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APPENDIX B: TR-20 OUTPUT DATA

PART I

DRAINAGE STUDY

FOR

PARADISE VALLEY/SCOTTSDALE

LINCOLN DRIVE TO CHENEY DRIVE

PREPARED FOR:

THE CITY OF SCOTTSDALE

PREPARED BY:

ERIE & ASSOCIATES, INC.

in Association With

WOOD & ASSOCIATES, INC.

EA #1053.2

OCTOBER 1986

Erie & Associates, Inc.
CONSULTING ENGINEERS
3120 N. 24th St. / Phoenix, Arizona 85016 / (602) 954-6399

C>TYPE LS40P

LINCOLN TO CHENEY DRAINAGE STUDY - EXISTING AND ALT. A CONDITIONS(EA1053.2)

TR-20 COMPUTATIONS
PERFORMED BY:

ERIE AND ASSOCIATES, INC.
Consulting Engineers
3120 North 24th Street
Phoenix, AZ, 85016

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:::::::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::::::
::::                                          ::::
::::                HAESTAD METHODS           ::::
::::               37 Brookside Road          ::::
::::         Waterbury, Connecticut  06708    ::::
::::                (203) 753-9800            ::::
::::                                          ::::
::::    full micro-computer implementation of ::::
::::                                          ::::
::::      USDA - Soil Conservation Service    ::::
::::                    TR-20                 ::::
::::                September 1983            ::::
::::        PROJECT FORMULATION HYDROLOGY     ::::
::::                                          ::::
:::::::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::::::
```

RUN DATE: Fri 10-OCT-1986 TIME: 09:26:34.04

DATA FILE: LINSCOT4

```
*******************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY******************

JOB                     NOPRINT
TITLE       MAY 85      DRAINAGE STUDY-EXISTING & ALT.A (LINSCOT4) EA 1053.2
 5 RAINFL 2              0.0208
 8          .0000       .0030       .0110       .0160       .0220
 8          .0280       .0350       .0410       .0480       .0560
 8          .0630       .0710       .0800       .0890       .0980
 8          .1090       .1200       .1330       .1470       .1630
 8          .1810       .2040       .2350       .2830       .6630
 8          .7350       .7720       .7990       .8200       .8380
 8          .9120       .8210       .9290       .9370       .9450
 8          .9520       .9590       .9650       .9720       .9783
 8          .9840       .9890       .9950       1.000       1.000
 9 ENDTBL
 2 XSECTN    5          1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN    6          1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN   75          1.0
 8                      0.0         0.0         0.0
 8                      .25         7.1         3.9
 8                      .75         45.9        12.9
 8                      1.0         75.6        18.0
 8                      1.5         155.        29.3
 8                      2.0         261.        42.
 9 ENDTBL
 2 XSECTN   76          1.0
 8                      0.0         0.0         0.0
 8                      .25         13.         11.
 8                      .50         41.         22.5
 8                      1.0         142.        53.
 8                      1.5         300.        90.3
 8                      2.0         480.        141.
 9 ENDTBL
 2 XSECTN   82          1.0
 8                      0.2         0.0         0.0
 8                      0.3         5.0         2.3
 8                      0.4         11.0        4.0
 8                      0.56        27.0        7.8
```

```
8                    0.6        31.0       9.2
8                    0.8        78.0       16.2
8                    1.0        142.0      23.2
9 ENDTBL
2 XSECTN    83       1.0
8                    0.1        0.0        0.0
8                    0.24       2.0        1.4
8                    0.5        13.0       4.6
8                    0.6        18.0       6.2
8                    0.7        27.0       7.8
8                    0.8        37.0       9.4
8                    0.9        40.0       11.0
8                    1.0        60.0       12.6
9 ENDTBL
2 XSECTN    81       1.0
8                    0.2        0.0        0.0
8                    0.3        5.0        2.3
8                    0.4        12.0       4.0
8                    0.53       25.0       7.1
8                    0.6        33.0       9.4
8                    0.8        84.0       16.5
8                    1.0        152.0      23.4
9 ENDTBL
2 XSECTN    80       1.0
8                    0.1        0.0        0.0
8                    0.24       2.7        1.4
8                    0.5        18.1       4.6
8                    0.6        24.8       6.2
8                    0.7        36.4       7.7
8                    0.8        49.8       9.4
8                    0.9        64.7       11.0
8                    1.0        81.2       12.6
9 ENDTBL
2 XSECTN    84       1.0
8                    0.0        0.0        0.0
8                    .25        10.0       6.3
8                    .50        31.2       12.5
8                    .75        60.6       18.8
8                    1.0        96.7       25.0
8                    1.5        185.4      37.5
8                    2.0        292.6      50.0
9 ENDTBL
2 XSECTN    85       1.0
8                    .5         0.0        0.0
8                    .75        33.8       25.0
8                    1.0        96.        50.0
```

