	20.	5.37
+	HYDROGRAPH AT	144	328.	13.00	69.	17.	8.	.51
+	2 COMBINED AT	1I144	683.	13.83	232.	58.	28.	6.05
+	2 COMBINED AT	CP144	1199.	13.08	416.	104.	50.	7.68
+	DIVERSION TO	DI164A	93.	13.08	22.	5.	3.	7.68
+	HYDROGRAPH AT	D144	1106.	13.08	394.	99.	47.	7.68
+	ROUTED TO	R144	1077.	13.33	393.	99.	47.	7.68
+	HYDROGRAPH AT	145A	287.	13.08	63.	16.	8.	.49
+	2 COMBINED AT	CP145A	1318.	13.25	454.	114.	55.	8.17
+	ROUTED TO	R145A	1289.	13.50	453.	114.	55.	8.17
+	HYDROGRAPH AT	D131	1405.	13.50	548.	145.	70.	10.47
+	ROUTED TO	R131	1358.	14.00	544.	145.	70.	10.47
+	HYDROGRAPH AT	145	297.	13.08	64.	16.	8.	.48
+	2 COMBINED AT	1I145	1436.	14.00	588.	161.	78.	9.00
+	2 COMBINED AT	CP145	2498.	14.00	1028.	272.	131.	11.63
+	DIVERSION TO	DI164	788.	14.00	228.	57.	27.	11.63
+	HYDROGRAPH AT	1D145	1710.	14.00	800.	215.	103.	11.63
+	DIVERSION TO	DI165	746.	14.00	293.	73.	35.	11.63
+	HYDROGRAPH AT	2D145	964.	14.00	507.	142.	68.	11.63
+	ROUTED TO	R145B	939.	14.42	507.	142.	68.	11.63

+	ROUTED TO	RR173	1319.	13.50	673.	246.	121.	30.12
+	HYDROGRAPH AT	171	386.	13.42	112.	30.	14.	.70
+	ROUTED TO	R171	365.	13.67	111.	30.	14.	.70
+	HYDROGRAPH AT	173A	161.	12.75	29.	8.	4.	.20
+	2 COMBINED AT	CP173A	387.	13.67	139.	37.	18.	.90
+	2 COMBINED AT	AFR2F1	1653.	13.50	776.	278.	137.	31.02
+	ROUTED TO	RR173A	1449.	14.08	762.	278.	137.	31.02
+	HYDROGRAPH AT	186	180.	13.25	46.	11.	6.	.33
+	ROUTED TO	R186	166.	13.67	46.	11.	6.	.33
+	HYDROGRAPH AT	187	75.	12.00	4.	1.	0.	.35
+	2 COMBINED AT	CP187	166.	13.67	50.	12.	6.	.68
+	2 COMBINED AT	AFR2F2	1555.	14.08	795.	288.	142.	31.70
+	ROUTED TO	RR187	1357.	14.67	782.	288.	142.	31.70
+	HYDROGRAPH AT	199	71.	13.08	15.	4.	2.	.11
+	ROUTED TO	R199	62.	13.67	15.	4.	2.	.11
+	HYDROGRAPH AT	200	216.	12.67	34.	9.	4.	.29
+	2 COMBINED AT	CP200	216.	12.67	49.	12.	6.	.40
+	2 COMBINED AT	AFR2F3	1378.	14.67	790.	299.	147.	32.10
+	ROUTED TO	RR200	1285.	15.00	785.	299.	147.	32.10
+	HYDROGRAPH AT	141	484.	12.33	50.	12.	6.	.47
+	ROUTED TO	R141	478.	12.42	50.	12.	6.	.47
+	HYDROGRAPH AT	141A	214.	12.17	16.	4.	2.	.15
+	2 COMBINED AT	CP141A	571.	12.33	65.	16.	8.	.62
+	ROUTED TO	R141A	533.	12.50	65.	16.	8.	.62
+	HYDROGRAPH AT	142	305.	13.00	63.	16.	8.	.51
	2 COMBINED AT							

+	2 COMBINED AT	2I139	739.	13.00	207.	61.	29.	7.04
+	HYDROGRAPH AT	140	180.	12.67	30.	8.	4.	.18
+	2 COMBINED AT	LE1	870.	13.00	243.	71.	34.	.88
+	ROUTED TO	RLE1	806.	13.08	243.	71.	34.	.88
+	HYDROGRAPH AT	156	233.	12.75	42.	11.	5.	.30
+	2 COMBINED AT	LE2	965.	13.00	281.	82.	39.	1.18
+	ROUTED TO	RLE2	891.	13.25	278.	82.	39.	1.18
+	2 COMBINED AT	LE3	1487.	12.92	700.	243.	118.	1.65
+	ROUTED TO	1RLE3	1509.	12.92	700.	243.	118.	1.65
+	ROUTED TO	2RLE3	1512.	12.92	700.	243.	118.	1.65
+	HYDROGRAPH AT	172	111.	12.58	16.	4.	2.	.12
+	2 COMBINED AT	LE4	1573.	12.92	706.	246.	120.	1.77
+	ROUTED TO	R172	1462.	13.33	702.	246.	120.	1.77
+	HYDROGRAPH AT	173	193.	13.00	40.	11.	5.	.31
+	2 COMBINED AT	CP173	1578.	13.33	725.	255.	125.	2.08
+	HYDROGRAPH AT	156A	501.	12.17	46.	13.	6.	.31
+	ROUTED TO	R156A	178.	14.17	45.	13.	6.	.31
+	HYDROGRAPH AT	158	1195.	12.33	147.	44.	21.	.97
+	DIVERSION TO	158RET	1195.	12.33	116.	31.	15.	.97
+	HYDROGRAPH AT	158OUT	534.	12.58	44.	13.	6.	.97
+	2 COMBINED AT	CP158	534.	12.58	85.	26.	13.	1.28
+	ROUTED TO	R158	198.	13.25	81.	26.	13.	1.28
+	HYDROGRAPH AT	173B	110.	12.83	18.	5.	2.	.20
+	2 COMBINED AT	CP173B	257.	13.17	95.	30.	15.	1.48
+	2 COMBINED AT	AFR2E	1576.	13.25	732.	262.	128.	30.12

+		2D137	289.	13.50	134.	41.	20.	21.60
+	ROUTED TO	R137	232.	15.83	119.	41.	20.	21.60
+	HYDROGRAPH AT	153	117.	13.33	32.	8.	4.	.20
+	2 COMBINED AT	CP153	234.	15.83	119.	48.	23.	21.92
+	2 COMBINED AT	CP138A	453.	16.08	326.	123.	60.	23.68
+	DIVERSION TO	DI154	306.	16.08	222.	84.	41.	23.68
+	HYDROGRAPH AT	D138A	147.	16.08	104.	39.	19.	23.68
+	ROUTED TO	R138A	138.	17.50	102.	39.	19.	23.68
+	HYDROGRAPH AT	D138A	306.	16.08	222.	84.	41.	23.68
+	ROUTED TO	RLLE	305.	16.17	222.	84.	41.	23.68
+	HYDROGRAPH AT	154	174.	12.58	28.	7.	3.	.17
+	2 COMBINED AT	LLE1	366.	16.00	271.	102.	50.	.33
+	ROUTED TO	RLLE1	363.	16.33	270.	102.	50.	.33
+	HYDROGRAPH AT	157	610.	12.83	117.	33.	16.	.89
+	DIVERSION TO	157RET	517.	12.67	51.	14.	7.	.89
+	HYDROGRAPH AT	157OUT	610.	12.83	72.	19.	9.	.89
+	2 COMBINED AT	1I157	725.	12.92	286.	106.	51.	25.08
+	2 COMBINED AT	2I157	725.	12.92	364.	144.	70.	25.08
+	HYDROGRAPH AT	127	456.	12.08	41.	12.	6.	.22
+	ROUTED TO	R127	248.	13.42	41.	12.	6.	.22
+	HYDROGRAPH AT	139	719.	12.25	84.	25.	12.	.47
+	DIVERSION TO	139RET	719.	12.25	56.	15.	7.	.47
+	HYDROGRAPH AT	139OUT	526.	12.42	34.	10.	5.	.47
+	2 COMBINED AT	1I139	528.	12.42	75.	21.	10.	.69
+	HYDROGRAPH AT	D126	776.	12.83	139.	41.	20.	4.75
+	ROUTED TO	RLE	692.	13.00	138.	41.	20.	4.75

+	ROUTED TO	R124	273.	15.00	75.	20.	10.	1.65
+	HYDROGRAPH AT	136	291.	13.08	63.	16.	8.	.46
+	2 COMBINED AT	1I136	289.	13.08	128.	36.	17.	1.03
+	2 COMBINED AT	CP136	527.	13.17	283.	90.	43.	18.33
+	ROUTED TO	R136	497.	13.67	282.	90.	43.	18.33
+	HYDROGRAPH AT	1D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	234.	13.08	73.	21.	10.	3.66
+	HYDROGRAPH AT	137	280.	13.42	77.	19.	9.	.54
+	3 COMBINED AT	CP137	867.	13.50	404.	125.	60.	21.60
+	DIVERSION TO	DI149	289.	13.50	134.	41.	20.	21.60
+	HYDROGRAPH AT	1D137	578.	13.50	269.	83.	40.	21.60
+	DIVERSION TO	DI153	289.	13.50	134.	41.	20.	21.60
+	HYDROGRAPH AT	2D137	289.	13.50	135.	42.	20.	21.60
+	ROUTED TO	R137	280.	14.08	134.	42.	20.	21.60
+	HYDROGRAPH AT	2D125	308.	12.50	74.	21.	10.	3.66
+	ROUTED TO	R125	123.	15.42	62.	21.	10.	3.66
+	HYDROGRAPH AT	138	278.	13.00	54.	14.	7.	.54
+	2 COMBINED AT	1I138	250.	13.00	85.	30.	15.	22.08
+	2 COMBINED AT	CP138	314.	14.08	209.	72.	35.	22.08
+	ROUTED TO	R138	311.	14.50	208.	72.	35.	22.08
+	HYDROGRAPH AT	138A	717.	12.17	80.	24.	12.	.46
+	DIVERSION TO	138ART	717.	12.17	65.	17.	8.	.46
+	HYDROGRAPH AT	138AOT	257.	12.50	22.	7.	3.	.46
+	2 COMBINED AT	1I138A	320.	14.50	215.	76.	37.	23.70
+	2 COMBINED AT	2I138A	319.	14.50	214.	75.	37.	24.81
	HYDROGRAPH AT							

+	HYDROGRAPH AT	133OUT	304.	12.83	42.	11.	5.	.50
+	2 COMBINED AT	1I133	439.	13.83	213.	59.	29.	11.37
+	2 COMBINED AT	CP133	1005.	14.42	508.	155.	75.	15.93
+	DIVERSION TO	DI146	402.	14.42	203.	62.	30.	15.93
+	HYDROGRAPH AT	1D133	604.	14.42	305.	93.	45.	15.93
+	DIVERSION TO	1D147	201.	14.42	101.	31.	15.	15.93
+	HYDROGRAPH AT	2D133	403.	14.42	204.	62.	30.	15.93
+	ROUTED TO	R133	394.	14.58	202.	62.	30.	15.93
+	HYDROGRAPH AT	134	313.	13.08	68.	17.	8.	.50
+	HYDROGRAPH AT	D123	0.	.00	0.	0.	0.	.44
+	ROUTED TO	R123	0.	.00	0.	0.	0.	.44
+	3 COMBINED AT	CP134	558.	13.25	252.	78.	37.	16.87
+	DIVERSION TO	2D147	316.	13.25	124.	33.	16.	16.87
+	HYDROGRAPH AT	D134	242.	13.25	129.	45.	21.	16.87
+	ROUTED TO	R134	233.	13.42	128.	45.	21.	16.87
+	HYDROGRAPH AT	1D124	131.	13.33	23.	6.	3.	1.65
+	ROUTED TO	R124	108.	14.00	23.	6.	3.	1.65
+	HYDROGRAPH AT	135	373.	12.67	65.	18.	9.	.49
+	DIVERSION TO	135RET	350.	12.58	34.	9.	4.	.49
+	HYDROGRAPH AT	135OUT	351.	12.75	35.	9.	5.	.49
+	3 COMBINED AT	CP135	389.	12.83	178.	58.	28.	17.92
+	DIVERSION TO	DI148	35.	12.83	8.	2.	1.	17.92
+	HYDROGRAPH AT	D135	354.	12.83	170.	56.	27.	17.92
+	ROUTED TO	R135	311.	13.42	169.	56.	27.	17.92
+	HYDROGRAPH AT	2D124	296.	13.33	81.	20.	10.	1.65

+		R130	814.	13.67	417.	112.	54.	5.37
+	HYDROGRAPH AT	131A	316.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	CP131A	979.	13.58	479.	128.	62.	5.87
+	ROUTED TO	R131A	975.	13.75	478.	128.	62.	5.87
+	HYDROGRAPH AT	131	317.	13.08	69.	17.	8.	.49
+	2 COMBINED AT	1I131	1115.	13.58	534.	145.	70.	9.57
+	HYDROGRAPH AT	2D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	81.	13.17	16.	4.	2.	.82
+	HYDROGRAPH AT	121A	366.	12.92	70.	17.	8.	.50
+	2 COMBINED AT	1I121A	402.	12.92	84.	22.	10.	1.34
+	HYDROGRAPH AT	D113A	43.	12.25	1.	0.	0.	1.34
+	ROUTED TO	R113A	9.	13.08	1.	0.	0.	1.34
+	2 COMBINED AT	CP121A	402.	12.92	85.	22.	10.	3.54
+	ROUTED TO	R121A	383.	13.08	84.	22.	10.	3.54
+	HYDROGRAPH AT	121	360.	12.92	68.	17.	8.	.50
+	2 COMBINED AT	CP121	692.	12.92	151.	38.	18.	4.03
+	ROUTED TO	R121	635.	13.50	150.	38.	18.	4.03
+	2 COMBINED AT	CP131	1727.	13.50	680.	182.	88.	10.47
+	DIVERSION TO	DI145	1405.	13.50	548.	145.	70.	10.47
+	HYDROGRAPH AT	D131	322.	13.50	132.	37.	18.	10.47
+	ROUTED TO	R131	316.	13.83	131.	37.	18.	10.47
+	HYDROGRAPH AT	132	253.	13.00	52.	13.	6.	.41
+	2 COMBINED AT	CP132	415.	13.58	178.	50.	24.	9.97
+	ROUTED TO	R132	403.	13.92	175.	50.	24.	9.97
+	HYDROGRAPH AT	133	304.	12.83	57.	16.	7.	.50
+	DIVERSION TO	133RET	192.	12.50	18.	5.	2.	.50

+	HYDROGRAPH AT	119A	296.	13.17	69.	17.	8.	.47
+	2 COMBINED AT	CP119A	439.	13.25	121.	30.	15.	1.26
+	DIVERSION TO	DI130	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	D119A	439.	13.25	121.	30.	15.	1.26
+	ROUTED TO	R119A	430.	13.42	121.	30.	15.	1.26
+	HYDROGRAPH AT	120	388.	13.25	105.	26.	13.	.54
+	3 COMBINED AT	1I120	787.	13.33	254.	67.	32.	2.88
+	HYDROGRAPH AT	1D112	131.	12.67	16.	4.	2.	.82
+	ROUTED TO	R112	76.	13.33	16.	4.	2.	.82
+	2 COMBINED AT	CP120	857.	13.33	268.	71.	34.	3.58
+	ROUTED TO	R120	805.	13.83	266.	71.	34.	3.58
+	HYDROGRAPH AT	D119	317.	13.17	74.	18.	9.	.86
+	ROUTED TO	R119	298.	13.42	74.	18.	9.	.86
+	HYDROGRAPH AT	128	299.	12.92	57.	14.	7.	.41
+	2 COMBINED AT	CP128	481.	12.92	130.	32.	16.	1.27
+	ROUTED TO	R128	464.	14.50	130.	32.	16.	1.27
+	HYDROGRAPH AT	D119A	0.	.00	0.	0.	0.	1.26
+	ROUTED TO	R119A	0.	.00	0.	0.	0.	1.26
+	HYDROGRAPH AT	130	571.	13.25	147.	37.	18.	1.00
+	3 COMBINED AT	1I130	577.	14.50	270.	68.	33.	3.77
+	HYDROGRAPH AT	129	339.	12.67	54.	14.	7.	.43
+	ROUTED TO	R129	274.	13.33	54.	14.	7.	.43
+	3 COMBINED AT	CP130	1457.	13.42	584.	153.	74.	5.37
+	DIVERSION TO	DI144	638.	13.42	165.	41.	20.	5.37
+	HYDROGRAPH AT	D130	818.	13.42	419.	112.	54.	5.37
	ROUTED TO							

+	HYDROGRAPH AT	D114	597.	13.50	107.	27.	13.	5.26
+	ROUTED TO	R114	506.	13.83	107.	27.	13.	5.26
+	HYDROGRAPH AT	122B	734.	12.25	92.	28.	14.	.51
+	DIVERSION TO	122BRT	537.	12.08	41.	12.	6.	.51
+	HYDROGRAPH AT	122BOT	734.	12.25	61.	17.	8.	.51
+	2 COMBINED AT	CP122B	719.	12.25	165.	43.	21.	5.66
+	ROUTED TO	R122B	641.	12.33	165.	43.	21.	5.66
+	2 COMBINED AT	CP122A	911.	14.00	353.	108.	52.	8.49
+	ROUTED TO	1R122A	888.	14.08	350.	108.	52.	8.49
+	ROUTED TO	2R122A	865.	14.42	344.	108.	52.	8.49
+	HYDROGRAPH AT	111	482.	12.08	45.	13.	6.	.26
+	DIVERSION TO	111RET	374.	12.00	23.	6.	3.	.26
+	HYDROGRAPH AT	111OUT	477.	12.17	25.	7.	3.	.26
+	ROUTED TO	R111	271.	12.42	25.	7.	3.	.26
+	HYDROGRAPH AT	104	218.	12.25	19.	5.	2.	.15
+	ROUTED TO	R104	79.	14.75	19.	5.	2.	.15
+	HYDROGRAPH AT	111A	870.	12.25	95.	27.	13.	.61
+	DIVERSION TO	111ART	870.	12.25	95.	27.	13.	.61
+	HYDROGRAPH AT	111AOT	1.	19.75	1.	0.	0.	.61
+	3 COMBINED AT	CP111A	271.	12.42	44.	12.	6.	.97
+	ROUTED TO	R111A	109.	13.92	40.	12.	6.	.97
+	HYDROGRAPH AT	119	544.	13.17	126.	32.	15.	.86
+	DIVERSION TO	DI128	317.	13.17	74.	18.	9.	.86
+	HYDROGRAPH AT	D119	227.	13.17	53.	13.	6.	.86
+	ROUTED TO	R119	204.	13.58	53.	13.	6.	.86

APPENDIX E

Hydraulics

- Listing of Computer Software Used to Model Conveyance Structures
- Output of Hydraulic Models:
  - Alternative 2A
  - Alternative 2B
  - Alternative 3A
  - Alternative 3B
  - Alternative 4
  - Final Alternative

The following computer applications were used for modeling the conveyance structures of this study:

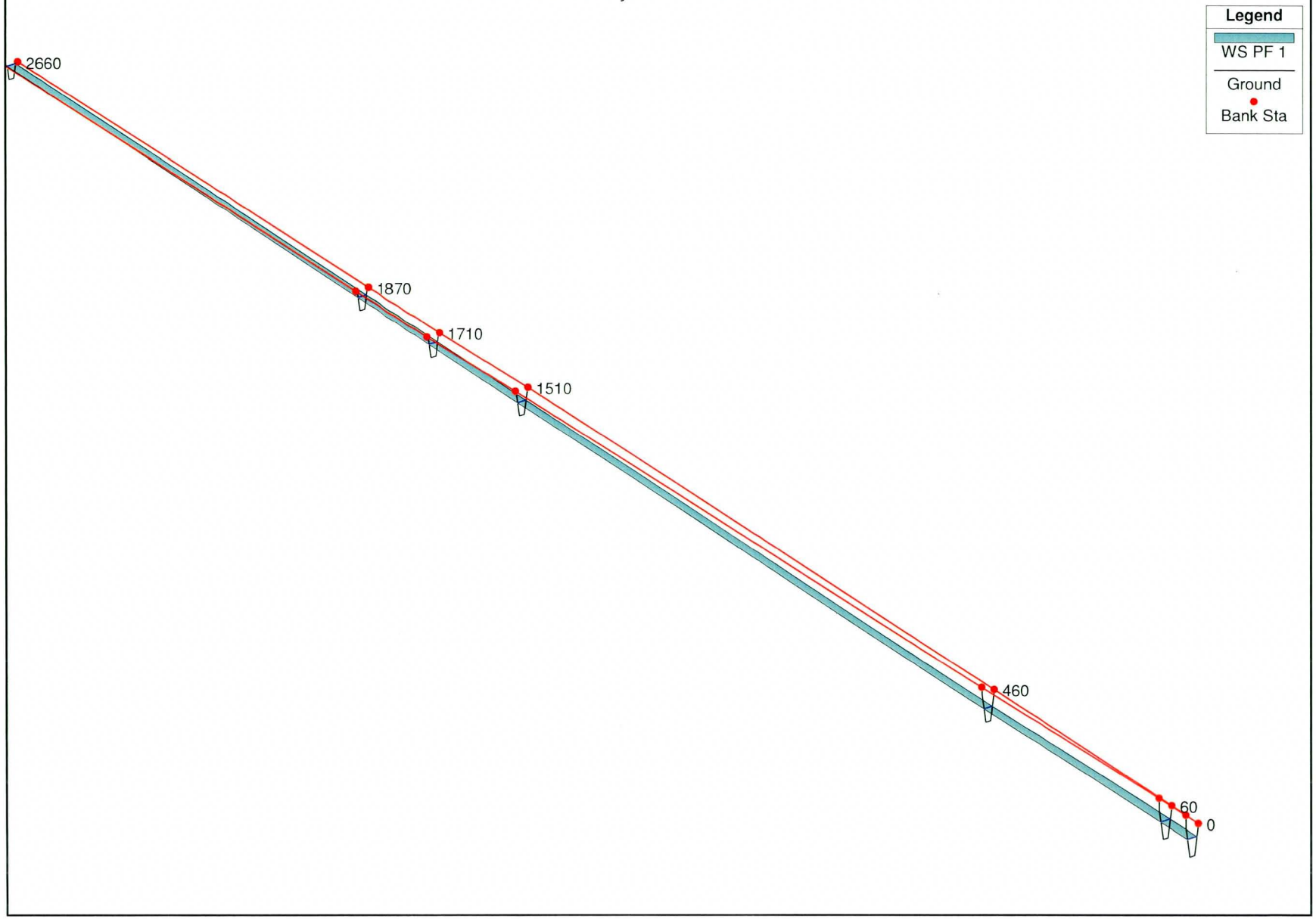
- HEC-RAS: A U.S. Army Corps of Engineers software package
- StormCAD: An application from the Haestad Methods software suite
- Culvert Master: An application from the Haestad Methods software suite
- UD-Channels V.1.01.xls: A Microsoft Excel© spreadsheet application by the Urban Drainage and Flood Control District of Denver, Colorado