```
**********************80-80 LIST OF INPUT DATA (CONTINUED)**********************

8                    1.25        175.        75.0
8                    1.5         270.0       100.0
9 ENDTBL
2 XSECTN    86       1.0
8                    1301.2      0.0         0.0
8                    1301.7      371.0       173.
8                    1302.       821.0       416.
8                    1302.5      2440.       1003.
9 ENDTBL
2 XSECTN    88       1.0
8                    .50         0.0         0.0
8                    1.0         28.         21.0
8                    1.5         185.        73.5
8                    2.0         414.        126.
9 ENDTBL
2 XSECTN    89       1.0
8                    0.0         0.0         0.0
8                    0.25        9.9         5.2
8                    0.50        31.8        10.8
8                    0.75        63.3        16.7
8                    1.0         103.6       23.0
8                    1.5         209.8       36.8
8                    2.0         349.5       52.0
9 ENDTBL
2 XSECTN    99       1.0
8                    1299.       0.0         0.0
8                    1300.       32.2        15.0
8                    1301.       330.8       140.3
8                    1301.6      944.        323.
8                    1302.       2115.       523.7
9 ENDTBL
6 RUNOFF 1  10       5  .44      88.         .65       1 0 0 1   1
6 DIVERT 6  81   5 1 2           .67         80.       1     1   1
6 REACH  3  13   2   5  2640.    1.5         1.6       1     1   1
6 REACH  3  15   1   2  2900.    1.5         1.6       1     1   1
6 RUNOFF 1  16       6  0.34     87.         .35       1     1   1
6 ADDHYD 4  17   5 6 7                                  1     1   1
6 DIVERT 6  83   7 5 3           .33         82.0      1     1   1
6 REACH  3  21   3   1  2640.    1.5         1.6       1     1   1
6 REACH  3  23   5   3  1150.    1.5         1.6       1     1   1
6 ADDHYD 4  25   3 2 7                                  1     1   1
6 RUNOFF 1  26       5  0.79     85.         .30       1     1   1
6 ADDHYD 4  27   5 7 6                                  1 1   1   1
6 REACH  3  27   6   5  2000.    1.5         1.6       1     1   1
6 RUNOFF 1  28       6  .07      85.         .27       1     1   1
6 ADDHYD 4  29   5 6 7                                  1     1   1
```

**********80-80 LIST OF INPUT DATA (CONTINUED)**********

```
6 RUNOFF 1  30      6  .01        85.        .17       1     1   1
6 ADDHYD 4  31  6 7 2                                   1     1   1
6 RUNOFF 1  32      5  .17        85.        .65       1     1   1
6 ADDHYD 4  33  5 1 7                                   1     1   1
6 RUNOFF 1  34      5  .03        85.        .37       1     1   1
6 ADDHYD 4  35  5 7 1                                   1 1   1   1
6 RUNOFF 1  36      5  .21        88.        .16       1     1   1
6 DIVERT 6  84  5 6 3             .50        85.0      1     1   1
6 REACH  3  39  6   5  800.       1.5        1.6       1     1   1
6 RUNOFF 1  40      7  .05        86.        0.12      1     1   1
6 ADDHYD 4  41  5 7 6                                   1     1   1
6 REACH  3  45  6   5  1300.      1.5        1.6       1     1   1
6 RUNOFF 1  97      6  .03        85.        .22       1     1   1
6 ADDHYD 4  45  5 6 7                                   1     1   1
6 DIVERT 6  89  7 5 6             .50        75.       1     1   1
6 REACH  3   2  5   4  1300.      1.6        1.38      1     1   1
6 REACH  3  43  3   7  1500.      1.5        1.6       1     1   1
6 RUNOFF 1  95      5  .03        85.        .22       1     1   1
6 ADDHYD 4  43  7 5 3                                   1     1   1
6 REACH  3   1  6   5  1050.      .43        1.52      1     1   1
6 ADDHYD 4  90  3 5 6                                   1     1   1
6 REACH  3  91  6   7  1100.      .50        1.65      1     1   1
6 RUNOFF 1  48      5  .15        85.       0.31       1     1   1
6 ADDHYD 4  51  1 5 6                                   1     1   1
6 DIVERT 6  86  2 1 3             .50       99.0       1     1   1
6 REACH  3  53  1   5  2800.      1.5        1.6       1 1   1   1
6 ADDHYD 4  55  6 5 1                                   1 1   1   1
6 REACH  3  57  3   5  1500.      1.5        1.6       1     1   1
6 RUNOFF 1  58      6  0.11       85.        .36       1     1   1
6 ADDHYD 4  59  5 6 3                                   1     1   1
6 DIVERT 6   4  3 2 6   36.       0.50       5.0       1     1   1
6 SAVMOV 5   4  6   3                                   1         1
6 DIVERT 6  88  3 5 6             0.50       6.0       1     1   1
6 ADDHYD 4  88  5 2 3                                   1     1   1
6 SAVMOV 5  88  6   2                                   1         1
6 DIVERT 6  76  4 6 5   18.       .50        77.       1     1   1
6 SAVMOV 5   2  6   4                                   1         1
6 ADDHYD 4   2  5 2 6                                   1     1   1
6 SAVMOV 5   3  6   5                                   1         1
6 ADDHYD 4   1  4 3 6                                   1     1   1
6 SAVMOV 5   1  6   4                                   1         1
6 REACH  3   3  5   6  500.       .19        1.7       1     1   1
6 RUNOFF 1  96      3  .03        85.        .20       1     1   1
6 ADDHYD 4   3  3 6 5                                   1     1   1
6 REACH  3  47  5   6  800.       .43        1.56      1     1   1
6 ADDHYD 4  47  7 6 3                                   1     1   1
```

```
**********************80-80 LIST OF INPUT DATA (CONTINUED)*********************

 6 SAVMOV 5  47   3   6                                  1        1
 6 RUNOFF 1  46       5  .03        88.        0.20     1    1   1
 6 ADDHYD 4  49   5 6 3                                  1    1   1
 6 REACH  3  63   4   7  1350.      1.5         1.6      1    1   1
 6 RUNOFF 1  64       5  0.06       85.        .20       1    1   1
 6 ADDHYD 4  65   5 7 2                                  1    1   1
 6 RUNOFF 1  66       5  0.03       85.        0.21      1    1   1
 6 ADDHYD 4  67   5 2 7                                  1 1  1   1
 6 RUNOFF 1  72       5  0.14       85.        0.42      1    1   1
 6 ADDHYD 4  73   5 3 2                                  1 1  1   1
   ENDATA
 7 INCREM 6             0.075
 7 COMPUT 7  10    73   0.0        1.44       24.       2 2  01  01
   ENDCMP 1
 7 COMPUT 7  10    73   0.0        2.53       24.       2 2  01  02
   ENDCMP 1
 7 COMPUT 7  10    73   0.0        3.12       24.       2 2  01  03
   ENDCMP 1
 7 COMPUT 7  10    73   0.0        4.04       24.0      2 2  01  04
   ENDCMP 1
   ENDJOB 2