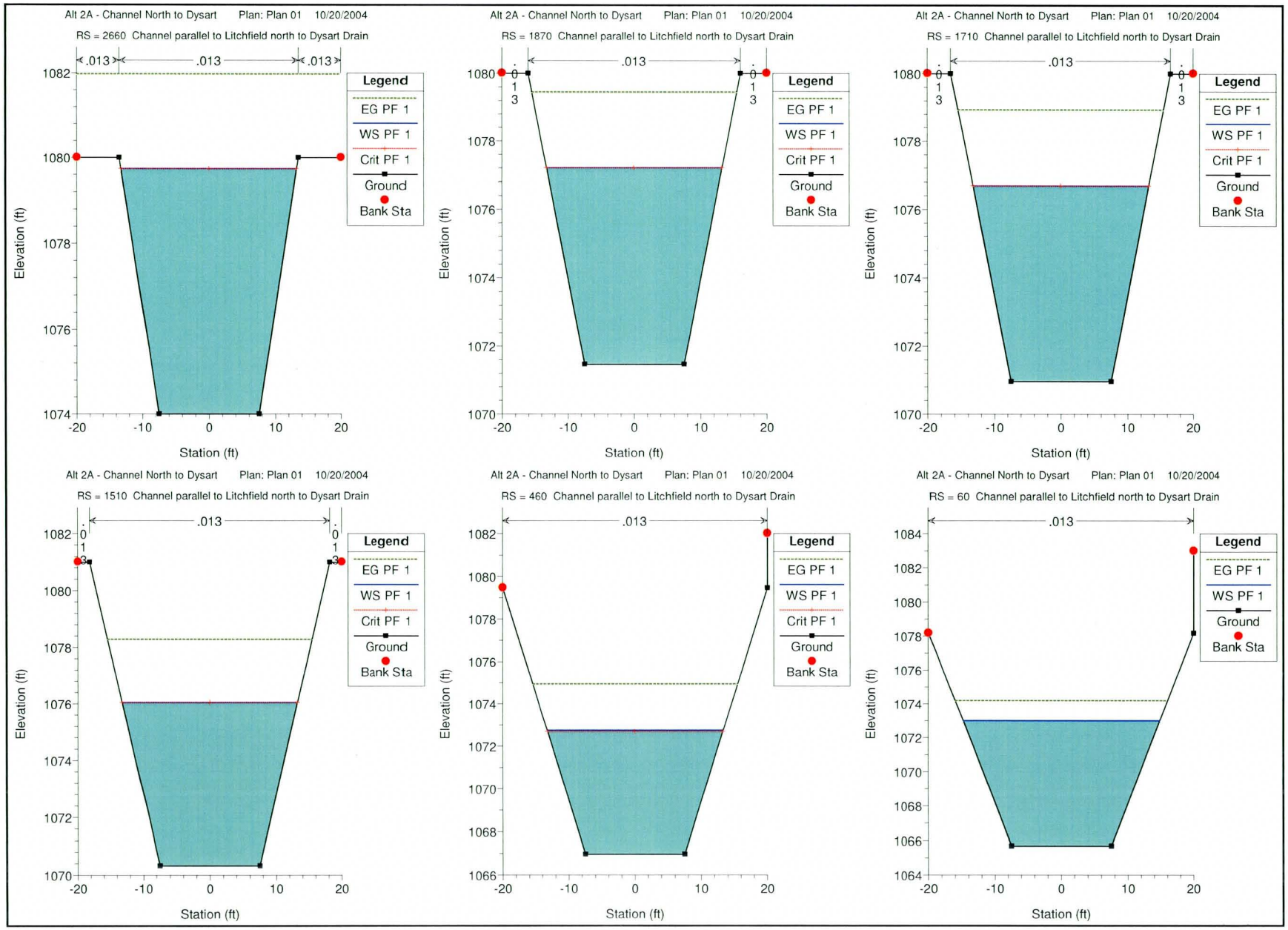
Alternative 2A Hydraulic Modeling

HEC-RAS Output

Alternative 2A – Channel North to Dysart

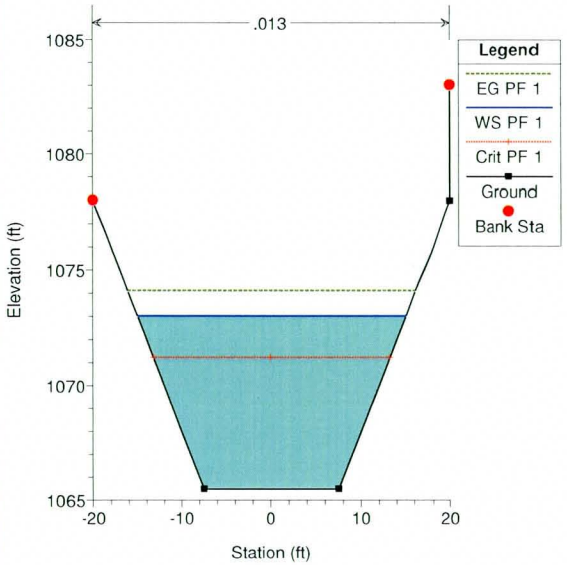
Alt 2A - Channel North to Dysart Plan: Plan 01 7/15/2004




Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 2660 Channel parallel to Litchfield north to Dysart Drain
.013
.013
.013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 1870 Channel parallel to Litchfield north to Dysart Drain
.013
Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 1710 Channel parallel to Litchfield north to Dysart Drain
.013
Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 1510 Channel parallel to Litchfield north to Dysart Drain
.013
Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 460 Channel parallel to Litchfield north to Dysart Drain
.013
Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004
RS = 60 Channel parallel to Litchfield north to Dysart Drain
.013

Alt 2A - Channel North to Dysart Plan: Plan 01 10/20/2004

RS = 0 Channel parallel to Litchfield north to Dysart Drain



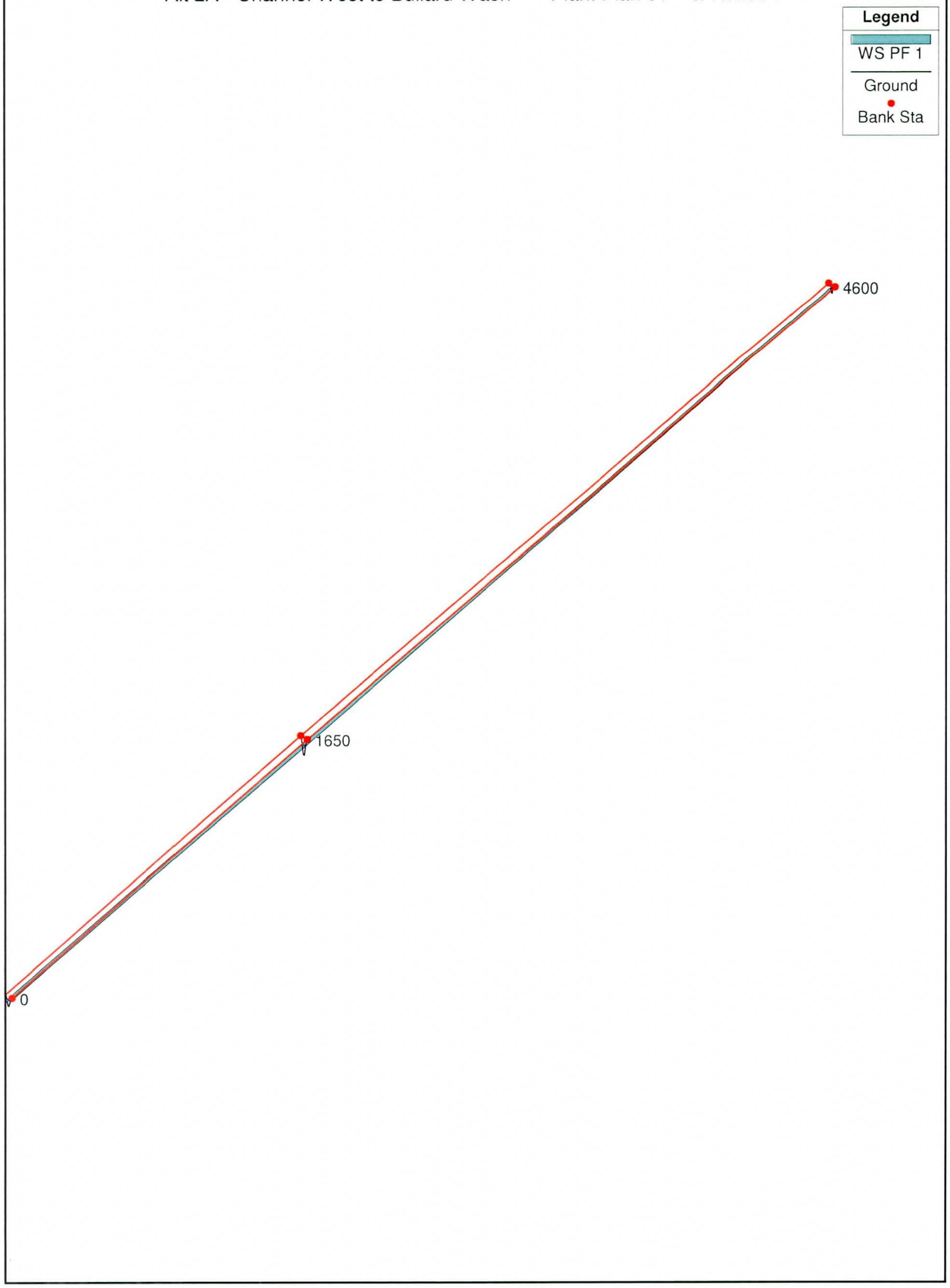
HEC-RAS Plan: Plan 01 River: Litchfield Chann Reach: tie in at Dysart Profile: PF 1

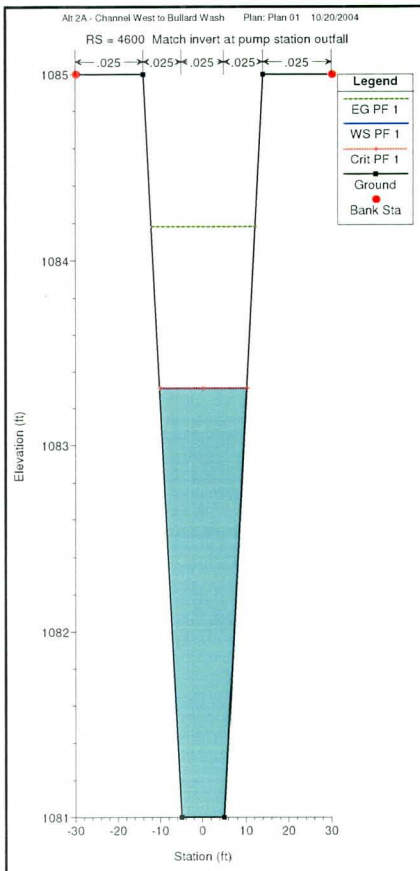
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
tie in at Dysart	2660	PF 1	1426.00	1074.00	1079.73	1079.73	1081.97	0.001861	12.02	118.68	26.45	1.00
tie in at Dysart	1870	PF 1	1426.00	1071.47	1077.19	1077.19	1079.44	0.001863	12.02	118.63	26.45	1.00
tie in at Dysart	1710	PF 1	1426.00	1070.96	1076.68	1076.68	1078.93	0.001863	12.02	118.62	26.45	1.00
tie in at Dysart	1510	PF 1	1426.00	1070.32	1076.04	1076.04	1078.29	0.001863	12.02	118.62	26.45	1.00
tie in at Dysart	460	PF 1	1426.00	1066.96	1072.74	1072.68	1074.93	0.001805	11.89	119.98	26.55	0.99
tie in at Dysart	60	PF 1	1426.00	1065.68	1072.99		1074.18	0.000773	8.75	162.95	29.61	0.66
tie in at Dysart	0	PF 1	1426.00	1065.49	1073.00	1071.21	1074.11	0.000699	8.44	169.05	30.02	0.63

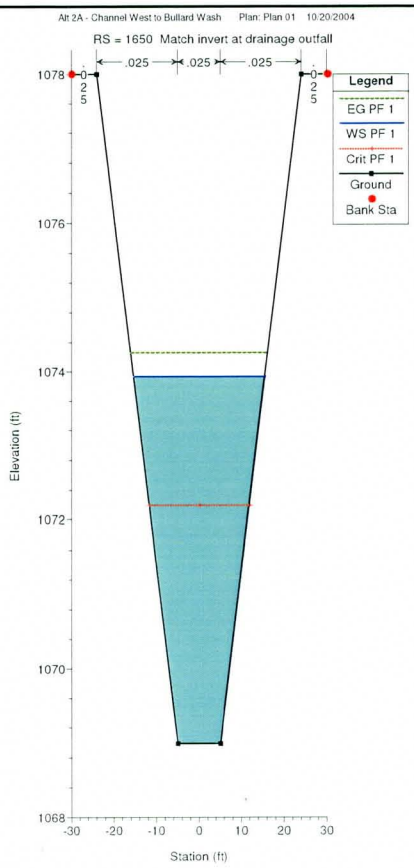
HEC-RAS Output

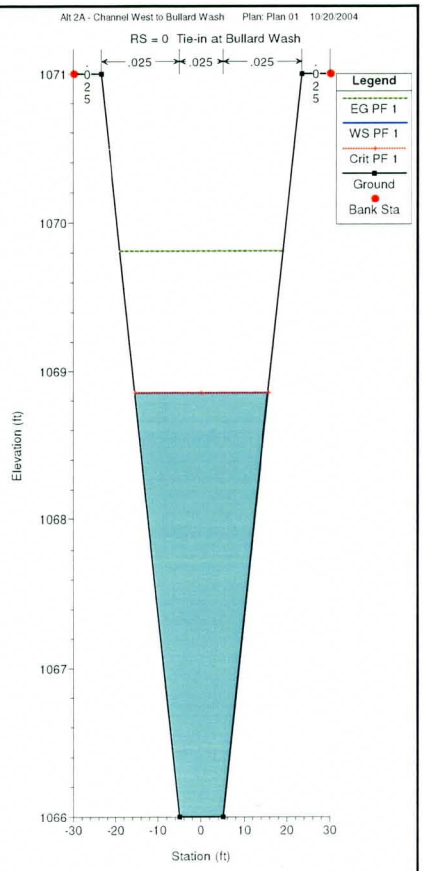
Alternative 2A – Channel West to Bullard

Alt 2A - Channel West to Bullard Wash Plan: Plan 01 8/13/2004




Alt 2A - Channel West to Bullard Wash Plan: Plan 01 10/20/2004
RS = 4600 Match invert at pump station outfall
.025 .025 .025 .025 .025
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Alt 2A - Channel West to Bullard Wash Plan: Plan 01 10/20/2004
RS = 1650 Match invert at drainage outfall
.025 .025 .025
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Alt 2A - Channel West to Bullard Wash Plan: Plan 01 10/20/2004
RS = 0 Tie-in at Bullard Wash
.025 .025 .025
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

HEC-RAS Plan: Plan 01 River: Alt 2a West to B Reach: Along Super Sabr Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Along Super Sabr	4600	PF 1	263.00	1081.00	1083.31	1083.31	1084.18	0.008213	7.50	35.09	20.39	1.01
Along Super Sabr	1650	PF 1	460.00	1068.99	1073.93	1072.18	1074.25	0.001328	4.56	100.96	30.86	0.44
Along Super Sabr	0	PF 1	460.00	1066.00	1068.85	1068.85	1069.81	0.007729	7.85	58.59	31.05	1.01

Culvert Master Output

Alternative 2A

Culvert Calculator Report
Box at Bullard Rd - Alt 2A

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,271.00	ft	Headwater Depth/ Height	0.90	
Computed Headwater Elevation	1,271.00	ft	Discharge	576.94	cfs
Inlet Control HW Elev	1,270.97	ft	Tailwater Elevation	1,269.00	ft
Outlet Control HW Elev	1,271.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,266.50	ft	Downstream Invert	1,266.45	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	2.62	ft
Slope Type	Mild		Normal Depth	3.50	ft
Flow Regime	Subcritical		Critical Depth	2.62	ft
Velocity Downstream	9.18	ft/s	Critical Slope	0.002896	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
mber Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,271.00	ft	Upstream Velocity Head	1.05	ft
Ke	0.50		Entrance Loss	0.53	ft

Inlet Control Properties					
Inlet Control HW Elev	1,270.97	ft	Flow Control	Unsubmerged	
Inlet Type	90 and 15 ° wingwall flares		Area Full	120.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Culvert Calculator Report
Box at Munitions Rd - Alt 2A

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,074.00	ft	Headwater Depth/ Height	0.82	
Computed Headwater Elevation	1,074.00	ft	Discharge	665.68	cfs
Inlet Control HW Elev	1,073.96	ft	Tailwater Elevation	1,072.00	ft
Outlet Control HW Elev	1,074.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,069.05	ft	Downstream Invert	1,069.00	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	3.00	ft
Slope Type	Mild		Normal Depth	3.88	ft
Flow Regime	Subcritical		Critical Depth	2.88	ft
Velocity Downstream	9.25	ft/s	Critical Slope	0.002919	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
mber Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,074.00	ft	Upstream Velocity Head	1.16	ft
Ke	0.50		Entrance Loss	0.58	ft

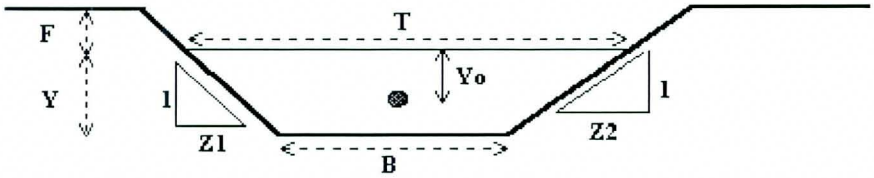
Inlet Control Properties					
Inlet Control HW Elev	1,073.96	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	144.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

UD – Channels V 1.01.xls Output

Alternative 2A

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Channel west to Bullard Wash - Alternative 2A

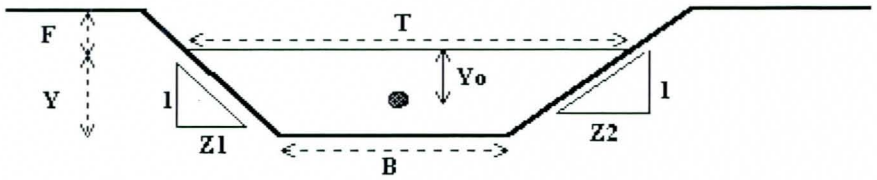


Design Information (Input)			
Channel Invert Slope	So =	0.0019	ft/ft
Channel Manning's N	N =	0.025	
Bottom Width	B =	10.0	ft
Left Side Slope	Z1 =	4.0	ft/ft
Right Side Slope	Z2 =	4.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**4.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**486.9**	cfs
Froude Number	**Fr =**	**0.52**	
Flow Velocity	**V =**	**4.7**	fps
Flow Area	A =	104.0	sq ft
Top Width	T =	42.0	ft
Wetted Perimeter	P =	43.0	ft
Hydraulic Radius	R =	2.4	ft
Hydraulic Depth	D =	2.5	ft
Specific Energy	Es =	4.3	ft
Centroid of Flow Area	Yo =	1.6	ft
Specific Force	Fs =	14.7	kip

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Channel north to Dysart Drain, Alternative 2A



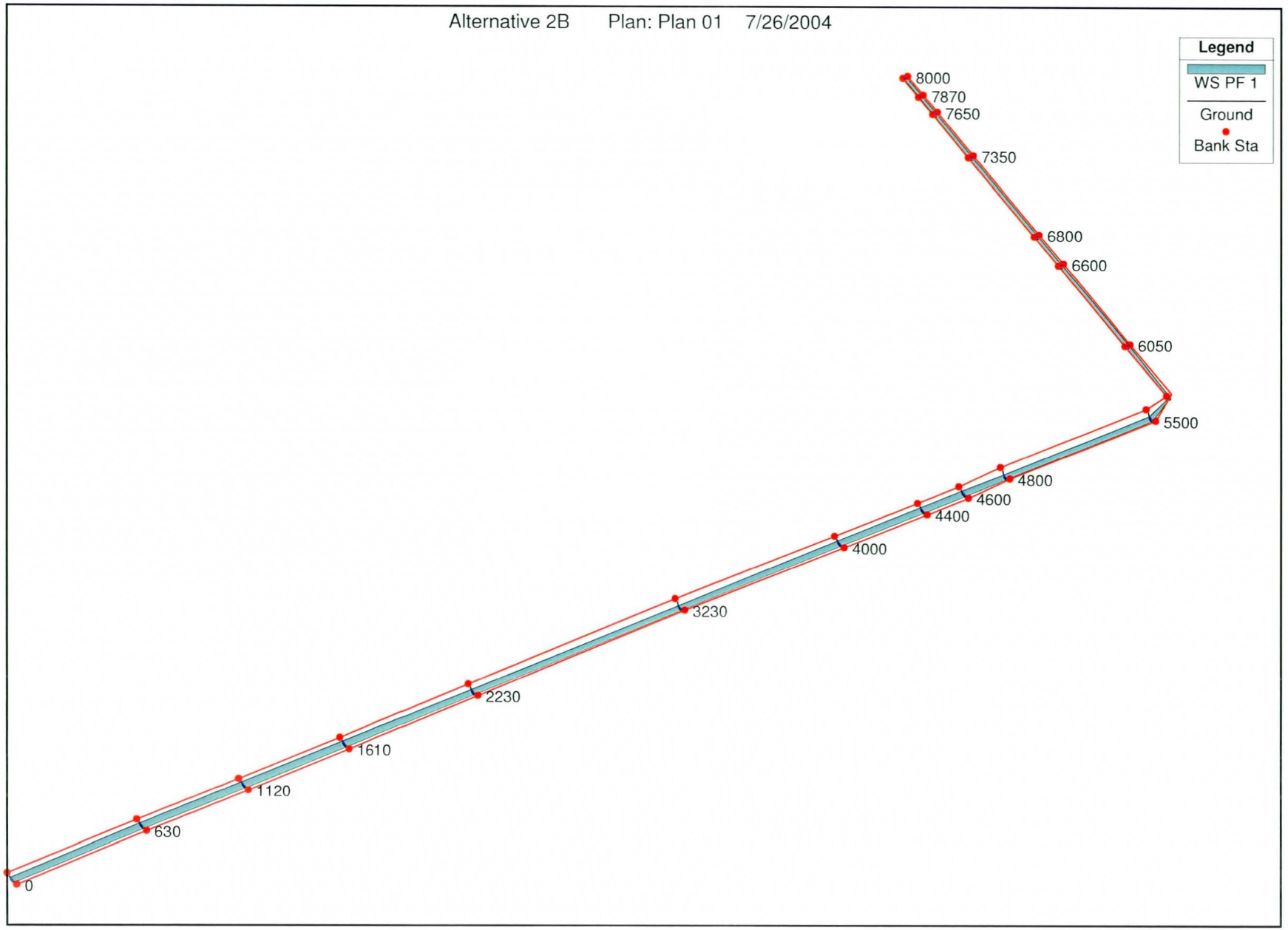
Design Information (Input)			
Channel Invert Slope	So =	0.0023	ft/ft
Channel Manning's N	N =	0.013	
Bottom Width	B =	15.0	ft
Left Side Slope	Z1 =	2.0	ft/ft
Right Side Slope	Z2 =	2.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**5.00**	ft

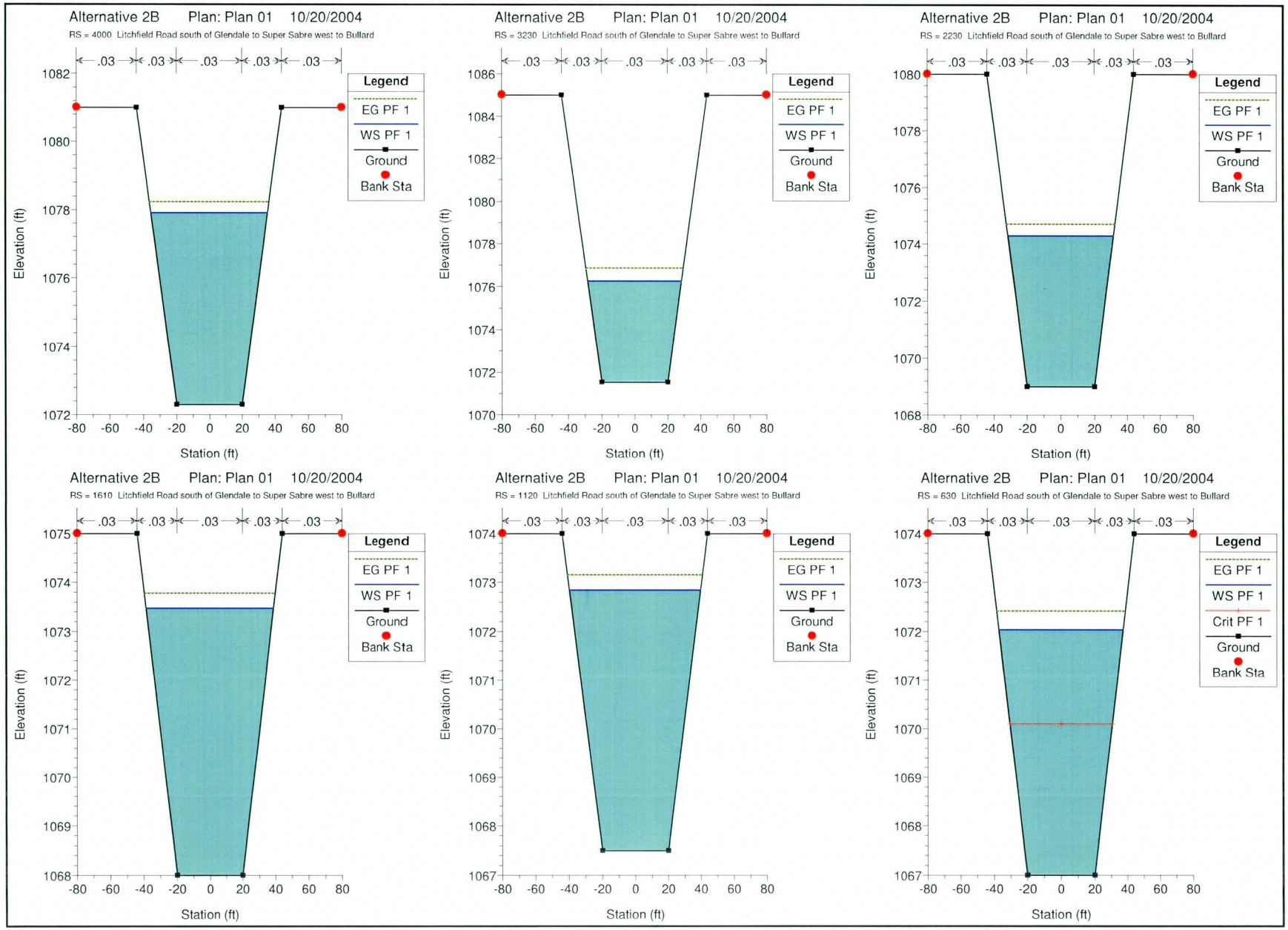
Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**1,537.0**	cfs
Froude Number	**Fr =**	**1.15**	
Flow Velocity	**V =**	**12.3**	fps
Flow Area	A =	125.0	sq ft
Top Width	T =	35.0	ft
Wetted Perimeter	P =	37.4	ft
Hydraulic Radius	R =	3.3	ft
Hydraulic Depth	D =	3.6	ft
Specific Energy	Es =	7.3	ft
Centroid of Flow Area	Yo =	2.2	ft
Specific Force	Fs =	53.5	kip

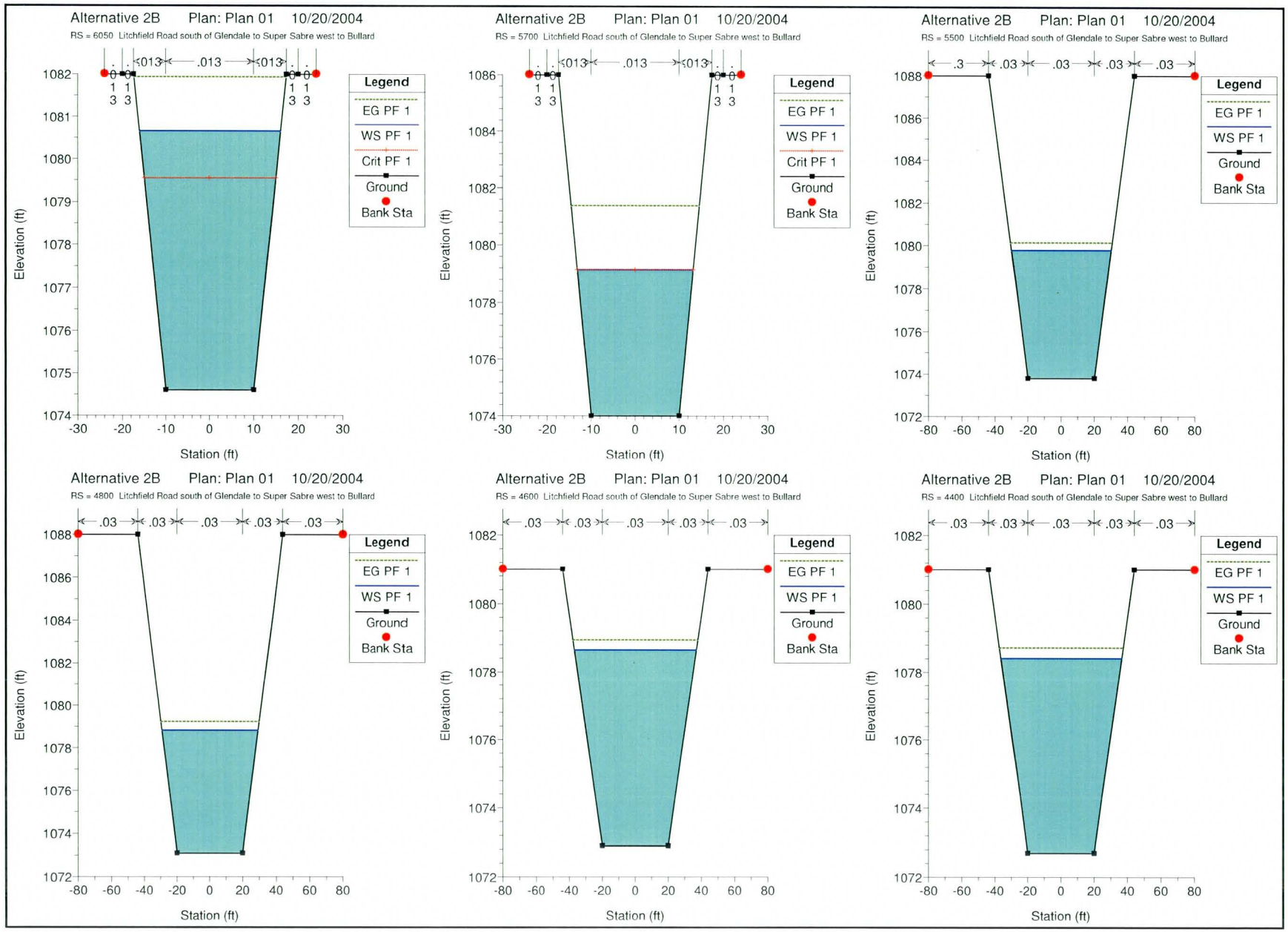
Alternative 2B Hydraulic Modeling

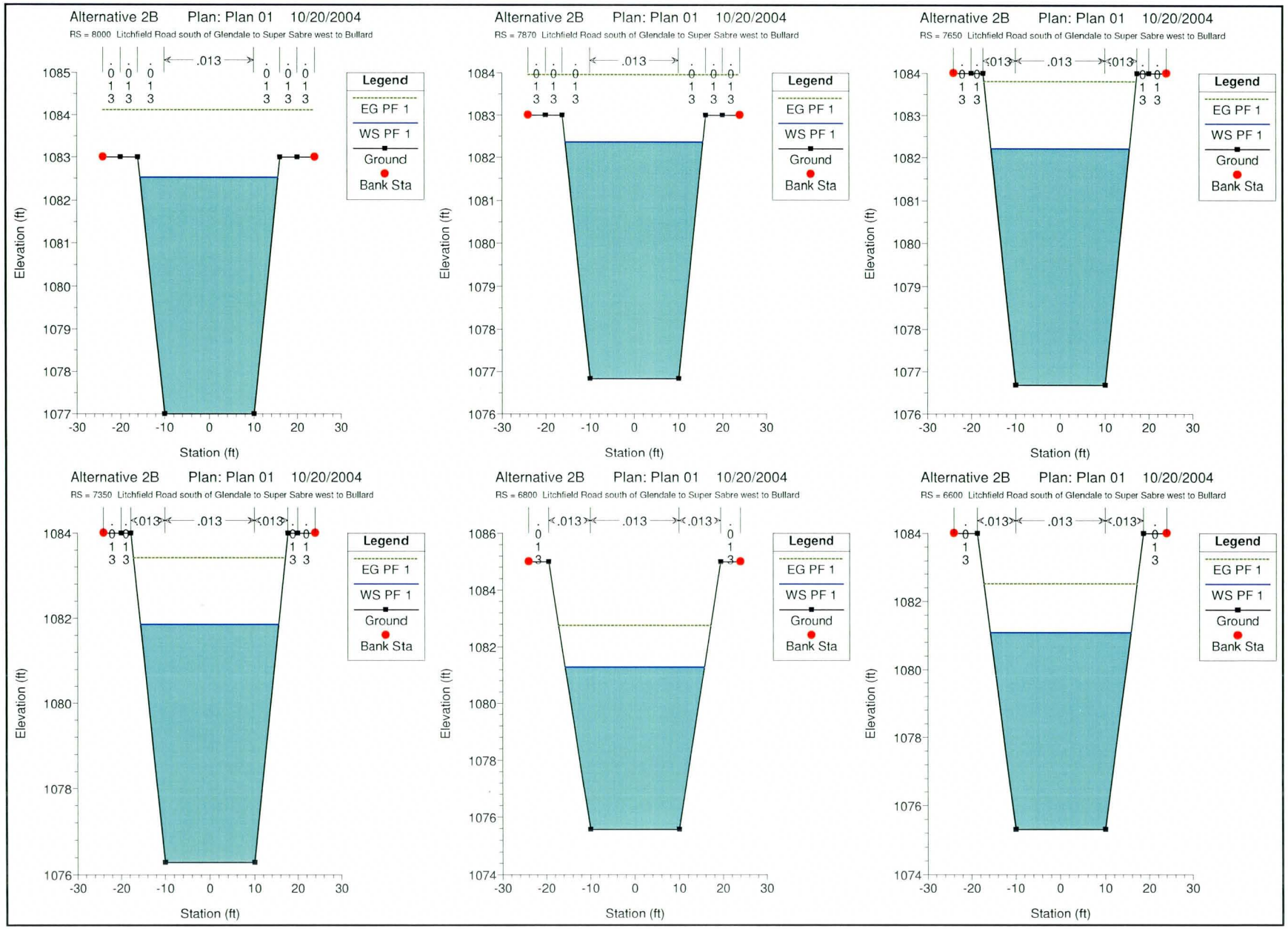
HEC-RAS Output

Alternative 2B – Channel Along Litchfield South of Glendale to Super Sabre then West to Bullard


Alternative 2B Plan: Plan 01 7/26/2004
Legend
WS PF 1
Ground
Bank Sta
8000
7870
7650
7350
6800
6600
6050
5500
4800
4600
4400
4000
3230
2230
1610
1120
630
0

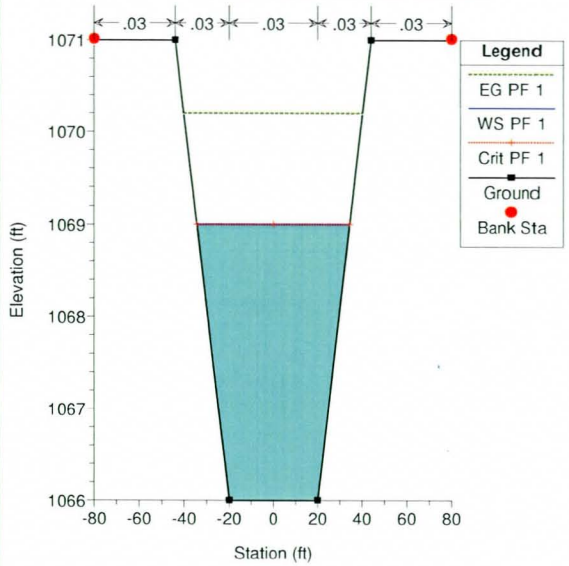

Alternative 2B Plan: Plan 01 10/20/2004
RS = 4000 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 3230 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 2230 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 1610 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 1120 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 630 Litchfield Road south of Glendale to Super Sabre west to Bullard
.03
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Alternative 2B Plan: Plan 01 10/20/2004
RS = 6050 Litchfield Road south of Glendale to Super Sabre west to Bullard
.013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alternative 2B Plan: Plan 01 10/20/2004
RS = 5700 Litchfield Road south of Glendale to Super Sabre west to Bullard
.013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alternative 2B Plan: Plan 01 10/20/2004
RS = 5500 Litchfield Road south of Glendale to Super Sabre west to Bullard
.3 .03 .03 .03 .03
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alternative 2B Plan: Plan 01 10/20/2004
RS = 4800 Litchfield Road south of Glendale to Super Sabre west to Bullard
.03 .03 .03 .03 .03
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alternative 2B Plan: Plan 01 10/20/2004
RS = 4600 Litchfield Road south of Glendale to Super Sabre west to Bullard
.03 .03 .03 .03 .03
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Alternative 2B Plan: Plan 01 10/20/2004
RS = 4400 Litchfield Road south of Glendale to Super Sabre west to Bullard
.03 .03 .03 .03 .03
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Alternative 2B Plan: Plan 01 10/20/2004
RS = 8000 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 7870 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 7650 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 7350 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 6800 Litchfield Road south of Glendale to Super Sabre west to Bullard
Alternative 2B Plan: Plan 01 10/20/2004
RS = 6600 Litchfield Road south of Glendale to Super Sabre west to Bullard
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

Alternative 2B Plan: Plan 01 10/20/2004

RS = 0 Litchfield Road south of Glendale to Super Sabre west to Bullard



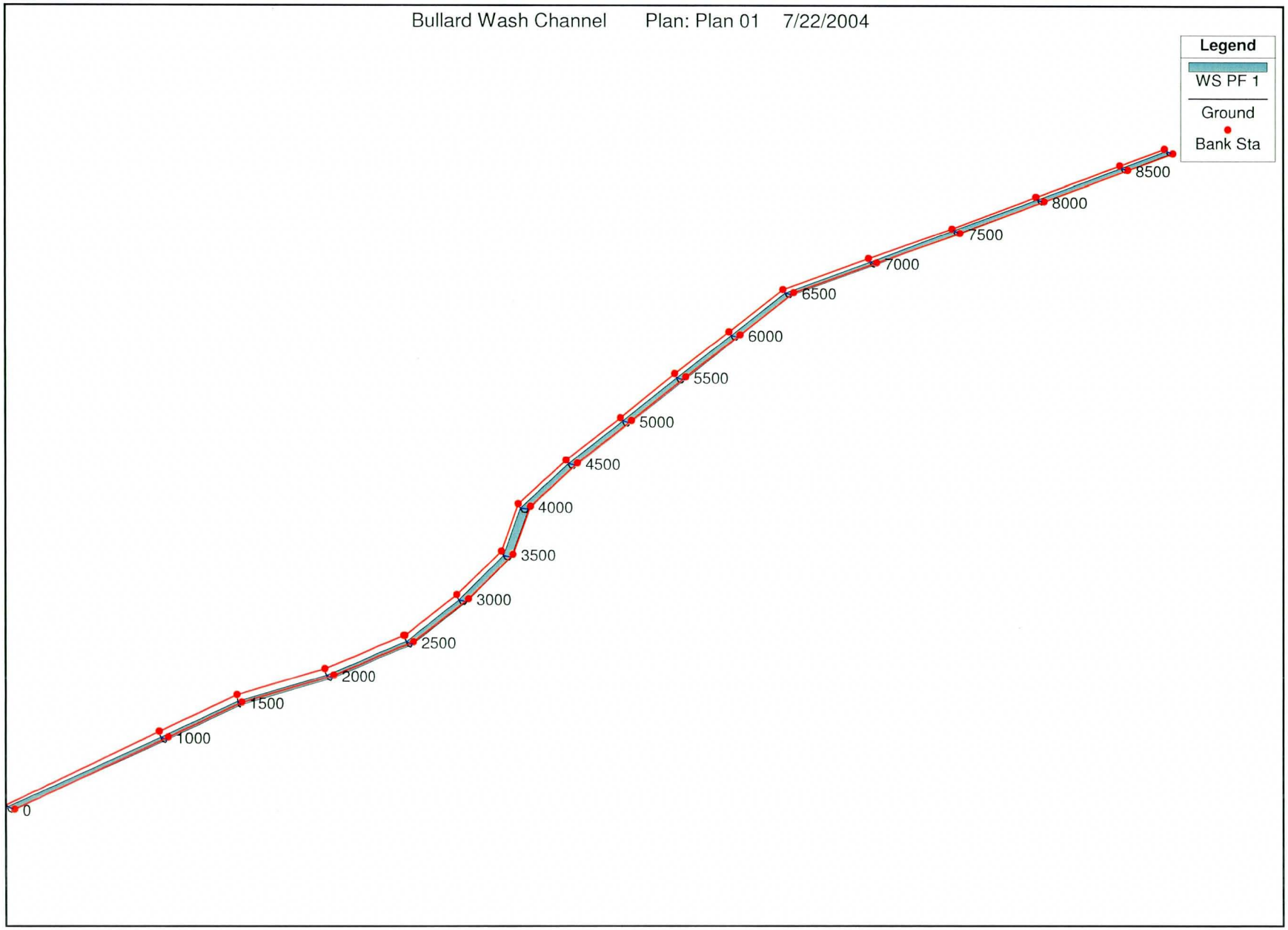
HEC-RAS Plan: P3 River: Litchfield Chann Reach: South Channel Profile: PF 1