*********************************END OF 80-80 LIST*********************************
```

COMPUTER PROGRAM FOR PROJECT FORMULATION - HYDROLOGY USER NOTES

THE USERS MANUAL FOR THIS PROGRAM IS THE MAY 1982 DRAFT OF TR-20. CHANGES FROM THE 2/14/74 VERSION INCLUDE:

REACH ROUTING - THE MODIFIED ATT-KIN ROUTING PROCEDURE REPLACES THE CONVEX METHOD. INPUT DATA PREPARED FOR PREVIOUS PROGRAM VERSIONS USING CONVEX ROUTING COEFFICIENTS WILL NOT RUN ON THIS VERSION.

THE PREFERRED TYPE OF DATA ENTRY IS CROSS SECTION DATA REPRESENTATIVE OF A REACH. IT IS RECOMMENDED THAT THE OPTIONAL CROSS SECTION DISCHARGE-AREA PLOTS BE OBTAINED WHENEVER NEW CROSS SECTION DATA IS ENTERED. THE PLOTS SHOULD BE CHECKED FOR REASONABLENESS AND ADEQUACY OF INPUT DATA FOR THE COMPUTATION OF "M" VALUES USED IN THE ROUTING PROCEDURE.

GUIDELINES FOR DETERMINING OR ANALYZING REACH LENGTHS AND COEFFICIENTS (X,M) ARE AVAILABLE IN THE USERS MANUAL. SUMMARY TABLE 2 DISPLAYS REACH ROUTING RESULTS AND ROUTING PARAMETERS FOR COMPARISON AND CHECKING.

HYDROGRAPH GENERATION - THE PROCEDURE TO CALCULATE THE INTERNAL TIME INCREMENT AND PEAK TIME OF THE UNIT HYDROGRAPH HAVE BEEN IMPROVED. PEAK DISCHARGES AND TIMES MAY DIFFER FROM THE PREVIOUS VERSION. OUTPUT HYDROGRAPHS ARE STILL INTERPOLATED, PRINTED, AND ROUTED AT THE USER SELECTED MAIN TIME INCREMENT.

INTERMEDIATE PEAKS - METHOD ADDED TO PROVIDE DISCHARGES AT INTERMEDIATE POINTS WITHIN REACHES WITHOUT ROUTING.

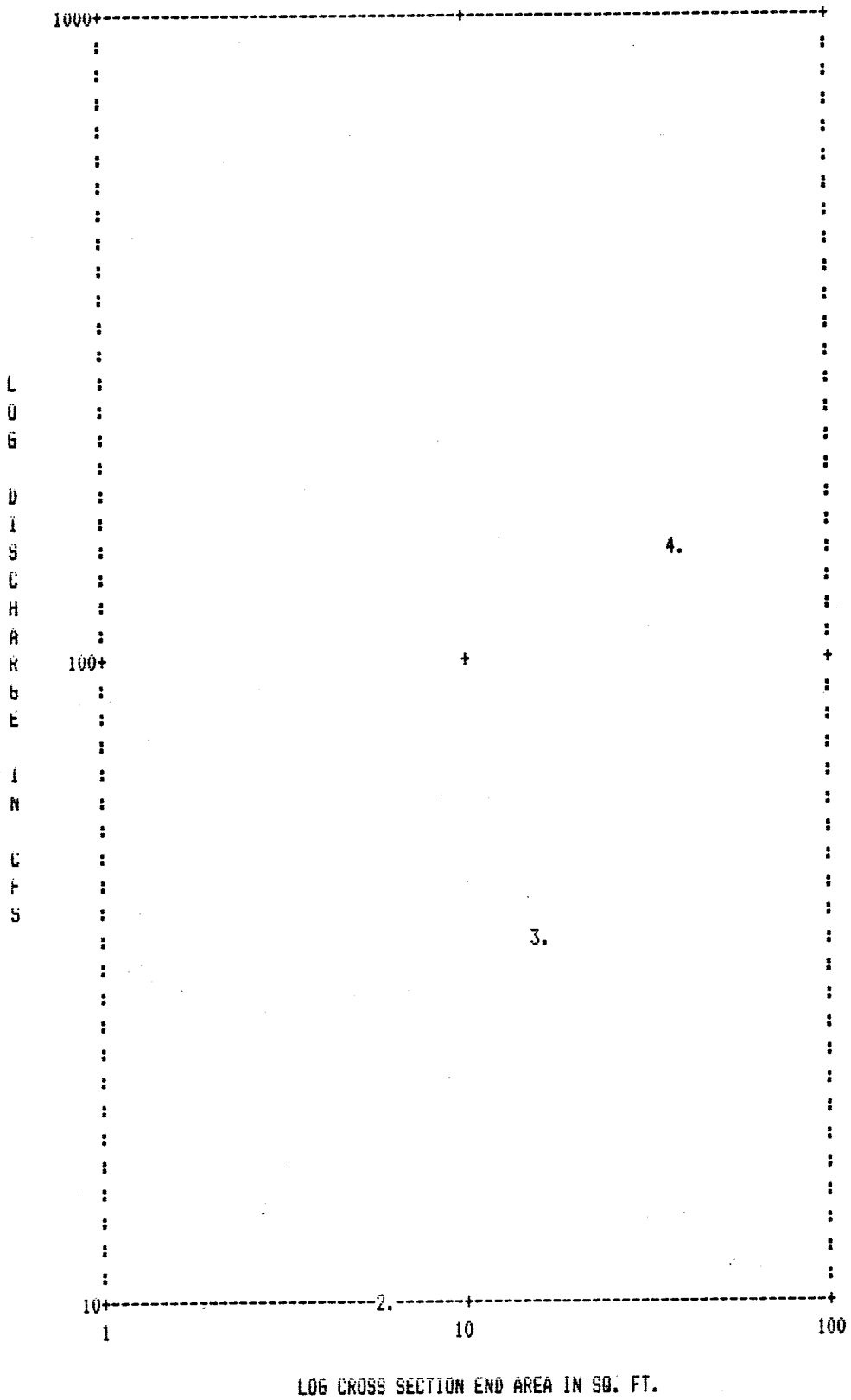
OTHER - THIS VERSION CONTAINS SOME ADDITIONS TO THE INPUT AND NUMEROUS MODIFICATIONS TO THE OUTPUT. USER OPTIONS HAVE BEEN MODIFIED AND AUGMENTED ON THE JOB RECORD, RAINTABLES ADDED, ERROR AND WARNING MESSAGES EXPANDED, AND THE SUMMARY TABLES COMPLETELY REVISED. THE HOLDOUT OPTION IS NOT OPERATIONAL AT THIS TIME.