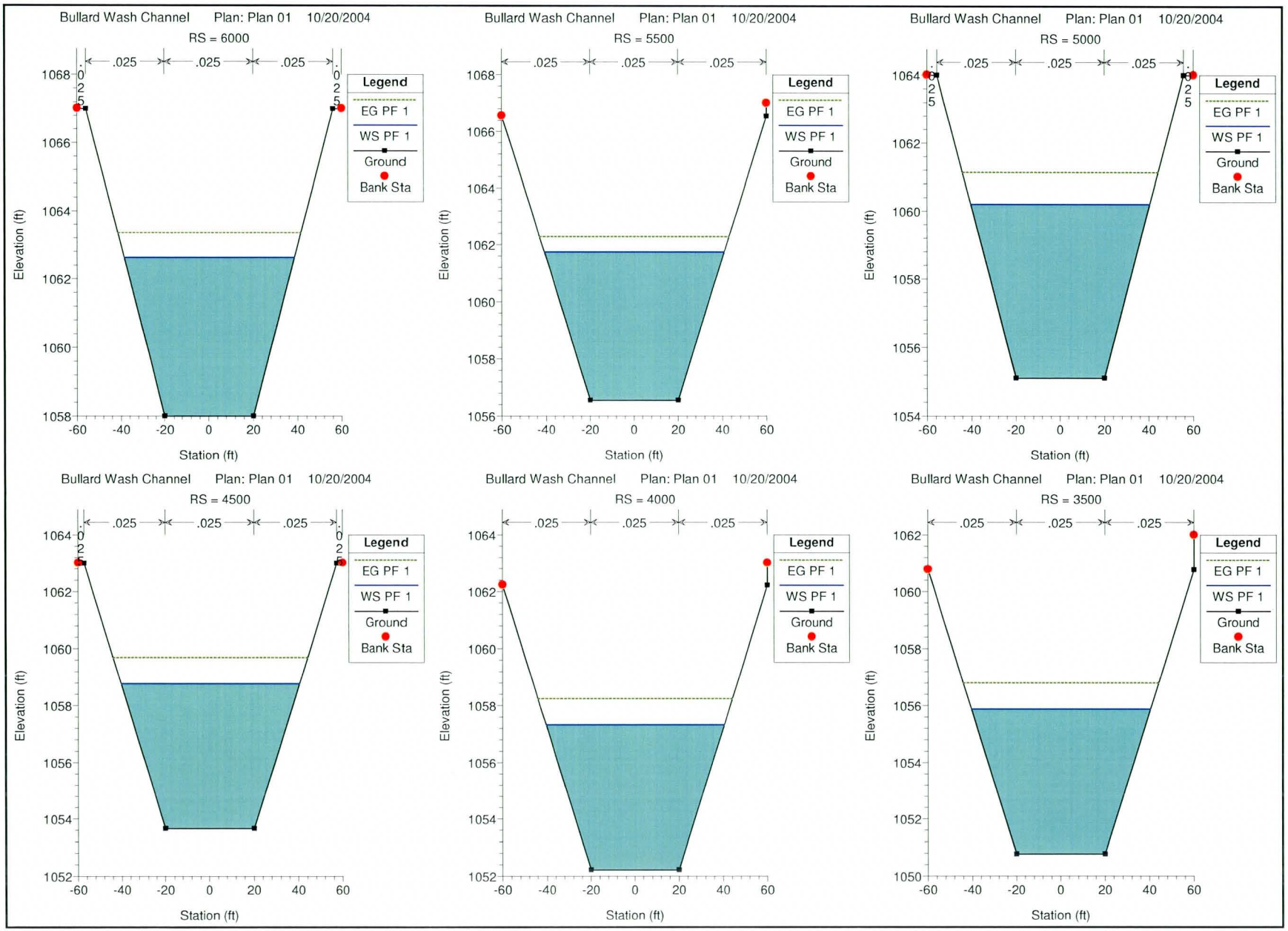
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
South Channel	8000	PF 1	1430.00	1077.00	1082.52		1084.12	0.001258	10.14	140.99	31.05	0.84
South Channel	7870	PF 1	1430.00	1076.83	1082.36		1083.95	0.001252	10.13	141.22	31.06	0.84
South Channel	7650	PF 1	1430.00	1076.68	1082.21		1083.80	0.001252	10.13	141.21	31.06	0.84
South Channel	7350	PF 1	1430.00	1076.29	1081.86		1083.42	0.001224	10.05	142.33	31.13	0.83
South Channel	6800	PF 1	1430.00	1075.57	1081.28		1082.75	0.001124	9.75	146.68	31.41	0.80
South Channel	6600	PF 1	1430.00	1075.31	1081.09		1082.52	0.001077	9.60	148.89	31.55	0.78
South Channel	6050	PF 1	1430.00	1074.60	1080.65	1079.55	1081.93	0.000919	9.08	157.46	32.09	0.72
South Channel	5700	PF 1	1430.00	1074.00	1079.12	1079.12	1081.38	0.001940	12.05	118.66	26.32	1.00
South Channel	5500	PF 1	1430.00	1073.80	1079.76		1080.12	0.001183	4.79	298.70	60.16	0.38
South Channel	4800	PF 1	1430.00	1073.10	1078.82		1079.22	0.001392	5.08	281.38	58.42	0.41
South Channel	4600	PF 1	1430.00	1072.90	1078.64		1078.94	0.001107	4.37	327.52	74.04	0.37
South Channel	4400	PF 1	1430.00	1072.70	1078.41		1078.71	0.001144	4.43	322.59	73.01	0.37
South Channel	4000	PF 1	1430.00	1072.30	1077.91		1078.23	0.001247	4.60	310.92	70.93	0.39
South Channel	3230	PF 1	1430.00	1071.53	1076.24		1076.85	0.002661	6.27	227.95	56.79	0.55
South Channel	2230	PF 1	1430.00	1069.00	1074.28		1074.71	0.001684	5.26	271.93	63.03	0.45
South Channel	1610	PF 1	1430.00	1068.00	1073.47		1073.78	0.001242	4.45	321.60	77.53	0.38
South Channel	1120	PF 1	1430.00	1067.50	1072.84		1073.15	0.001314	4.48	319.00	79.44	0.39
South Channel	630	PF 1	1430.00	1067.00	1072.04	1070.09	1072.42	0.001690	4.96	288.51	74.54	0.44
South Channel	0	PF 1	1430.00	1066.00	1068.99	1068.99	1070.19	0.010089	8.79	162.76	68.74	1.01

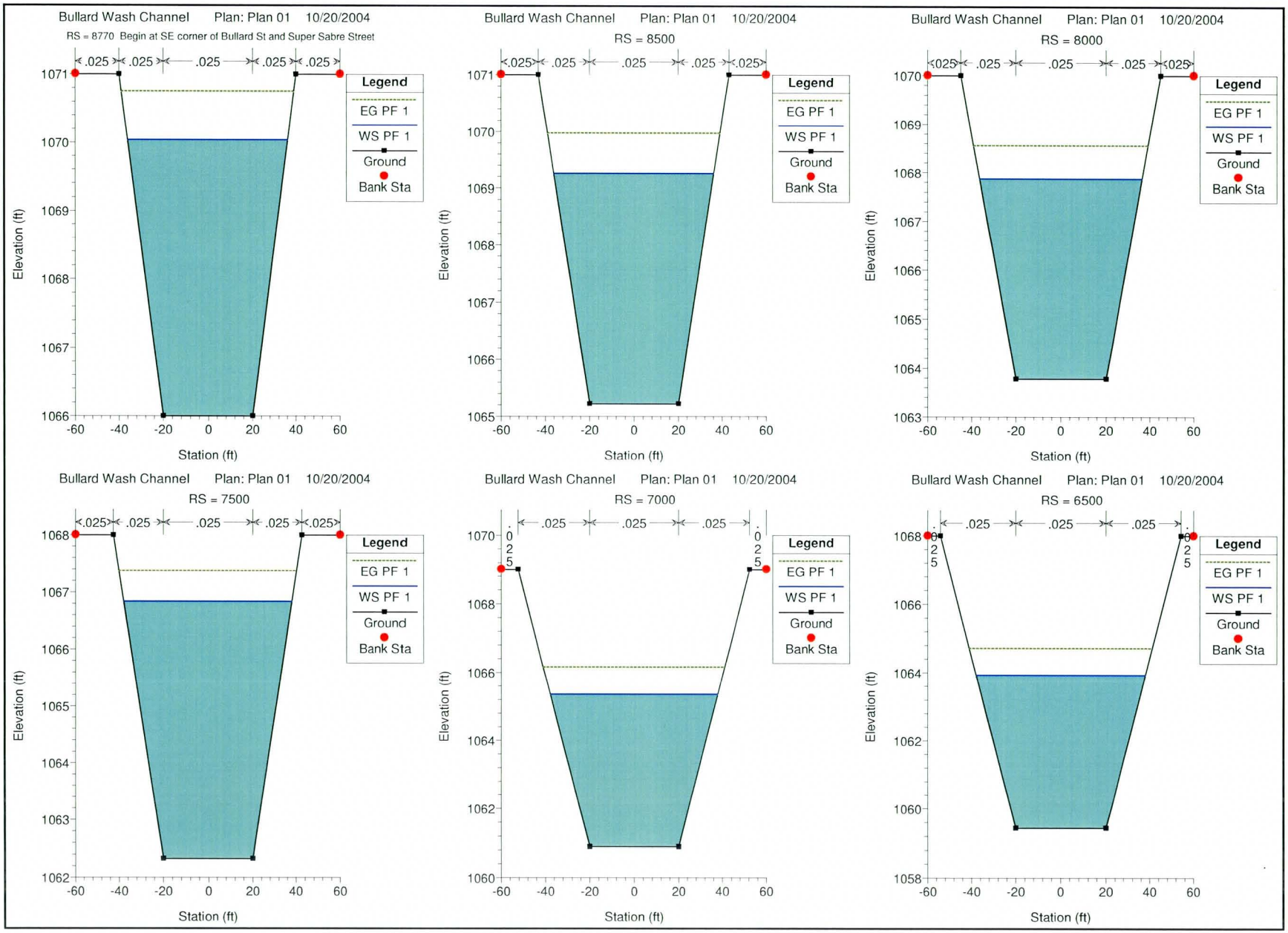
HEC-RAS Output

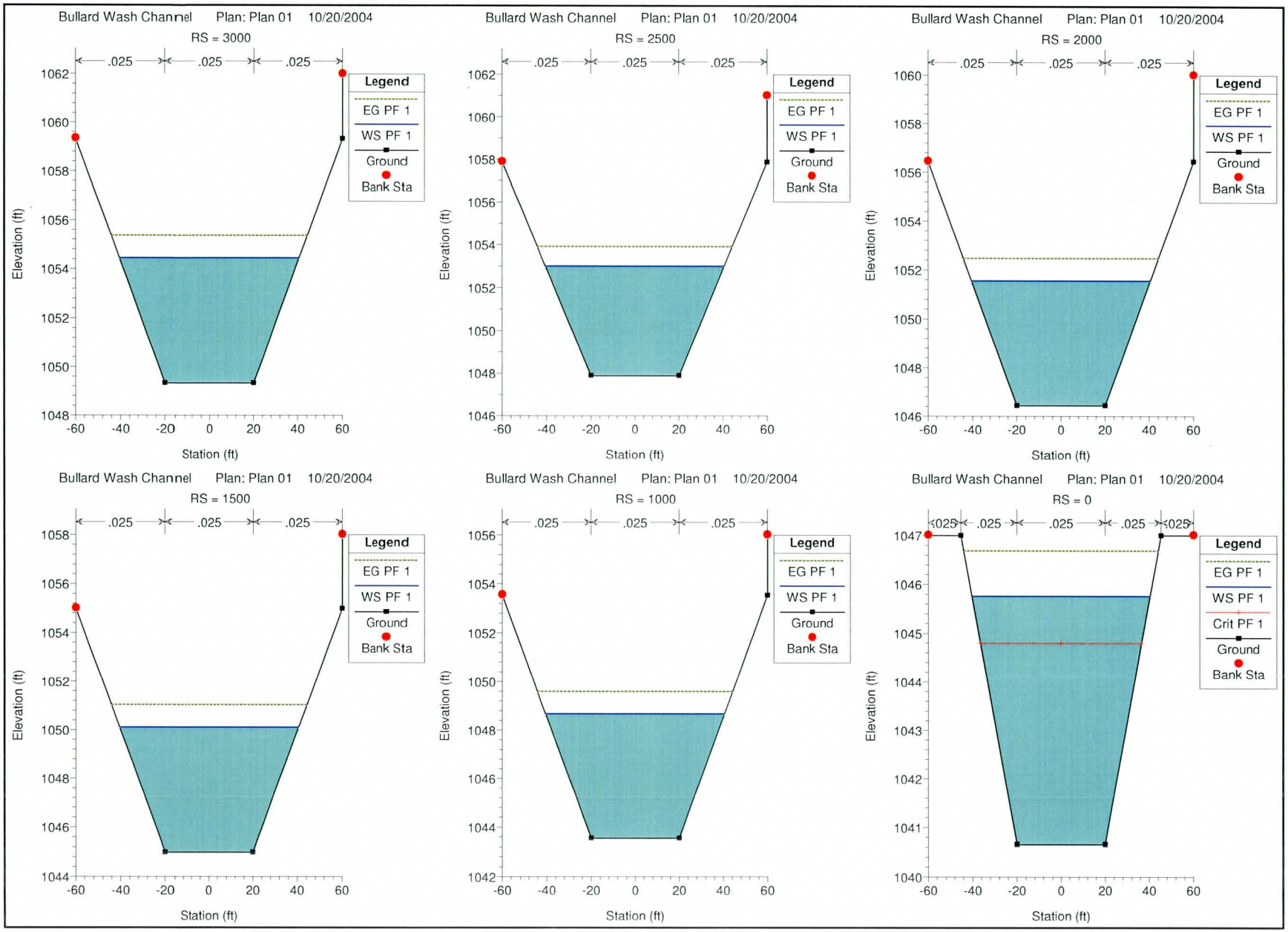
Alternative 2B – Bullard Channel

Bullard Wash Channel Plan: Plan 01 7/22/2004




Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 6000
RS = 5500
RS = 5000
RS = 4500
RS = 4000
RS = 3500
.025
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 8770 Begin at SE corner of Bullard St and Super Sabre Street
Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 8500
Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 8000
Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 7500
Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 7000
Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 6500
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
.025


Bullard Wash Channel Plan: Plan 01 10/20/2004
RS = 3000
RS = 2500
RS = 2000
RS = 1500
RS = 1000
RS = 0
.025
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

HEC-RAS Plan: Plan 01 River: Bullard Wash Reach: Bullard Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Bullard	8770	PF 1	1534.00	1066.00	1070.03		1070.75	0.002886	6.77	226.42	72.27	0.67
Bullard	8500	PF 1	1534.00	1065.22	1069.26		1069.97	0.002879	6.77	226.62	72.29	0.67
Bullard	8000	PF 1	1534.00	1063.78	1067.87		1068.56	0.002751	6.66	230.24	72.69	0.66
Bullard	7500	PF 1	1534.00	1062.33	1066.84		1067.37	0.001911	5.86	261.64	76.07	0.56
Bullard	7000	PF 1	1856.00	1060.89	1065.36		1066.16	0.002899	7.18	258.37	75.72	0.69
Bullard	6500	PF 1	1856.00	1059.44	1063.93		1064.72	0.002849	7.14	259.94	75.89	0.68
Bullard	6000	PF 1	1856.00	1058.00	1062.62		1063.35	0.002558	6.87	270.00	76.94	0.65
Bullard	5500	PF 1	1856.00	1056.55	1061.74		1062.28	0.001647	5.88	315.44	81.53	0.53
Bullard	5000	PF 1	2376.00	1055.11	1060.20		1061.13	0.002898	7.72	307.59	80.76	0.70
Bullard	4500	PF 1	2376.00	1053.66	1058.76		1059.69	0.002879	7.71	308.32	80.83	0.70
Bullard	4000	PF 1	2376.00	1052.22	1057.31		1058.24	0.002898	7.72	307.59	80.76	0.70
Bullard	3500	PF 1	2376.00	1050.77	1055.87		1056.80	0.002879	7.71	308.32	80.83	0.70
Bullard	3000	PF 1	2376.00	1049.33	1054.42		1055.35	0.002898	7.72	307.59	80.76	0.70
Bullard	2500	PF 1	2376.00	1047.88	1052.98		1053.91	0.002879	7.71	308.32	80.83	0.70
Bullard	2000	PF 1	2376.00	1046.44	1051.53		1052.46	0.002898	7.72	307.59	80.76	0.70
Bullard	1500	PF 1	2376.00	1044.99	1050.09		1051.02	0.002880	7.71	308.30	80.83	0.70
Bullard	1000	PF 1	2376.00	1043.55	1048.65		1049.57	0.002887	7.71	308.04	80.80	0.70
Bullard	0	PF 1	2376.00	1040.66	1045.75	1044.78	1046.68	0.002900	7.73	307.52	80.75	0.70

Culvert Master Output

Alternative 2B

Culvert Calculator Report
Box at Bullard Rd - Alt 2B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,270.50	ft	Headwater Depth/ Height	1.00	
Computed Headwater Elevation	1,270.50	ft	Discharge	1,452.09	cfs
Inlet Control HW Elev	1,270.48	ft	Tailwater Elevation	1,269.00	ft
Outlet Control HW Elev	1,270.50	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,266.50	ft	Downstream Invert	1,266.45	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	2.55	ft
Slope Type	Mild		Normal Depth	3.10	ft
Flow Regime	Subcritical		Critical Depth	2.33	ft
Velocity Downstream	7.91	ft/s	Critical Slope	0.002877	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 4 ft		Rise	4.00	ft
Number Sections	6				

Outlet Control Properties					
Outlet Control HW Elev	1,270.50	ft	Upstream Velocity Head	0.89	ft
Ke	0.50		Entrance Loss	0.45	ft

Inlet Control Properties					
Inlet Control HW Elev	1,270.48	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	288.0	ft²
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Culvert Calculator Report
Box at Litchfield Rd - Alt 2B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,079.00	ft	Headwater Depth/ Height	1.02	
Computed Headwater Elevation	1,079.00	ft	Discharge	1,611.63	cfs
Inlet Control HW Elev	1,078.71	ft	Tailwater Elevation	1,075.00	ft
Outlet Control HW Elev	1,079.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,073.90	ft	Downstream Invert	1,073.80	ft
Length	50.00	ft	Constructed Slope	0.002000	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	2.82	ft
Slope Type	Mild		Normal Depth	3.21	ft
Flow Regime	Subcritical		Critical Depth	2.82	ft
Velocity Downstream	9.53	ft/s	Critical Slope	0.002913	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
Number Sections	5				

Outlet Control Properties					
Outlet Control HW Elev	1,079.00	ft	Upstream Velocity Head	1.21	ft
Ke	0.70		Entrance Loss	0.85	ft

Inlet Control Properties					
Inlet Control HW Elev	1,078.71	ft	Flow Control	N/A	
Inlet Type	0 ° wingwall flares		Area Full	300.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	3	
C	0.04230		Equation Form	1	
Y	0.82000				

Culvert Calculator Report
Box at Munitions Rd - Alt 2B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,070.00	ft	Headwater Depth/ Height	0.99	
Computed Headwater Elevation	1,070.00	ft	Discharge	2,932.60	cfs
Inlet Control HW Elev	1,069.91	ft	Tailwater Elevation	1,068.00	ft
Outlet Control HW Elev	1,070.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,064.05	ft	Downstream Invert	1,064.00	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	4.00	ft
Slope Type	Mild		Normal Depth	N/A	ft
Flow Regime	Subcritical		Critical Depth	3.72	ft
Velocity Downstream	10.18	ft/s	Critical Slope	0.003024	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
Number Sections	6				

Outlet Control Properties					
Outlet Control HW Elev	1,070.00	ft	Upstream Velocity Head	1.48	ft
Ke	0.20		Entrance Loss	0.30	ft

Inlet Control Properties					
Inlet Control HW Elev	1,069.91	ft	Flow Control	N/A	
Inlet Type	90 ° headwall w 45 ° bevels		Area Full	432.0	ft²
K	0.49500		HDS 5 Chart	'10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

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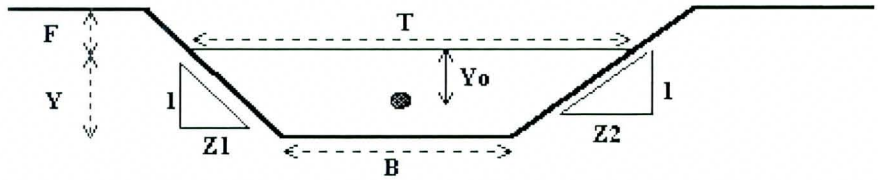
UD – Channels V 1.01.xls Output

Alternative 2B

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Bullard Wash - Preferred Alternative

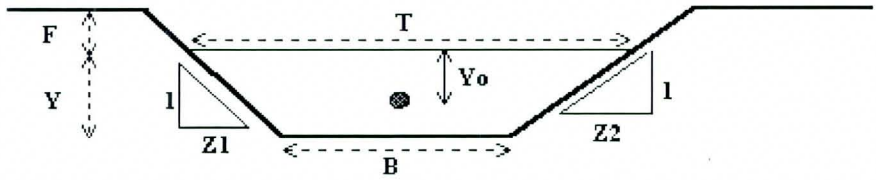


Design Information (Input)			
Channel Invert Slope	So =	0.0031	ft/ft
Channel Manning's N	N =	0.030	
Bottom Width	B =	40.0	ft
Left Side Slope	Z1 =	6.0	ft/ft
Right Side Slope	Z2 =	6.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**6.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**3,191.2**	cfs
Froude Number	**Fr =**	**0.61**	
Flow Velocity	**V =**	**7.0**	fps
Flow Area	A =	456.0	sq ft
Top Width	T =	112.0	ft
Wetted Perimeter	P =	113.0	ft
Hydraulic Radius	R =	4.0	ft
Hydraulic Depth	D =	4.1	ft
Specific Energy	Es =	6.8	ft
Centroid of Flow Area	Yo =	2.5	ft
Specific Force	Fs =	114.9	kip

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Channel west to Bullard Wash, Alternative 2B



Design Information (Input)			
Channel Invert Slope	So =	0.0010	ft/ft
Channel Manning's N	N =	0.030	
Bottom Width	B =	40.0	ft
Left Side Slope	Z1 =	4.0	ft/ft
Right Side Slope	Z2 =	4.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**6.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**1,592.7**	cfs
Froude Number	**Fr =**	**0.35**	
Flow Velocity	**V =**	**4.1**	fps
Flow Area	A =	384.0	sq ft
Top Width	T =	88.0	ft
Wetted Perimeter	P =	89.5	ft
Hydraulic Radius	R =	4.3	ft
Hydraulic Depth	D =	4.4	ft
Specific Energy	Es =	6.3	ft
Centroid of Flow Area	Yo =	2.6	ft
Specific Force	Fs =	75.5	kip

Alternative 3A Hydraulic Modeling

Culvert Master Output

Alternative 3A

Culvert Calculator Report
Culvert North to Dysart Drain - Alt 3A

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,080.00	ft	Headwater Depth/ Height	1.00	
Computed Headwater Elevation	1,080.00	ft	Discharge	1,424.95	cfs
Inlet Control HW Elev	1,079.75	ft	Tailwater Elevation	1,072.00	ft
Outlet Control HW Elev	1,080.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,074.00	ft	Downstream Invert	1,070.00	ft
Length	2,600.00	ft	Constructed Slope	0.001538	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	3.65	ft
Slope Type	Mild		Normal Depth	4.65	ft
Flow Regime	Subcritical		Critical Depth	3.65	ft
Velocity Downstream	10.84	ft/s	Critical Slope	0.003014	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
Number Sections	3				

Outlet Control Properties					
Outlet Control HW Elev	1,080.00	ft	Upstream Velocity Head	1.13	ft
Ke	0.20		Entrance Loss	0.23	ft

Inlet Control Properties					
Inlet Control HW Elev	1,079.75	ft	Flow Control	N/A	
Inlet Type	90 ° headwall w 45 ° bevels		Area Full	216.0	ft^2
K	0.49500		HDS 5 Chart	'10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Culvert Calculator Report
Box at Munitions Rd - Alt 3A

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,074.00	ft	Headwater Depth/ Height	0.82	
Computed Headwater Elevation	1,074.00	ft	Discharge	665.68	cfs
Inlet Control HW Elev	1,073.96	ft	Tailwater Elevation	1,072.00	ft
Outlet Control HW Elev	1,074.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,069.05	ft	Downstream Invert	1,069.00	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	3.00	ft
Slope Type	Mild		Normal Depth	3.88	ft
Flow Regime	Subcritical		Critical Depth	2.88	ft
Velocity Downstream	9.25	ft/s	Critical Slope	0.002919	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
Number Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,074.00	ft	Upstream Velocity Head	1.16	ft
Ke	0.50		Entrance Loss	0.58	ft

Inlet Control Properties					
Inlet Control HW Elev	1,073.96	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	144.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Culvert Calculator Report
Culvert West to Bullard - Alt 3A

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,085.00	ft	Headwater Depth/ Height	1.00	
Computed Headwater Elevation	1,085.00	ft	Discharge	470.43	cfs
Inlet Control HW Elev	1,084.90	ft	Tailwater Elevation	1,069.00	ft
Outlet Control HW Elev	1,085.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,081.00	ft	Downstream Invert	1,066.00	ft
Length	4,600.00	ft	Constructed Slope	0.003261	ft/ft

Hydraulic Profile					
Profile	CompositeS1S2		Depth, Downstream	3.00	ft
Slope Type	Steep		Normal Depth	2.19	ft
Flow Regime	N/A		Critical Depth	2.29	ft
Velocity Downstream	6.53	ft/s	Critical Slope	0.002875	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 4 ft		Rise	4.00	ft
Number Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,085.00	ft	Upstream Velocity Head	1.14	ft
Ke	0.50		Entrance Loss	0.57	ft

Inlet Control Properties					
Inlet Control HW Elev	1,084.90	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	96.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Alternative 3B Hydraulic Modeling

Culvert Master Output

Alternative 3B

Culvert Calculator Report
Box at Munitions Rd - Alt 3B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,070.00	ft	Headwater Depth/ Height	0.99	
Computed Headwater Elevation	1,070.00	ft	Discharge	2,932.60	cfs
Inlet Control HW Elev	1,069.91	ft	Tailwater Elevation	1,068.00	ft
Outlet Control HW Elev	1,070.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,064.05	ft	Downstream Invert	1,064.00	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	4.00	ft
Slope Type	Mild		Normal Depth	N/A	ft
Flow Regime	Subcritical		Critical Depth	3.72	ft
Velocity Downstream	10.18	ft/s	Critical Slope	0.003024	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
Number Sections	6				

Outlet Control Properties					
Outlet Control HW Elev	1,070.00	ft	Upstream Velocity Head	1.48	ft
Ke	0.20		Entrance Loss	0.30	ft

Inlet Control Properties					
Inlet Control HW Elev	1,069.91	ft	Flow Control	N/A	
Inlet Type	90 ° headwall w 45 ° bevels		Area Full	432.0	ft²
K	0.49500		HDS 5 Chart	'10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Culvert Calculator Report
Culvert South to Super Sabre - Alt 3B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,081.50	ft	Headwater Depth/ Height	0.90	
Computed Headwater Elevation	1,081.50	ft	Discharge	1,499.83	cfs
Inlet Control HW Elev	1,081.23	ft	Tailwater Elevation	1,076.00	ft
Outlet Control HW Elev	1,081.50	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,077.00	ft	Downstream Invert	1,074.00	ft
Length	2,400.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	2.69	ft
Slope Type	Mild		Normal Depth	3.60	ft
Flow Regime	Subcritical		Critical Depth	2.69	ft
Velocity Downstream	9.30	ft/s	Critical Slope	0.002901	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
Number Sections	5				

Outlet Control Properties					
Outlet Control HW Elev	1,081.50	ft	Upstream Velocity Head	0.75	ft
Ke	0.20		Entrance Loss	0.15	ft

Inlet Control Properties					
Inlet Control HW Elev	1,081.23	ft	Flow Control	N/A	
Inlet Type	90 ° headwall w 45 ° bevels		Area Full	300.0	ft^2
K	0.49500		HDS 5 Chart	'10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Culvert Calculator Report
Box at Litchfield Rd - Alt 3B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,079.00	ft	Headwater Depth/ Height	1.02	
Computed Headwater Elevation	1,079.00	ft	Discharge	1,557.76	cfs
Inlet Control HW Elev	1,078.59	ft	Tailwater Elevation	1,075.00	ft
Outlet Control HW Elev	1,079.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,073.90	ft	Downstream Invert	1,073.50	ft
Length	50.00	ft	Constructed Slope	0.008000	ft/ft

Hydraulic Profile					
Profile	S2		Depth, Downstream	2.26	ft
Slope Type	Steep		Normal Depth	1.96	ft
Flow Regime	Supercritical		Critical Depth	2.76	ft
Velocity Downstream	11.51	ft/s	Critical Slope	0.002908	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
Number Sections	5				

Outlet Control Properties					
Outlet Control HW Elev	1,079.00	ft	Upstream Velocity Head	1.38	ft
Ke	0.70		Entrance Loss	0.96	ft

Inlet Control Properties					
Inlet Control HW Elev	1,078.59	ft	Flow Control	N/A	
Inlet Type	0 ° wingwall flares		Area Full	300.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	3	
C	0.04230		Equation Form	1	
Y	0.82000				

Culvert Calculator Report
Culvert West to Bullard - Alt 3B

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,078.50	ft	Headwater Depth/ Height	0.90	
Computed Headwater Elevation	1,078.50	ft	Discharge	1,538.39	cfs
Inlet Control HW Elev	1,078.31	ft	Tailwater Elevation	1,072.00	ft
Outlet Control HW Elev	1,078.50	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,074.00	ft	Downstream Invert	1,066.00	ft
Length	5,600.00	ft	Constructed Slope	0.001429	ft/ft

Hydraulic Profile					
Profile	CompositePressureM1		Depth, Downstream	6.00	ft
Slope Type	N/A		Normal Depth	3.50	ft
Flow Regime	Subcritical		Critical Depth	2.73	ft
Velocity Downstream	5.13	ft/s	Critical Slope	0.002905	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
nber Sections	5				

Outlet Control Properties					
Outlet Control HW Elev	1,078.50	ft	Upstream Velocity Head	0.83	ft
Ke	0.20		Entrance Loss	0.17	ft

Inlet Control Properties					
Inlet Control HW Elev	1,078.31	ft	Flow Control	N/A	
Inlet Type	90 ° headwall w 45 ° bevels		Area Full	300.0	ft^2
K	0.49500		HDS 5 Chart	'10	
M	0.66700		HDS 5 Scale	2	
C	0.03140		Equation Form	2	
Y	0.82000				

Alternative 4 Hydraulic Modeling

Culvert Master Output

Alternative 4

Culvert Calculator Report
Culvert South to Bullard - Alt 4

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,072.50	ft	Headwater Depth/ Height	1.00	
Computed Headwater Elevation	1,072.50	ft	Discharge	464.19	cfs
Inlet Control HW Elev	1,072.37	ft	Tailwater Elevation	1,070.00	ft
Outlet Control HW Elev	1,072.50	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,068.50	ft	Downstream Invert	1,066.00	ft
Length	2,000.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M1		Depth, Downstream	4.00	ft
Slope Type	Mild		Normal Depth	3.01	ft
Flow Regime	Subcritical		Critical Depth	2.27	ft
Velocity Downstream	4.84	ft/s	Critical Slope	0.002874	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 4 ft		Rise	4.00	ft
Number Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,072.50	ft	Upstream Velocity Head	0.61	ft
Ke	0.50		Entrance Loss	0.31	ft

Inlet Control Properties					
Inlet Control HW Elev	1,072.37	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	96.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Culvert Calculator Report
Box at Munitions Rd - Alt 4

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,074.00	ft	Headwater Depth/ Height	0.82	
Computed Headwater Elevation	1,074.00	ft	Discharge	665.68	cfs
Inlet Control HW Elev	1,073.96	ft	Tailwater Elevation	1,072.00	ft
Outlet Control HW Elev	1,074.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,069.05	ft	Downstream Invert	1,069.00	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	3.00	ft
Slope Type	Mild		Normal Depth	3.88	ft
Flow Regime	Subcritical		Critical Depth	2.88	ft
Velocity Downstream	9.25	ft/s	Critical Slope	0.002919	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 6 ft		Rise	6.00	ft
Number Sections	2				

Outlet Control Properties					
Outlet Control HW Elev	1,074.00	ft	Upstream Velocity Head	1.16	ft
Ke	0.50		Entrance Loss	0.58	ft

Inlet Control Properties					
Inlet Control HW Elev	1,073.96	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	144.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

Culvert Calculator Report
Culvert West to Infield Area - Alt 4

Solve For: Discharge

Culvert Summary					
Allowable HW Elevation	1,078.00	ft	Headwater Depth/ Height	1.00	
Computed Headwater Elevation	1,078.00	ft	Discharge	188.05	cfs
Inlet Control HW Elev	1,077.80	ft	Tailwater Elevation	1,073.50	ft
Outlet Control HW Elev	1,078.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,074.00	ft	Downstream Invert	1,070.50	ft
Length	3,200.00	ft	Constructed Slope	0.001094	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	3.00	ft
Slope Type	Mild		Normal Depth	3.19	ft
Flow Regime	Subcritical		Critical Depth	2.22	ft
Velocity Downstream	6.27	ft/s	Critical Slope	0.003081	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	10.00	ft
Section Size	10 x 4 ft		Rise	4.00	ft
nber Sections	1				

Outlet Control Properties					
Outlet Control HW Elev	1,078.00	ft	Upstream Velocity Head	0.54	ft
Ke	0.50		Entrance Loss	0.27	ft

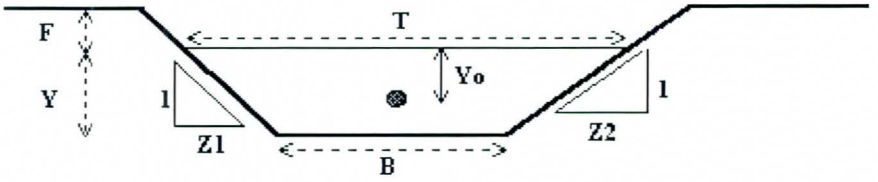
Inlet Control Properties					
Inlet Control HW Elev	1,077.80	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	40.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

UD – Channels V 1.01.xls Output

Alternative 4

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Alternative 4 - Infield Area Channel



Design Information (Input)			
Channel Invert Slope	So =	0.0001	ft/ft
Channel Manning's N	N =	0.013	
Bottom Width	B =	10.0	ft
Left Side Slope	Z1 =	2.0	ft/ft
Right Side Slope	Z2 =	2.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**5.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**255.0**	cfs
Froude Number	**Fr =**	**0.25**	
Flow Velocity	**V =**	**2.6**	fps
Flow Area	A =	100.0	sq ft
Top Width	T =	30.0	ft
Wetted Perimeter	P =	32.4	ft
Hydraulic Radius	R =	3.1	ft
Hydraulic Depth	D =	3.3	ft
Specific Energy	Es =	5.1	ft
Centroid of Flow Area	Yo =	2.1	ft
Specific Force	Fs =	14.2	kip

Final Alternative Hydraulic Modeling

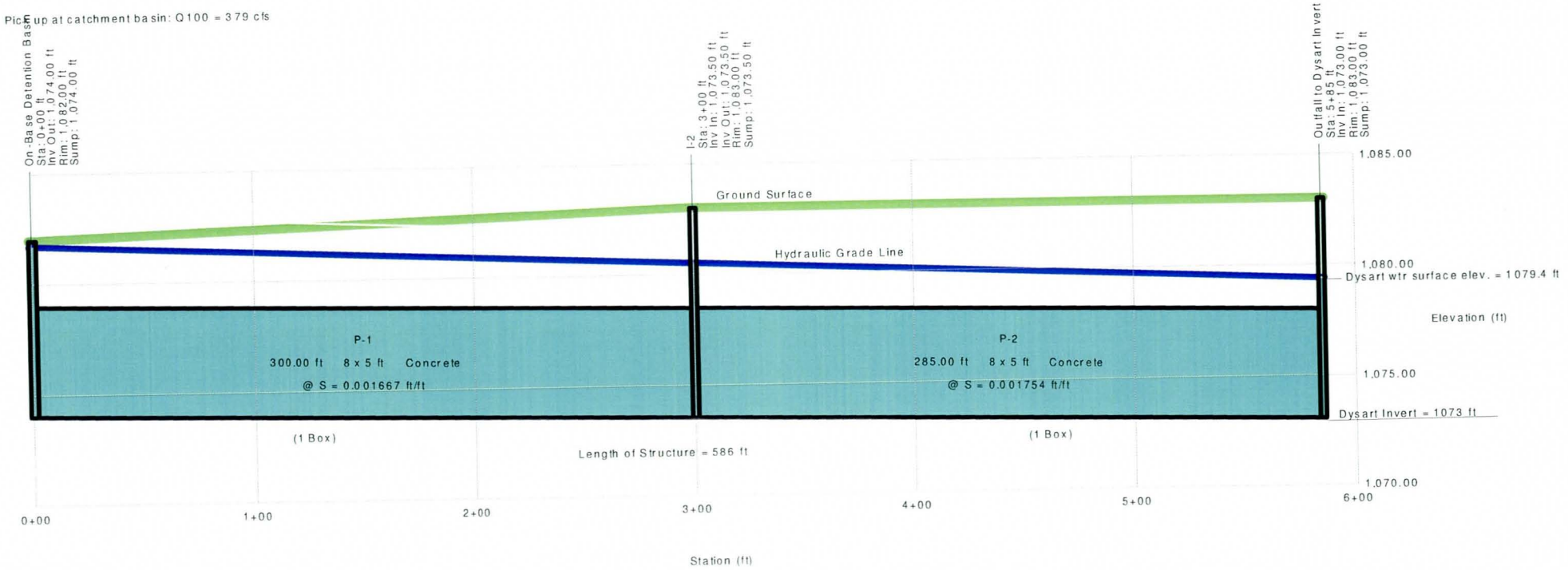
Final Alternative – Replacement of Existing Pipes from Subbasin 201 to Dysart Drain Hydraulic Modeling

StormCad Output

Final Alternative – Replacement of Existing Pipes from Subbasin 201 to Dysart Drain Hydraulic Modeling

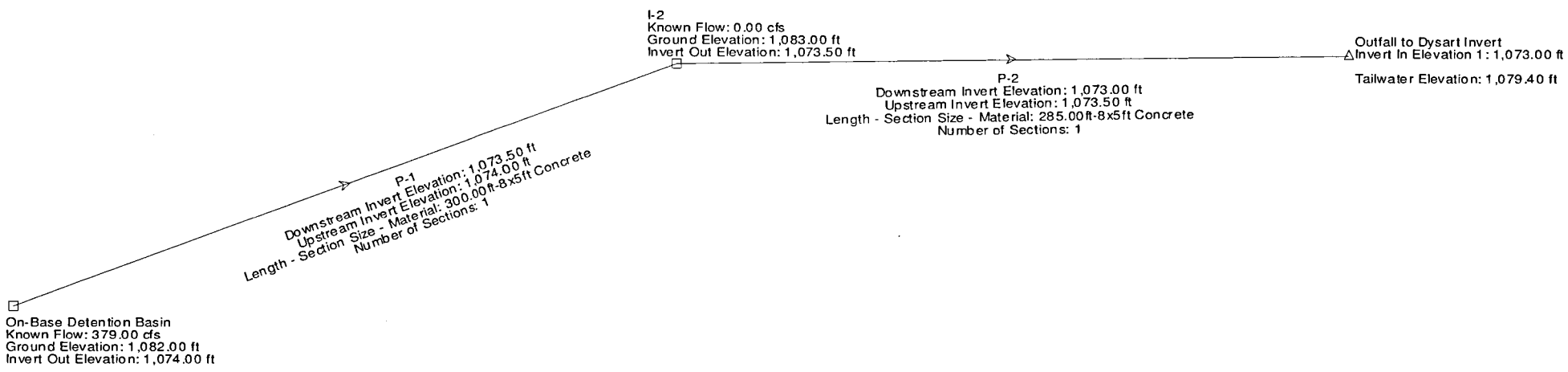
Profile
Scenario: Base

Sub-Basin 201 Pipe Profile: On-Base Detention Basin to Dysart Outfall



Scenario: Base

Sub-Basin 201 Drainage Structure: On-base Detention Basin to Dysart



Calculation Results Summary

==========
Scenario: Base

>>>> Info: Subsurface Network Rooted by: Outfall to Dysart Invert
>>>> Info: Subsurface Analysis iterations: 1
>>>> Info: Convergence was achieved.