PROGRAM QUESTIONS OR PROBLEMS SHOULD BE DIRECTED TO HYDRAULIC ENGINEERS AT THE SCS NATIONAL TECHNICAL CENTERS:

CHESTER, PA (NORTHEAST) -- 215-499-3933, FORT WORTH, TX (SOUTH) -- 334-5242 (FTS)
LINCOLN, NB (MIDWEST) -- 541-5318 (FTS), PORTLAND, OR (WEST) -- 423-4099 (FTS)
OR HYDROLOGY UNIT, ENGINEERING DIVISION, LANHAM, MD -- 436-7383 (FTS).

PROGRAM CHANGES SINCE MAY 1982:

12/1/82 - CORRECT PEAK RATE FACTOR FOR USER ENTERED DIMHYD
CORRECT REACH ROUTING PEAK TRAVEL TIME PRINTED WITH FULLPRINT OPTION
5/02/83 - CORRECT COMPUTATIONS FOR ---
1. DIVISION OF BASEFLOW IN DIVERT OPERATION
2. HYDROGRAPH VOLUME SPLIT BETWEEN BASEFLOW AND ABOVE BASEFLOW
3. CROSS SECTION DATA PLOTTING POSITION
4. INTERMEDIATE PEAK WHEN "FROM" AREA IS LARGER THAN "THRU" AREA