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-2	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00
On-Base Detention Basin	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: Outfall to Dysart Invert

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-2	1	8 x 5 ft	Box	285.00	379.00	9.48	1,080.50	1,079.40
P-1	1	8 x 5 ft	Box	300.00	379.00	9.48	1,081.66	1,080.50

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
Outfall to Dysart Invert	379.00	1,083.00	1,079.40	1,079.40
I-2	379.00	1,083.00	1,080.50	1,080.50
On-Base Detention Basin	379.00	1,082.00	1,081.66	1,081.66

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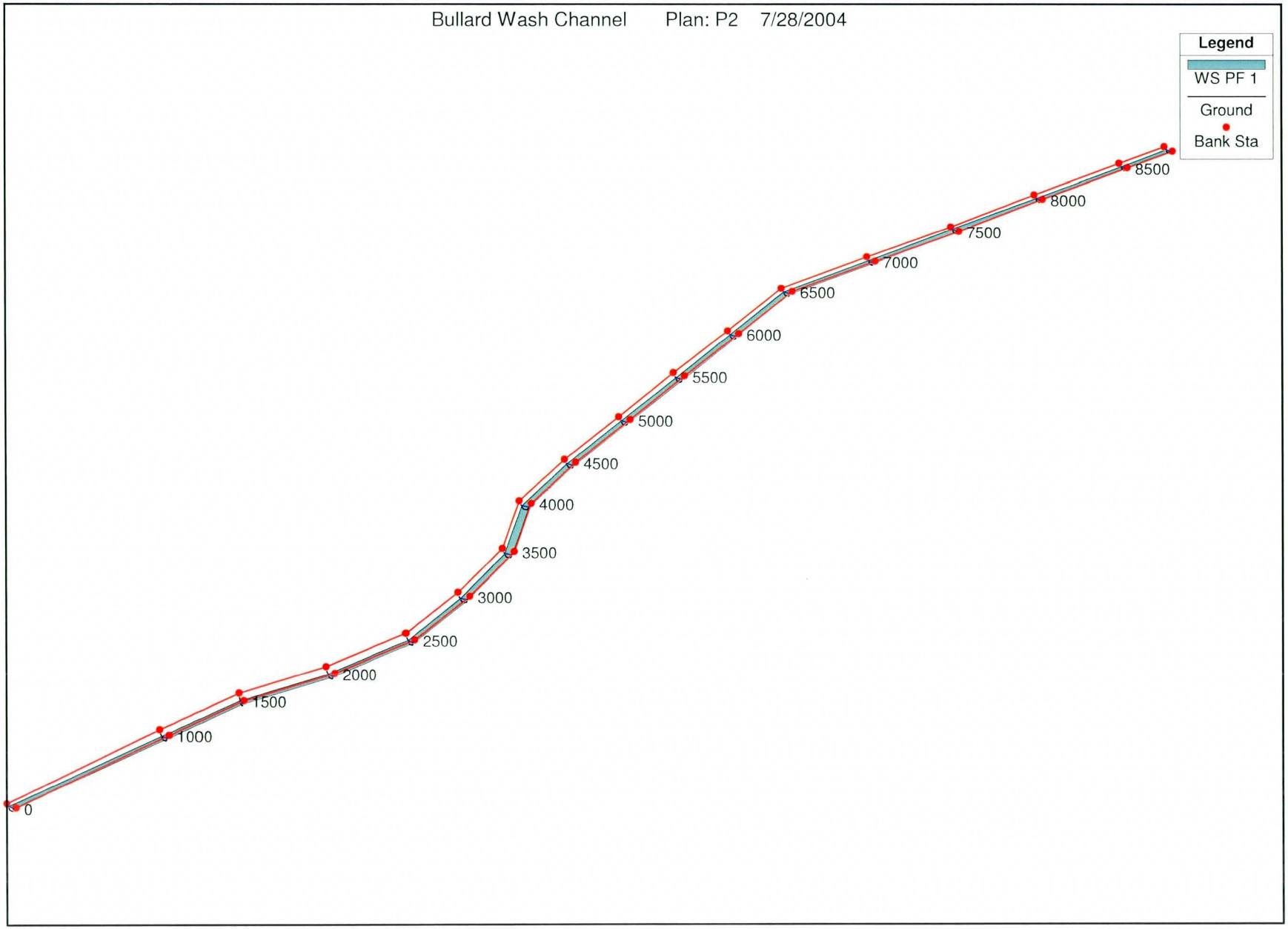
Final Alternative –Bullard Wash Hydraulic Modeling

HEC-RAS Output

Final Alternative –Bullard Wash

Hydraulic Modeling


Bullard Wash Channel Plan: P2 7/28/2004
Legend
WS PF 1
Ground
Bank Sta
0
1000
1500
2000
2500
3000
3500
4000
4500
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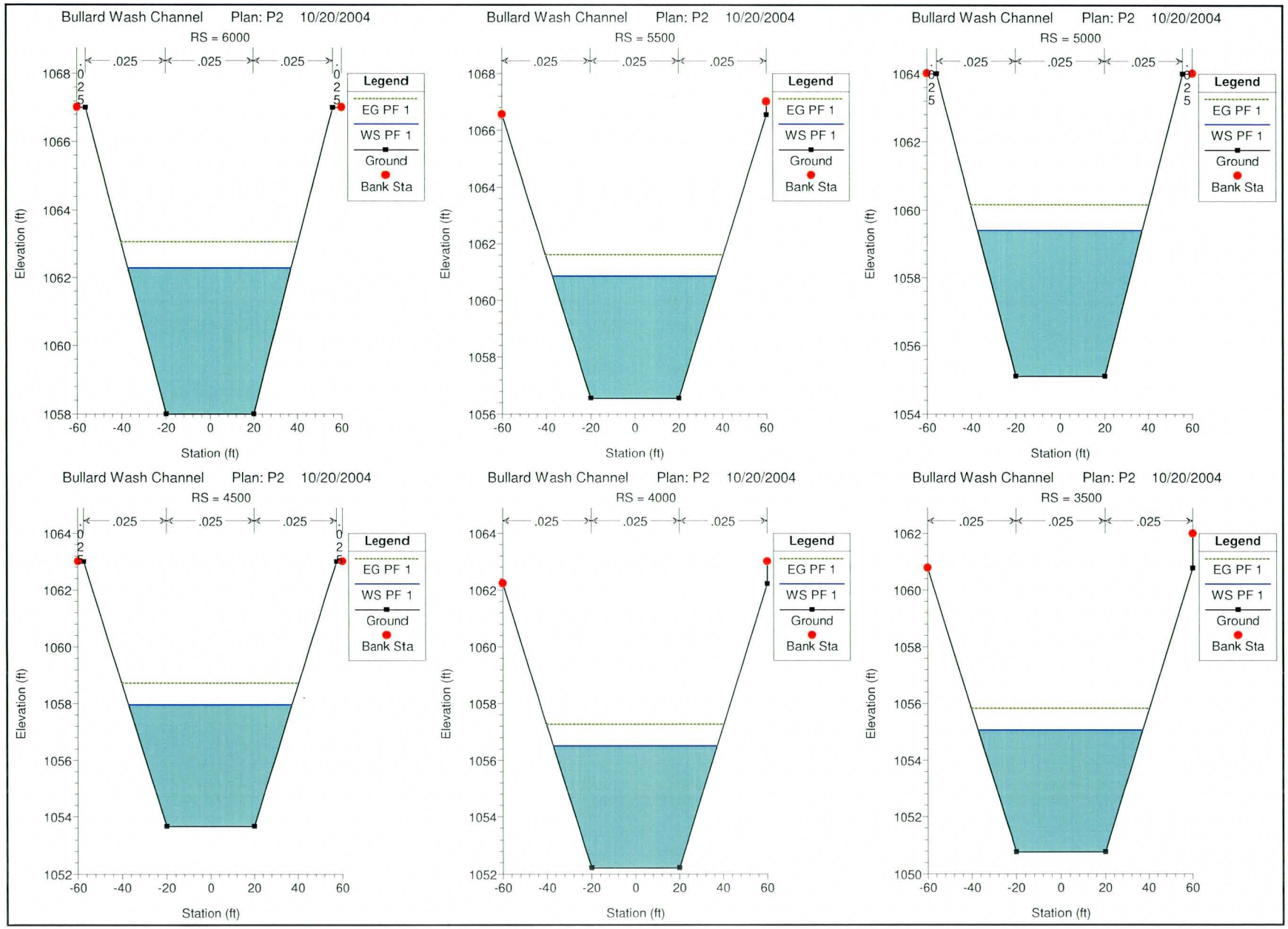
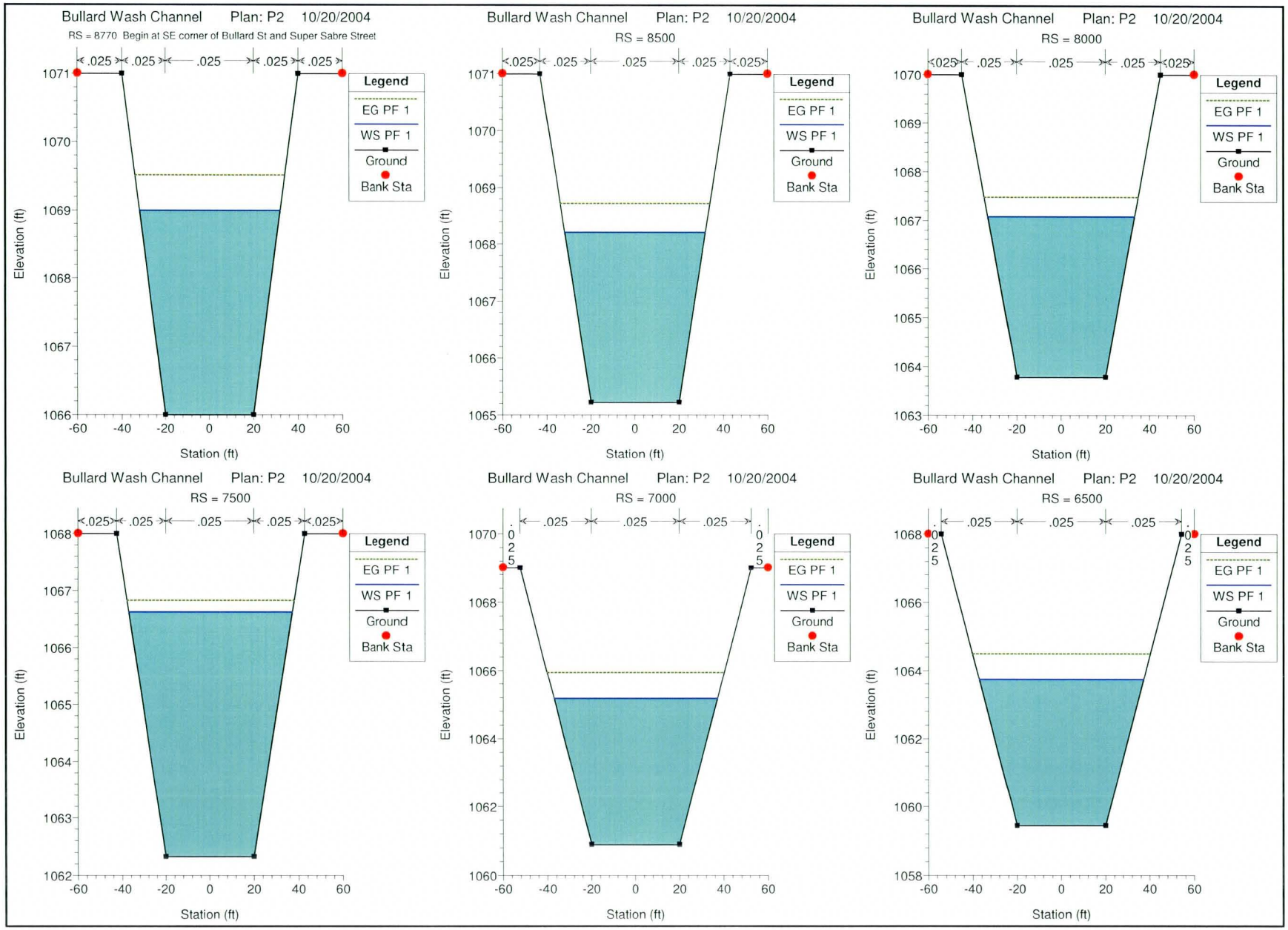
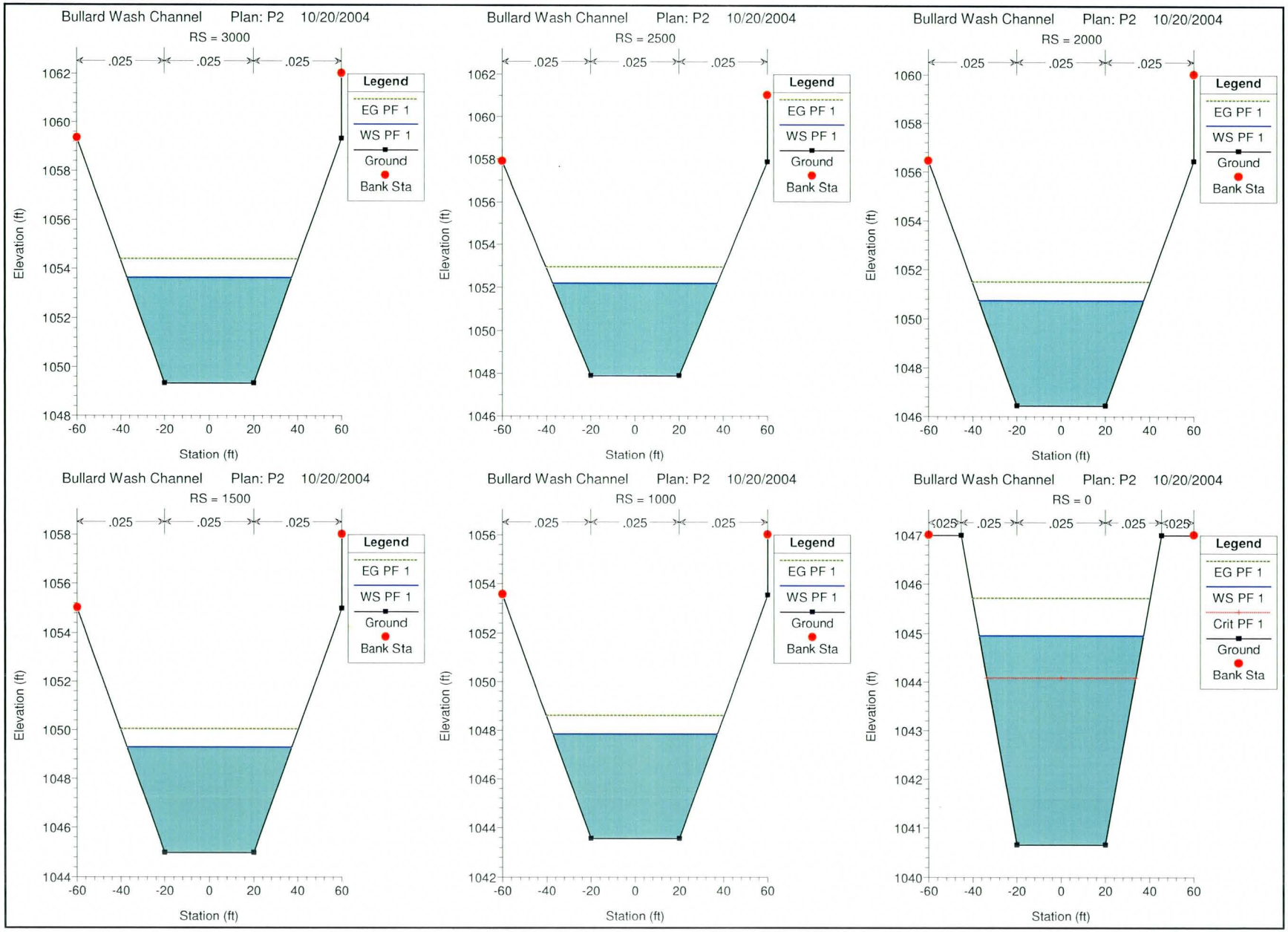
5500
6000
6500
7000
7500
8000
8500


Bullard Wash Channel Plan: P2 10/20/2004
RS = 6000
Bullard Wash Channel Plan: P2 10/20/2004
RS = 5500
Bullard Wash Channel Plan: P2 10/20/2004
RS = 5000
Bullard Wash Channel Plan: P2 10/20/2004
RS = 4500
Bullard Wash Channel Plan: P2 10/20/2004
RS = 4000
Bullard Wash Channel Plan: P2 10/20/2004
RS = 3500
.025
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Bullard Wash Channel Plan: P2 10/20/2004
RS = 8770 Begin at SE corner of Bullard St and Super Sabre Street
Bullard Wash Channel Plan: P2 10/20/2004
RS = 8500
Bullard Wash Channel Plan: P2 10/20/2004
RS = 8000
Bullard Wash Channel Plan: P2 10/20/2004
RS = 7500
Bullard Wash Channel Plan: P2 10/20/2004
RS = 7000
Bullard Wash Channel Plan: P2 10/20/2004
RS = 6500
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Bullard Wash Channel Plan: P2 10/20/2004
RS = 3000
.025 .025 .025
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Bullard Wash Channel Plan: P2 10/20/2004
RS = 2500
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Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Bullard Wash Channel Plan: P2 10/20/2004
RS = 2000
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Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Bullard Wash Channel Plan: P2 10/20/2004
RS = 1500
.025 .025 .025
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Bullard Wash Channel Plan: P2 10/20/2004
RS = 1000
.025 .025 .025
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Bullard Wash Channel Plan: P2 10/20/2004
RS = 0
.025 .025 .025 .025 .025
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

Culvert Master Output

Final Alternative –Bullard Wash

Hydraulic Modeling

Culvert Calculator Report
Bullard Rd Box - Preferred Alternative

Solve For: Discharge

Culvert Summary				
Allowable HW Elevation	1,271.00 ft		Headwater Depth/ Height	0.90
Computed Headwater Elevation	1,271.00 ft		Discharge	576.94 cfs
Inlet Control HW Elev	1,270.97 ft		Tailwater Elevation	1,269.00 ft
Outlet Control HW Elev	1,271.00 ft		Control Type	Outlet Control

Grades				
Upstream Invert	1,266.50 ft		Downstream Invert	1,266.45 ft
Length	40.00 ft		Constructed Slope	0.001250 ft/ft

Hydraulic Profile				
Profile	M2		Depth, Downstream	2.62 ft
Slope Type	Mild		Normal Depth	3.50 ft
Flow Regime	Subcritical		Critical Depth	2.62 ft
Velocity Downstream	9.18 ft/s		Critical Slope	0.002896 ft/ft

Section				
Section Shape	Box		Mannings Coefficient	0.013
Section Material	Concrete		Span	12.00 ft
Section Size	12 x 5 ft		Rise	5.00 ft
Number Sections	2			

Outlet Control Properties				
Outlet Control HW Elev	1,271.00 ft		Upstream Velocity Head	1.05 ft
Ke	0.50		Entrance Loss	0.53 ft

Inlet Control Properties				
Inlet Control HW Elev	1,270.97 ft		Flow Control	N/A
Inlet Type	90 and 15 ° wingwall flares		Area Full	120.0 ft²
K	0.06100		HDS 5 Chart	8
M	0.75000		HDS 5 Scale	2
C	0.04000		Equation Form	1
Y	0.80000			

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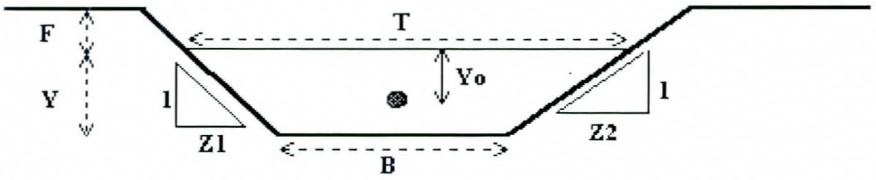
UD – Channels V 1.01.xls Output

Final Alternative –Bullard Wash

Hydraulic Modeling

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Bullard Wash - Preferred Alternative



Design Information (Input)			
Channel Invert Slope	So =	0.0031	ft/ft
Channel Manning's N	N =	0.030	
Bottom Width	B =	40.0	ft
Left Side Slope	Z1 =	4.0	ft/ft
Right Side Slope	Z2 =	4.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**5.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**1,978.9**	cfs
Froude Number	**Fr =**	**0.60**	
Flow Velocity	**V =**	**6.6**	fps
Flow Area	A =	300.0	sq ft
Top Width	T =	80.0	ft
Wetted Perimeter	P =	81.2	ft
Hydraulic Radius	R =	3.7	ft
Hydraulic Depth	D =	3.8	ft
Specific Energy	Es =	5.7	ft
Centroid of Flow Area	Yo =	2.2	ft
Specific Force	Fs =	66.8	kip

Final Alternative – Lalomai Hydraulic Modeling

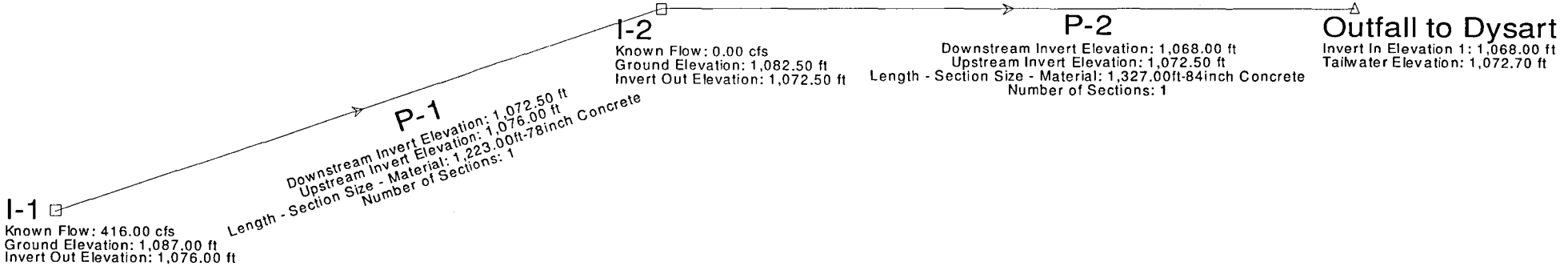
StormCad Output

Final Alternative – Lalomai

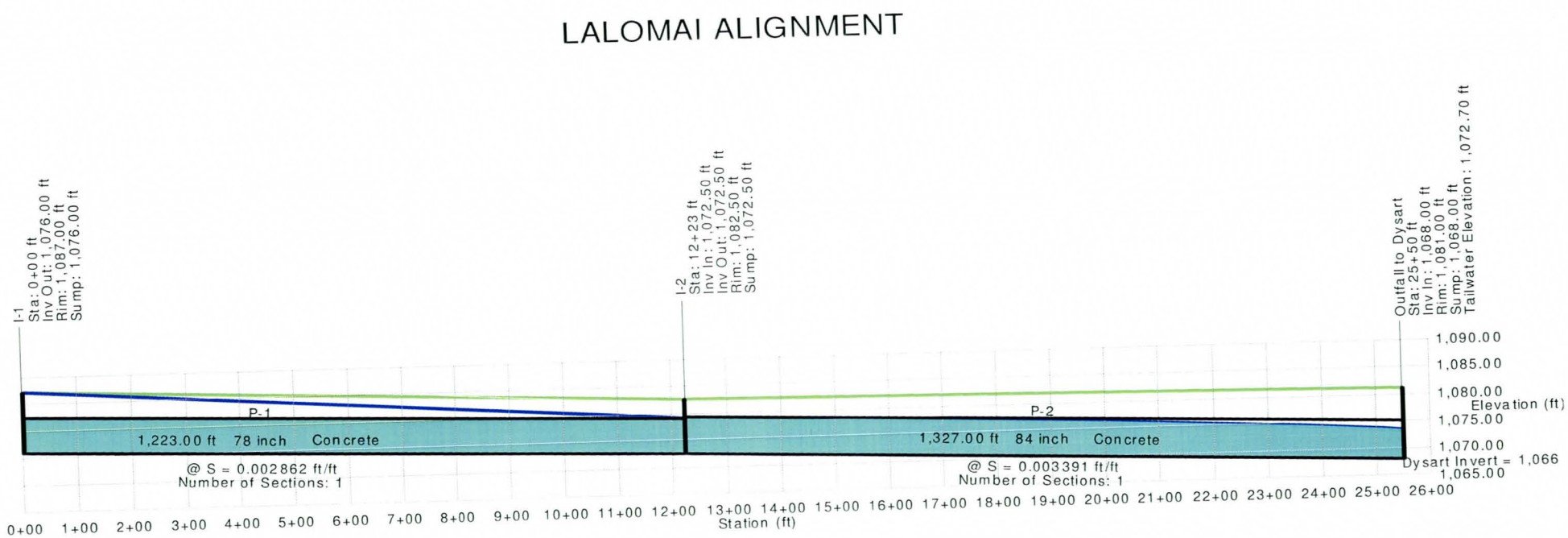
Hydraulic Modeling

Scenario: Base

LALOMAI ALIGNMENT PLAN



Profile
Scenario: Base



Calculation Results Summary

==========
Scenario: Base

>>> Info: Subsurface Network Rooted by: Outfall to Dysart
>>>> Info: Subsurface Analysis iterations: 1
>>>> Info: Convergence was achieved.

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-2	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00
I-1	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: Outfall to Dysart

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-2	1	84 inch	Circular	1,327.00	416.00	10.81	1,079.22	1,073.37
P-1	1	78 inch	Circular	1,223.00	416.00	12.54	1,086.92	1,079.22

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
Outfall to Dysart	416.00	1,081.00	1,072.70	1,072.70
I-2	416.00	1,082.50	1,079.22	1,079.22
I-1	416.00	1,087.00	1,086.92	1,086.92

==========
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Final Alternative – Kachina Hydraulic Modeling

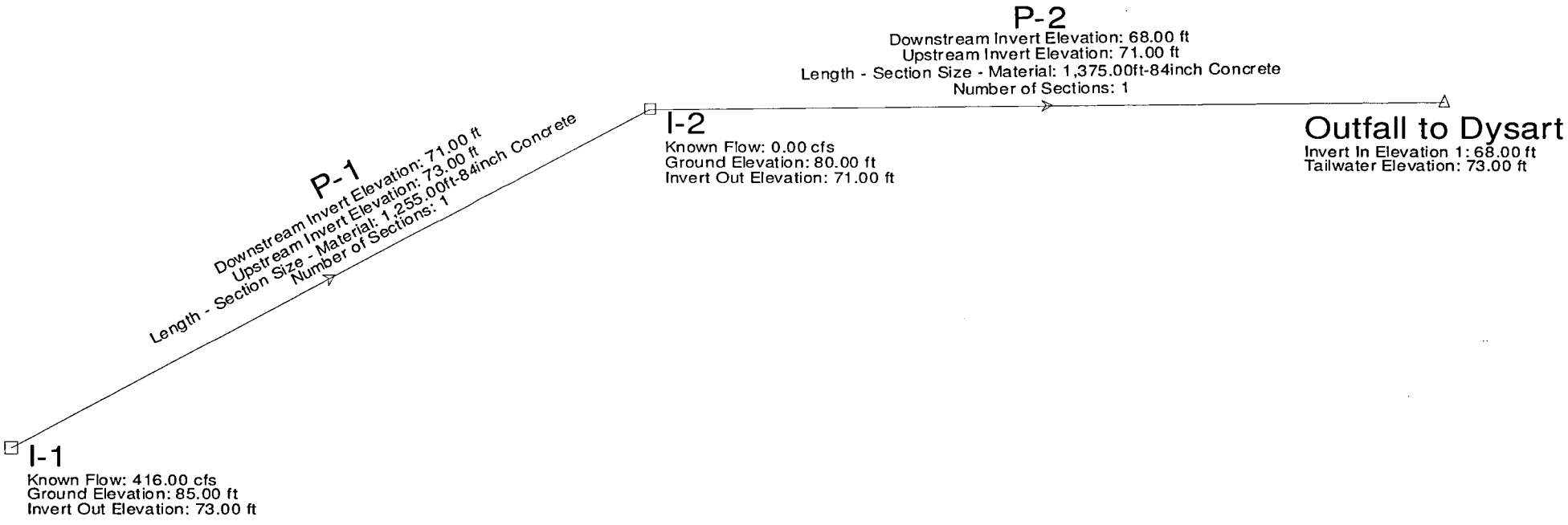
StormCad Output

Final Alternative – Kachina

Hydraulic Modeling

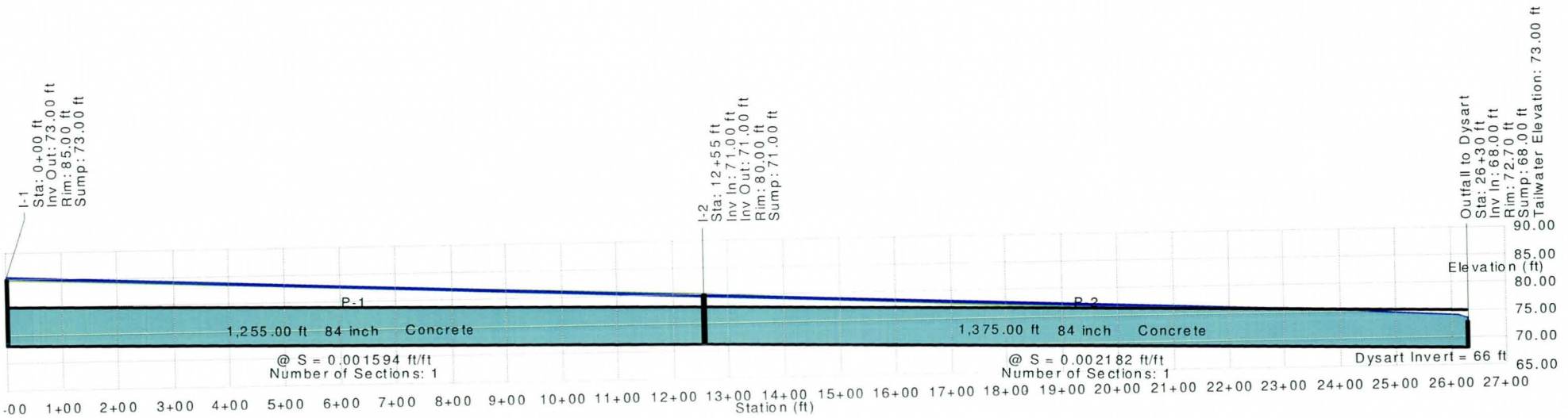
Scenario: Base

KACHINA ALIGNMENT PLAN



Profile
Scenario: Base

Kachina Alignment



Calculation Results Summary

==========
Scenario: Base

>>>> Info: Subsurface Network Rooted by: Outfall to Dysart
>>>> Info: Subsurface Analysis iterations: 1
>>>> Info: Convergence was achieved.

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-2	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00
I-1	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: Outfall to Dysart

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-2	1	84 inch	Circular	1,375.00	416.00	10.81	79.91	73.37
P-1	1	84 inch	Circular	1,255.00	416.00	10.81	85.23	79.91

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
Outfall to Dysart	416.00	72.70	73.00	73.00
I-2	416.00	80.00	79.91	79.91
I-1	416.00	85.00	85.00	85.00

==========
Completed: 08/14/2004 02:24:59 PM

Final Alternative – Litchfield Road Hydraulic Modeling

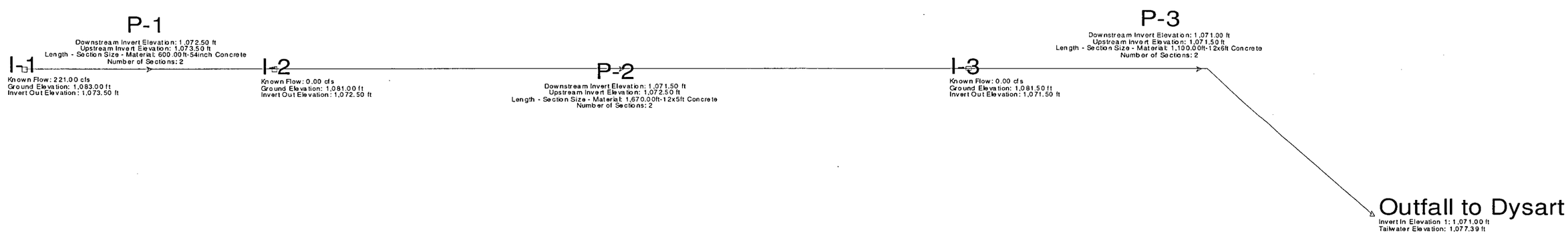
StormCad Output

Final Alternative – Litchfield Road

Hydraulic Modeling

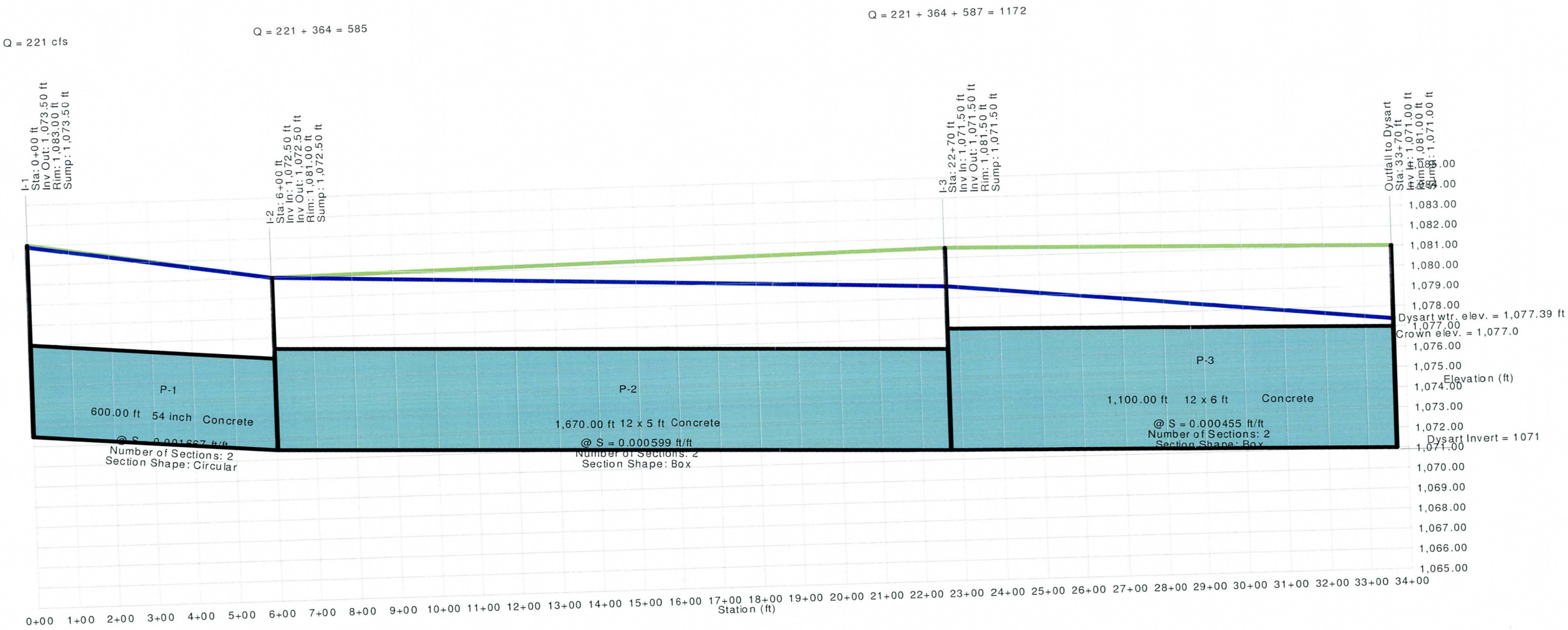
LITCHFIELD ROAD ALIGNMENT

LITCHFIELD ROAD ALIGNMENT



Profile
Scenario: Base

Litchfield Road Alignment Profile



Project Engineer: HDR
StormCAD v5.5 [5.5003]
Page 1 of 1

Title: Luke CAR
p:\...\currentmodel\luke_carii082504.stm
10/20/04 08:12:41 PM

HDR Engineering Inc
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Calculation Results Summary

==========
Scenario: Base

>>> Info: Subsurface Network Rooted by: Outfall to Dysart
>>>> Info: Subsurface Analysis iterations: 1
>>>> Info: Convergence was achieved.

CALCULATION SUMMARY FOR SURFACE NETWORKS

Label	Inlet Type	Inlet	Total Intercepted Flow (cfs)	Total Bypassed Flow (cfs)	Capture Efficiency (%)	Gutter Spread (ft)	Gutter Depth (ft)
I-3	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00
I-2	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00
I-1	Generic Inlet	Generic Default 100%	0.00	0.00	100.0	0.00	0.00

CALCULATION SUMMARY FOR SUBSURFACE NETWORK WITH ROOT: Outfall to Dysart

Label	Number of Sections	Section Size	Section Shape	Length (ft)	Total System Flow (cfs)	Average Velocity (ft/s)	Hydraulic Grade Upstream (ft)	Hydraulic Grade Downstream (ft)
P-3	2	12 x 6 ft	Box	1,100.00	1,172.00	8.14	1,079.60	1,077.39
P-2	2	12 x 5 ft	Box	1,670.00	585.00	4.88	1,081.03	1,079.60
P-1	2	54 inch	Circular	600.00	221.00	6.95	1,082.89	1,081.00

Label	Total System Flow (cfs)	Ground Elevation (ft)	Hydraulic Grade Line In (ft)	Hydraulic Grade Line Out (ft)
Outfall to Dysart	1,172.00	1,081.00	1,077.39	1,077.39
I-3	1,172.00	1,081.50	1,079.60	1,079.60
I-2	585.00	1,081.00	1,081.00	1,081.00
I-1	221.00	1,083.00	1,082.89	1,082.89

==========
Completed: 10/20/2004 11:27:24 AM

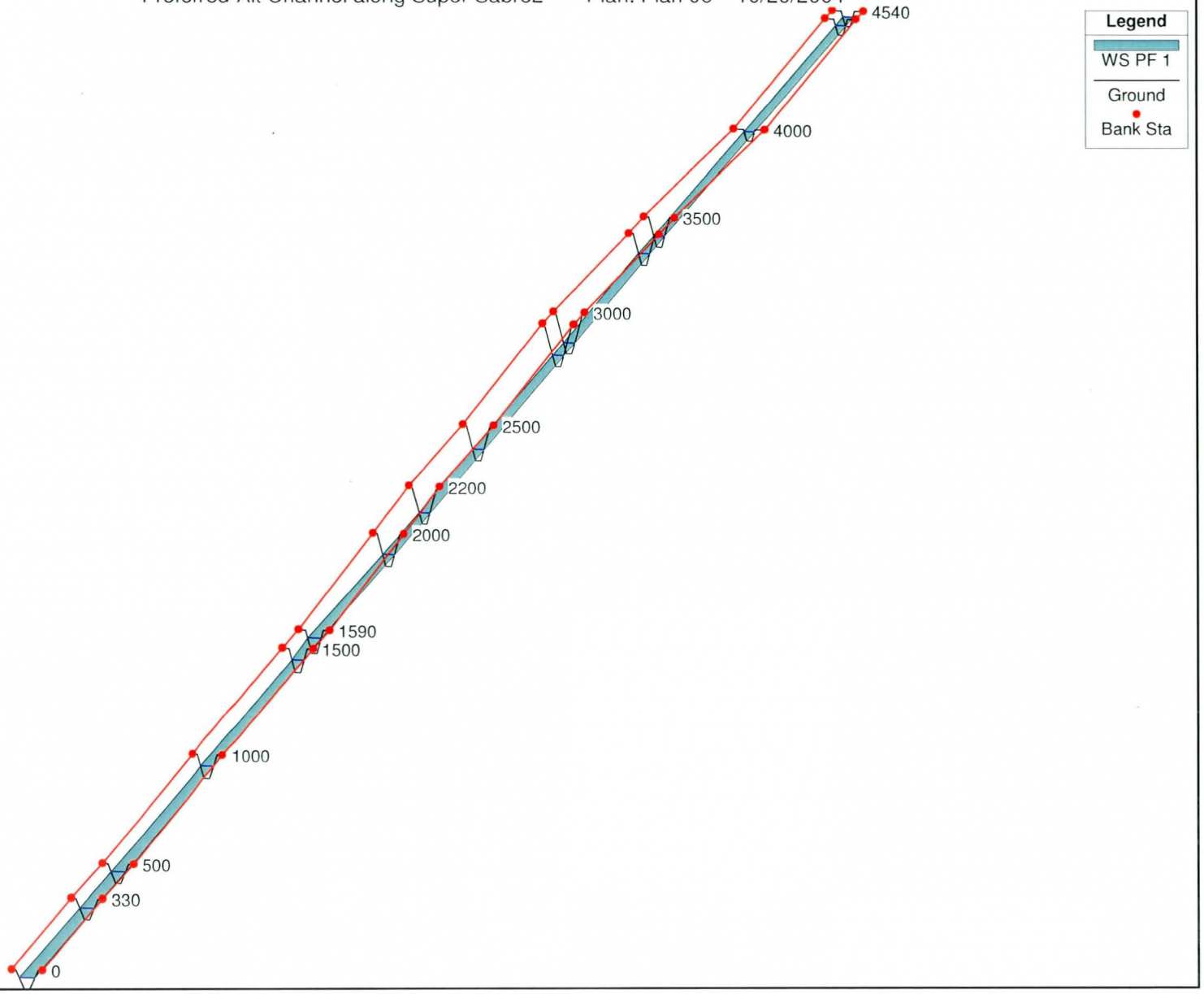
Final Alternative –Super Sabre Street Hydraulic Modeling