5. STORAGE ROUTED REACH TRAVEL TIME FOR MULTIPEAK HYDROGRAPH
6. ORDERING "FLOW-FREQ" FILE FROM SUMMARY TABLE #3 DATA
7. BASEFLOW ENTERED WITH READHYD
8. LOW FLOW SPLIT DURING DIVERT PROCEDURE #2 WHEN SECTION RATINGS START AT DIFFERENT ELEVATIONS
ENHANCEMENTS ---
1. REPLACE USER MANUAL ERROR CODES (PAGE 4-9 TO 4-11) WITH MESSAGES
2. LABEL OUTPUT HYDROGRAPH FILES WITH CROSS SECTION/STRUCTURE, ALTERNATE AND STORM NO'S
09/01/83 - CORRECT INPUT AND OUTPUT ERRORS FOR INTERMEDIATE PEAKS
CORRECT COMBINATION OF RATING TABLES FOR DIVERT
CHECK REACH ROUTING PARAMETERS FOR ACCEPTABLE LIMITS
ELIMINATE MINIMUM REACH TRAVEL TIME WHEN ATT-KIN COEFFICIENT EQUALS ONE

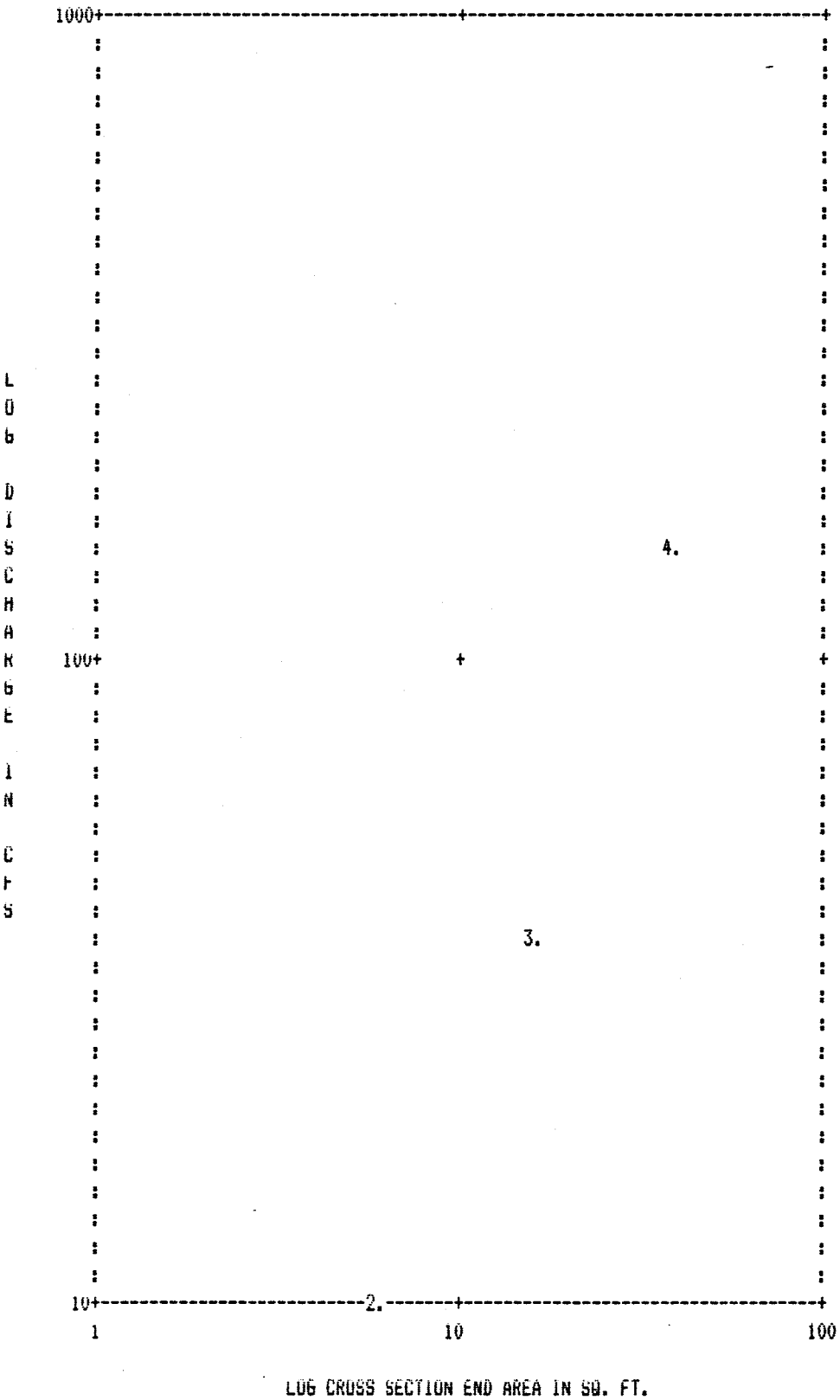


CROSS SECTION 5 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

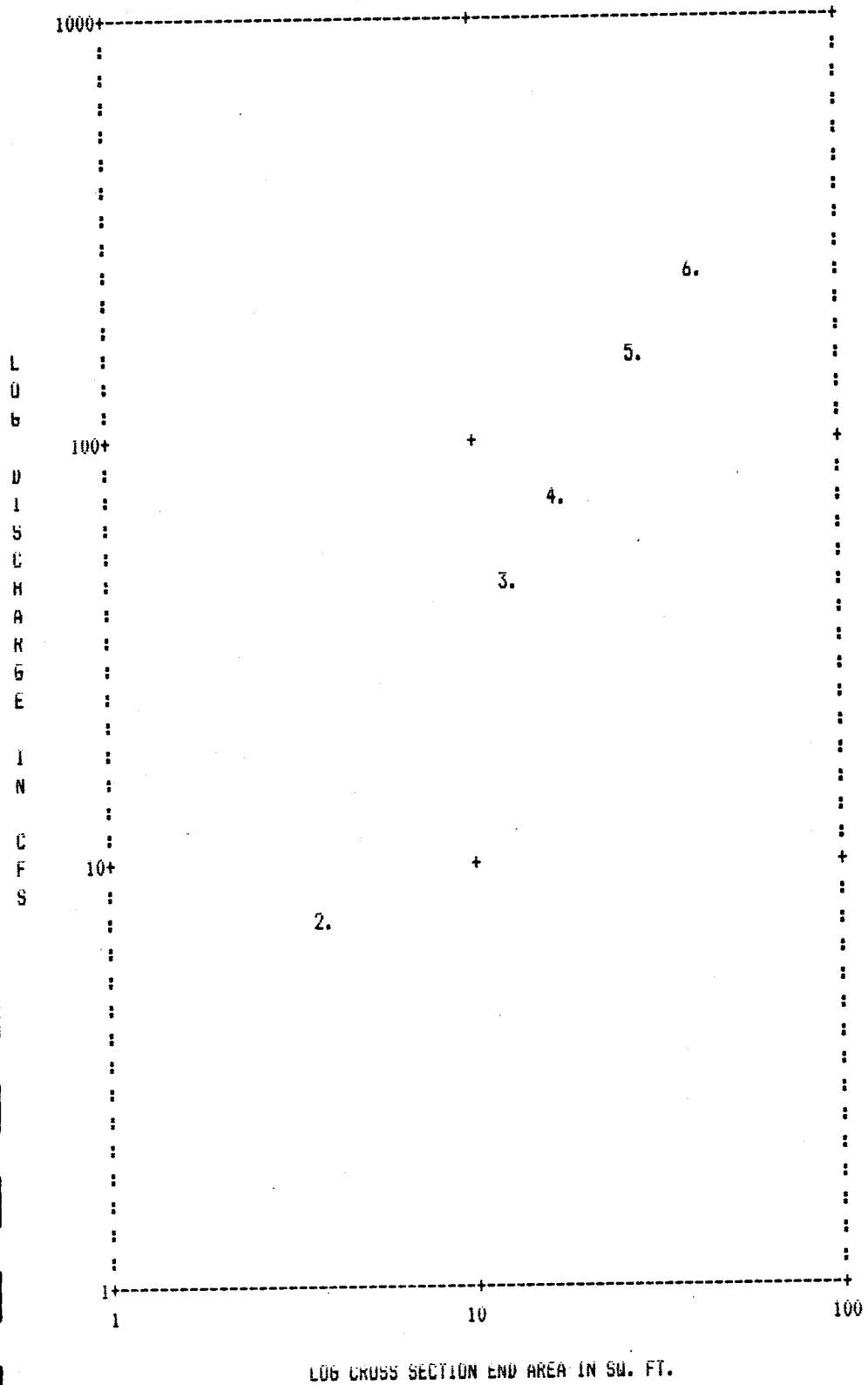


CROSS SECTION 6 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