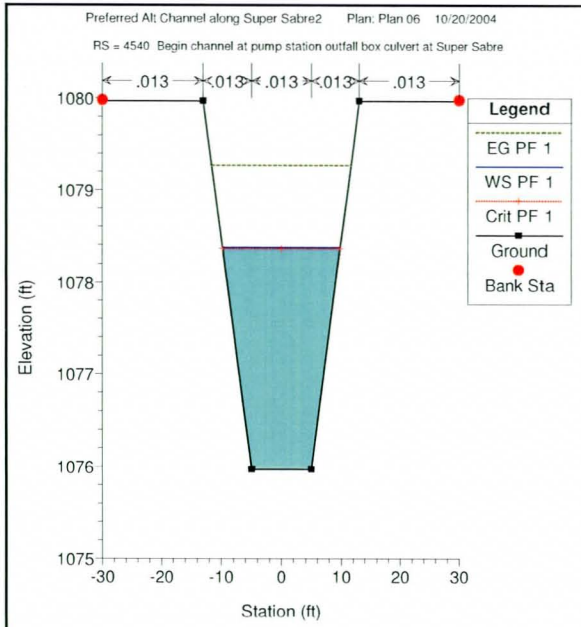
HEC-RAS Output

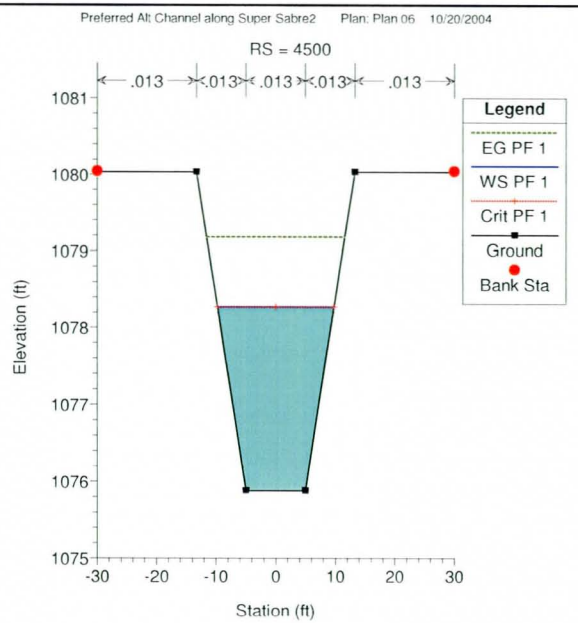
Final Alternative –Super Sabre

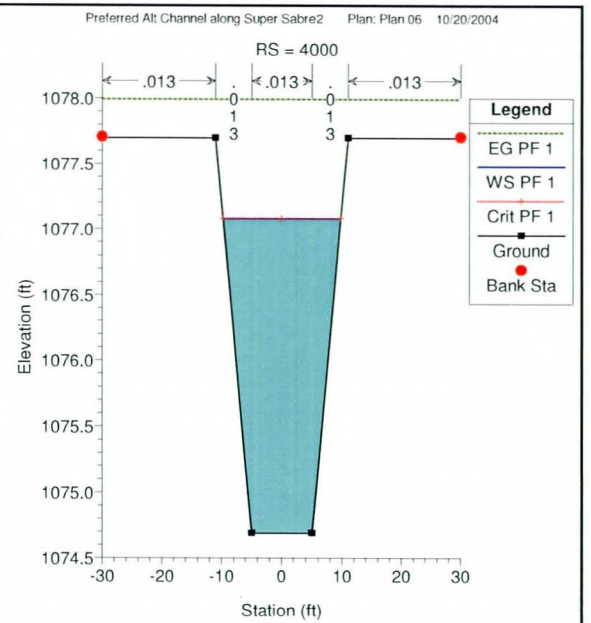
Street Hydraulic Modeling

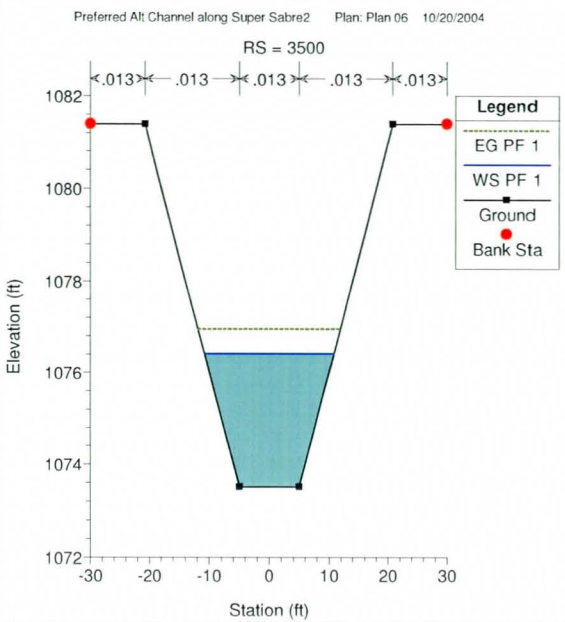
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004

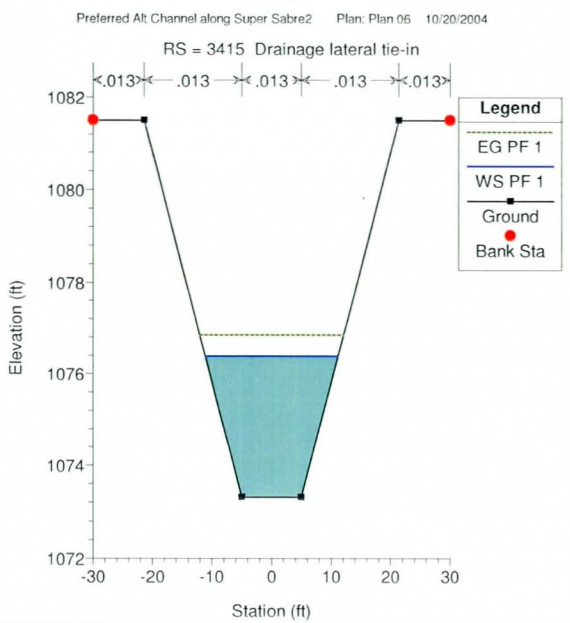


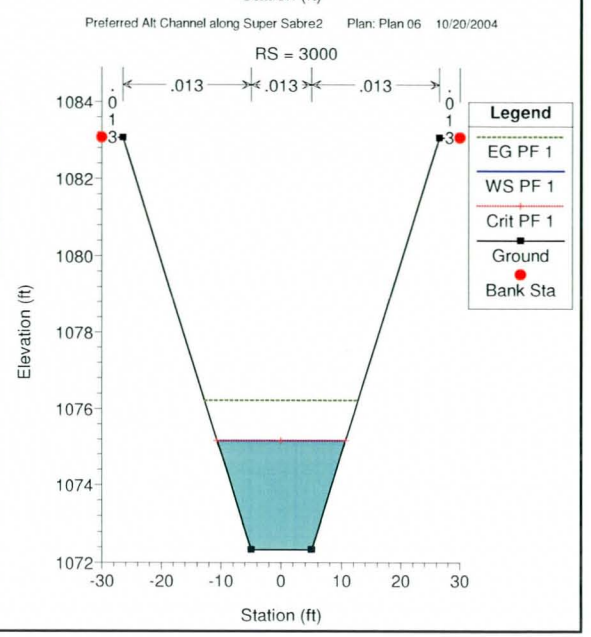

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 4540 Begin channel at pump station outfall box culvert at Super Sabre
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

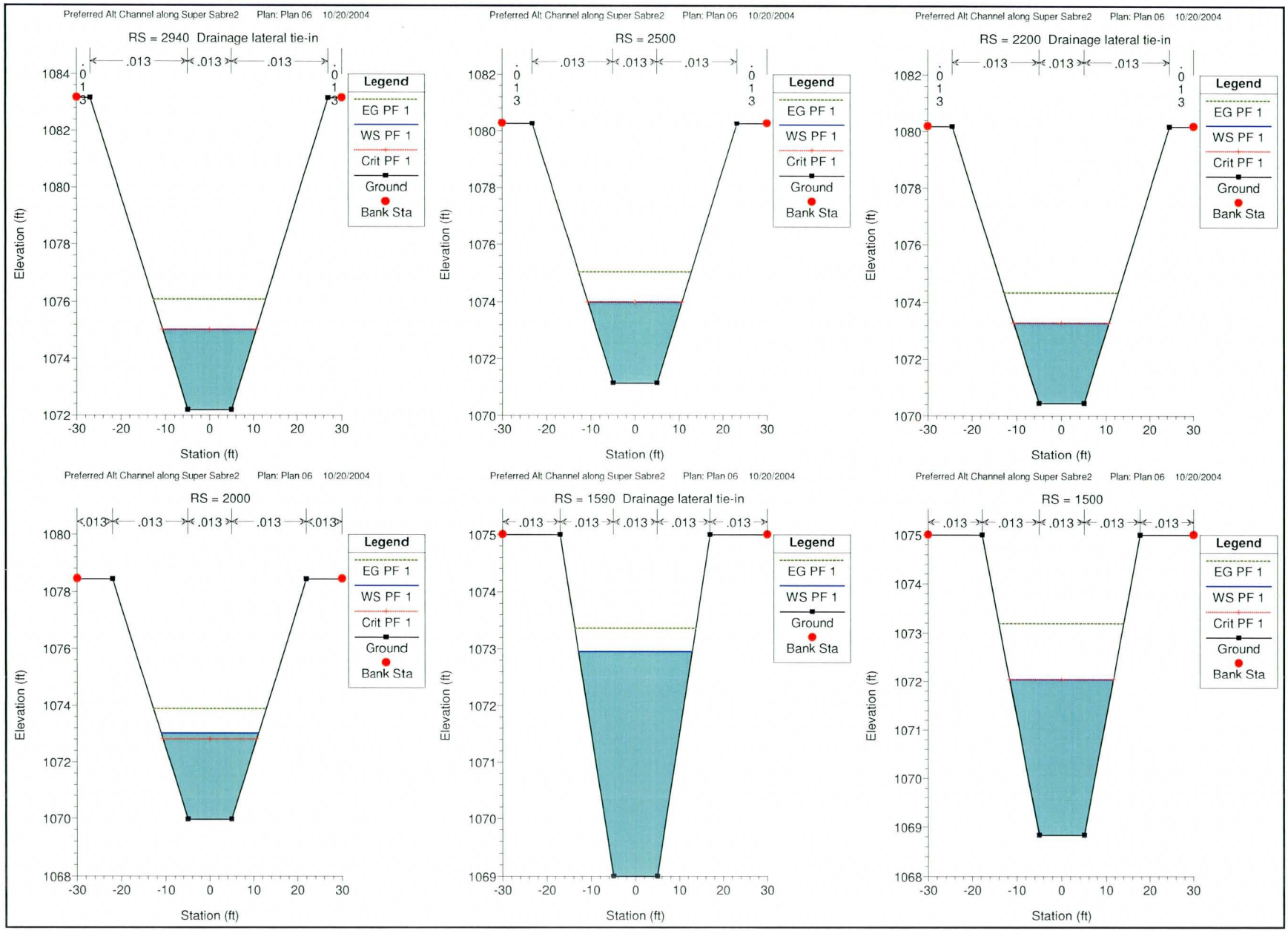

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 4500
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

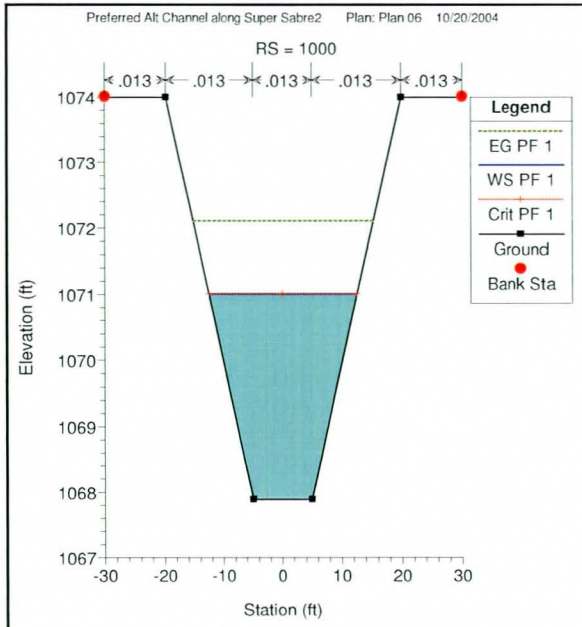

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 4000
.013 .013 .013
.013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

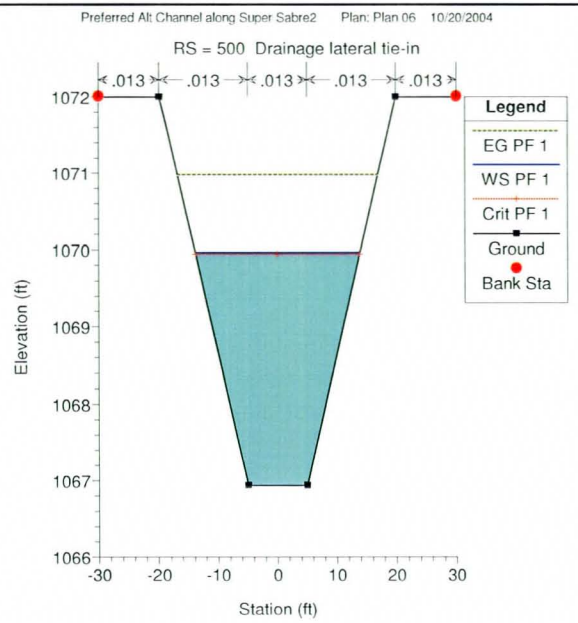

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 3500
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

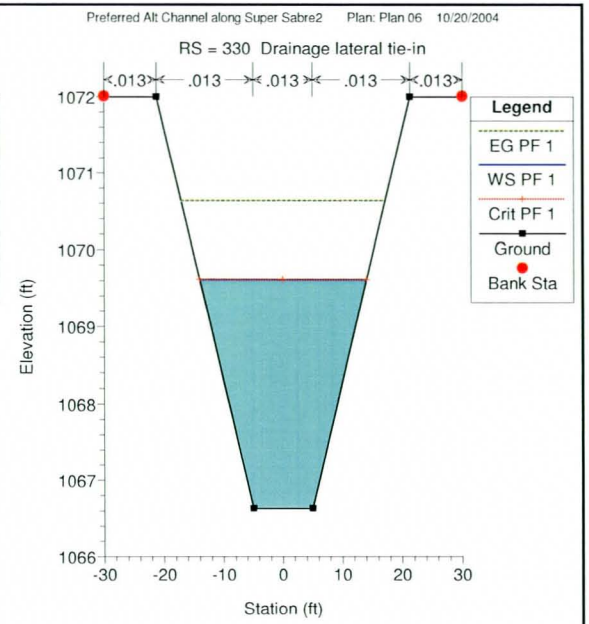

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 3415 Drainage lateral tie-in
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

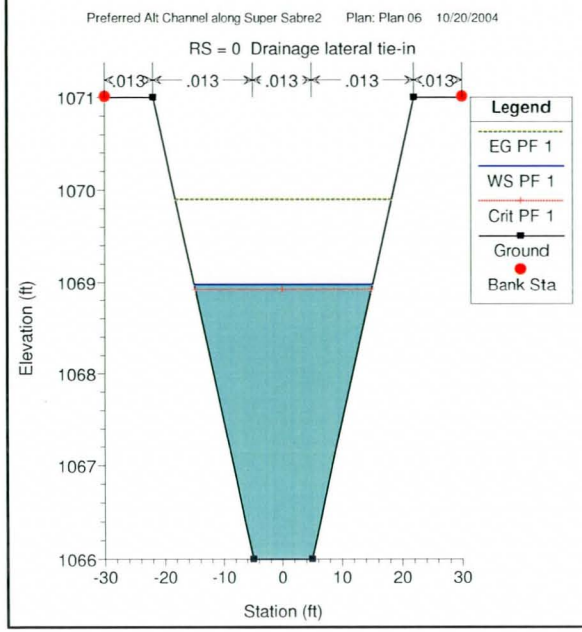

Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 3000
.013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 2940 Drainage lateral tie-in
.013 .013 .013
.013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 2500
.013 .013 .013
.013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 2200 Drainage lateral tie-in
.013 .013 .013
.013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 2000
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 1590 Drainage lateral tie-in
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)
Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 1500
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 1000
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 500 Drainage lateral tie-in
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 330 Drainage lateral tie-in
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)


Preferred Alt Channel along Super Sabre2 Plan: Plan 06 10/20/2004
RS = 0 Drainage lateral tie-in
.013 .013 .013 .013 .013
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
Elevation (ft)
Station (ft)

HEC-RAS Plan: P5 River: Super Sabre Chan Reach: Channel Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Channel	4540	PF 1	270.00	1075.97	1078.36	1078.35	1079.27	0.002177	7.63	35.41	19.58	1.00
Channel	4500	PF 1	270.00	1075.88	1078.26	1078.26	1079.18	0.002211	7.67	35.21	19.54	1.01
Channel	4000	PF 1	270.00	1074.69	1077.08	1077.08	1077.99	0.002205	7.66	35.24	19.54	1.01
Channel	3500	PF 1	270.00	1073.51	1076.40		1076.95	0.001067	5.91	45.69	21.58	0.72
Channel	3415	PF 1	270.00	1073.31	1076.38		1076.84	0.000853	5.45	49.53	22.28	0.64
Channel	3000	PF 1	365.00	1072.33	1075.16	1075.16	1076.21	0.002123	8.24	44.31	21.32	1.01
Channel	2940	PF 1	365.00	1072.19	1075.02	1075.02	1076.07	0.002125	8.24	44.30	21.32	1.01
Channel	2500	PF 1	365.00	1071.15	1073.98	1073.98	1075.03	0.002121	8.23	44.33	21.32	1.01
Channel	2200	PF 1	365.00	1070.44	1073.27	1073.27	1074.32	0.002126	8.24	44.29	21.31	1.01
Channel	2000	PF 1	365.00	1069.97	1073.01	1072.80	1073.88	0.001618	7.47	48.86	22.16	0.89
Channel	1590	PF 1	365.00	1069.00	1072.95		1073.36	0.000583	5.16	70.72	25.80	0.55
Channel	1500	PF 1	460.00	1068.83	1072.03	1072.03	1073.19	0.002059	8.65	53.17	23.22	1.01
Channel	1000	PF 1	460.00	1067.89	1071.00	1071.00	1072.11	0.002060	8.44	54.53	25.07	1.01
Channel	500	PF 1	460.00	1066.94	1069.96	1069.94	1070.97	0.001999	8.07	57.02	27.75	0.99
Channel	330	PF 1	460.00	1066.63	1069.61	1069.61	1070.63	0.002073	8.13	56.58	28.02	1.01
Channel	0	PF 1	460.00	1066.00	1068.97	1068.91	1069.90	0.001901	7.71	59.65	30.14	0.97

Culvert Master Output

Final Alternative –Super Sabre

Street Hydraulic Modeling

Culvert Calculator Report
Bullard Rd Box - Preferred Alternative

S For: Discharge

Culvert Summary					
Allowable HW Elevation	1,271.00	ft	Headwater Depth/ Height	0.90	
Computed Headwater Elevation	1,271.00	ft	Discharge	576.94	cfs
Inlet Control HW Elev	1,270.97	ft	Tailwater Elevation	1,269.00	ft
Outlet Control HW Elev	1,271.00	ft	Control Type	Outlet Control	

Grades					
Upstream Invert	1,266.50	ft	Downstream Invert	1,266.45	ft
Length	40.00	ft	Constructed Slope	0.001250	ft/ft

Hydraulic Profile					
Profile	M2		Depth, Downstream	2.62	ft
Slope Type	Mild		Normal Depth	3.50	ft
Flow Regime	Subcritical		Critical Depth	2.62	ft
Velocity Downstream	9.18	ft/s	Critical Slope	0.002896	ft/ft

Section					
Section Shape	Box		Mannings Coefficient	0.013	
Section Material	Concrete		Span	12.00	ft
Section Size	12 x 5 ft		Rise	5.00	ft
Number Sections	2				

(. Control Properties					
Outlet Control HW Elev	1,271.00	ft	Upstream Velocity Head	1.05	ft
Ke	0.50		Entrance Loss	0.53	ft

Inlet Control Properties					
Inlet Control HW Elev	1,270.97	ft	Flow Control	N/A	
Inlet Type	90 and 15 ° wingwall flares		Area Full	120.0	ft^2
K	0.06100		HDS 5 Chart	8	
M	0.75000		HDS 5 Scale	2	
C	0.04000		Equation Form	1	
Y	0.80000				

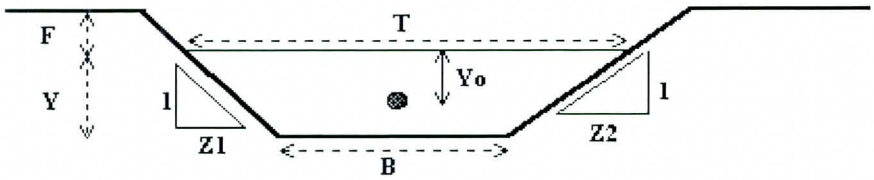
UD – Channels V 1.01.xls Output

Final Alternative –Super Sabre

Street Hydraulic Modeling

Normal Flow Analysis - Trapezoidal Channel

Project: Luke AFB CAR
Channel ID: Channel west along Super Sabre to Bullard Wash - Preferred Alt



Design Information (Input)			
Channel Invert Slope	So =	0.0013	ft/ft
Channel Manning's N	N =	0.013	
Bottom Width	B =	10.0	ft
Left Side Slope	Z1 =	2.0	ft/ft
Right Side Slope	Z2 =	2.0	ft/ft
Freeboard Height	F =	1.0	ft
Design Water Depth	Y =	**4.00**	ft

Normal Flow Condtion (Calculated)			
Discharge	**Q =**	**560.0**	cfs
Froude Number	**Fr =**	**0.82**	
Flow Velocity	**V =**	**7.8**	fps
Flow Area	A =	72.0	sq ft
Top Width	T =	26.0	ft
Wetted Perimeter	P =	27.9	ft
Hydraulic Radius	R =	2.6	ft
Hydraulic Depth	D =	2.8	ft
Specific Energy	Es =	4.9	ft
Centroid of Flow Area	Yo =	1.7	ft
Specific Force	Fs =	16.1	kip