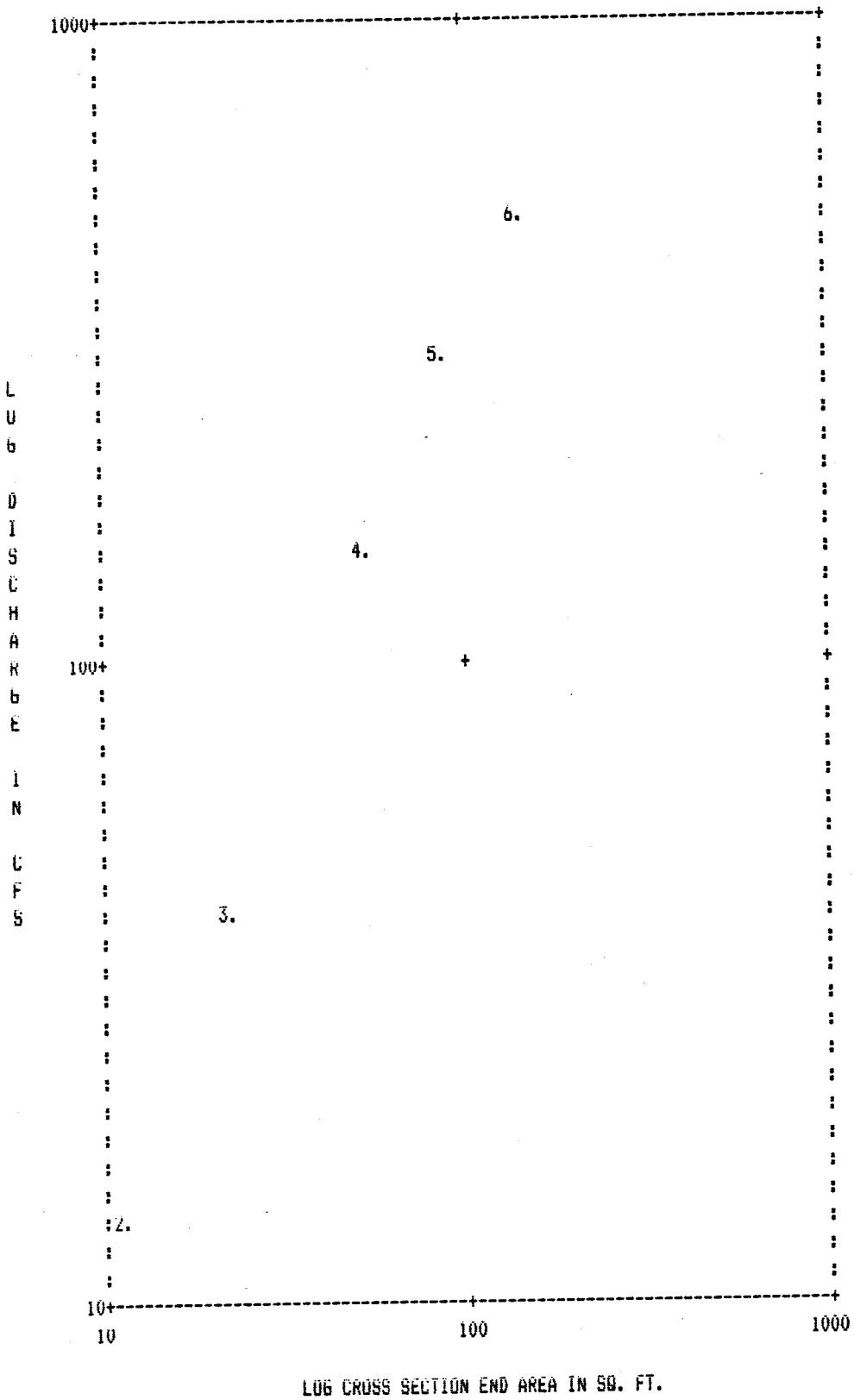


CROSS SECTION 75 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.56
2	7.10	3.90	1.56
3	45.90	12.90	1.56
4	75.60	18.00	1.54
5	155.00	29.30	1.50
6	261.00	42.00	1.48

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

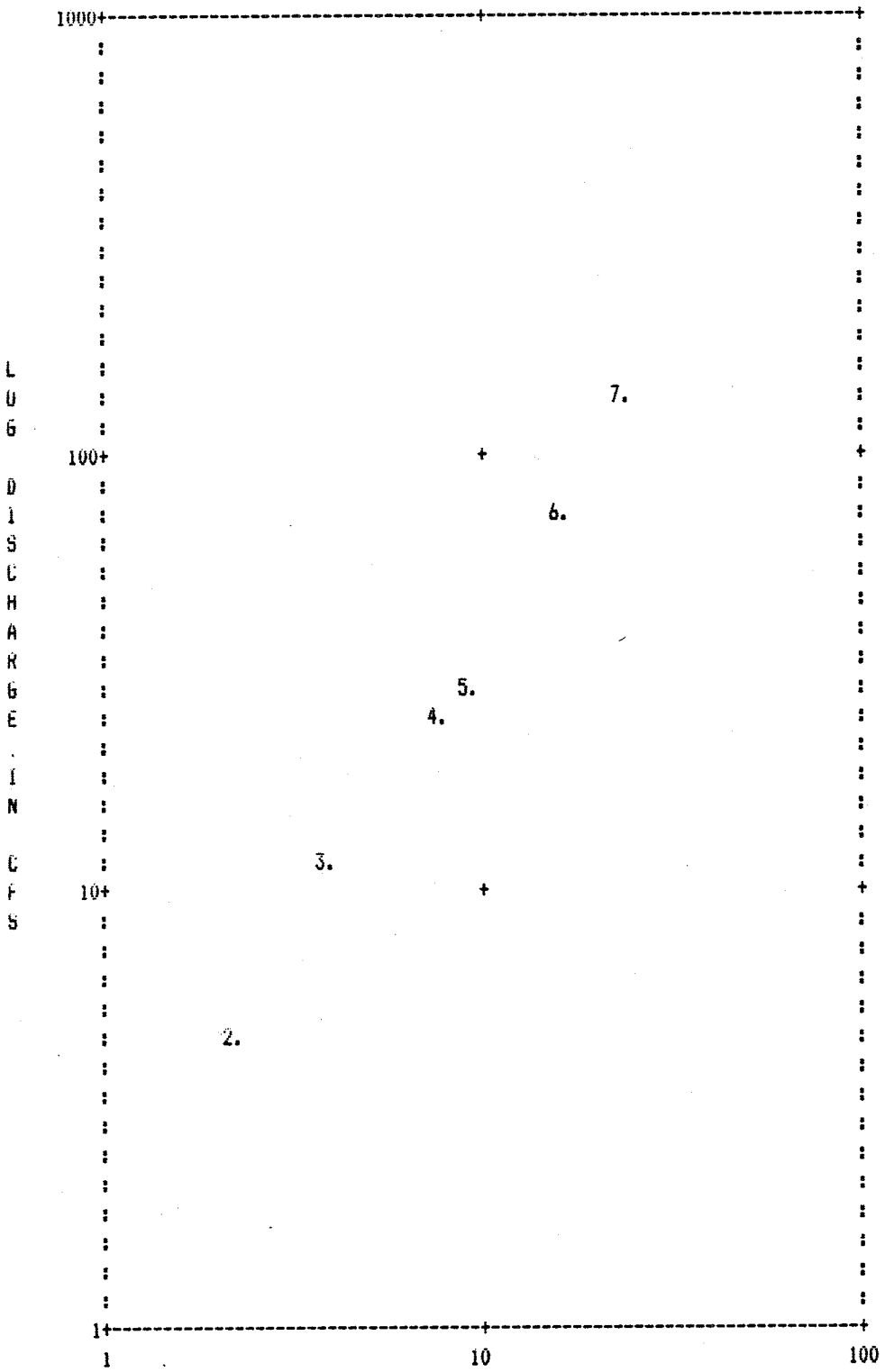


CROSS SECTION 76 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.61
2	13.00	11.00	1.61
3	41.00	22.50	1.61
4	142.00	53.00	1.49
5	300.00	90.30	1.45
6	480.00	141.00	1.30

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

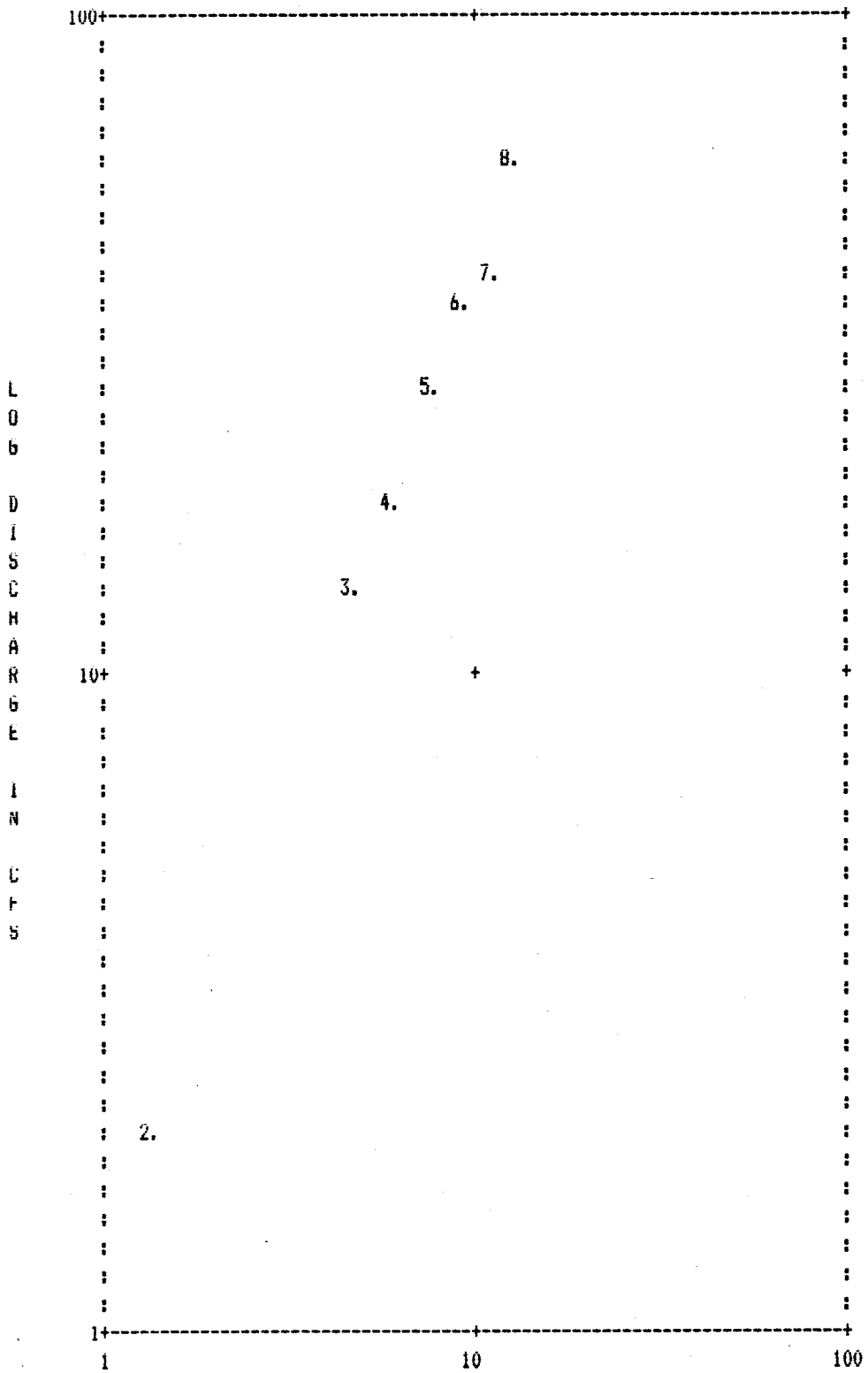


CROSS SECTION 82 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.42
2	5.00	2.30	1.42
3	11.00	4.00	1.42
4	27.00	7.80	1.38
5	31.00	9.20	1.31
6	78.00	16.20	1.50
7	142.00	23.20	1.58

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

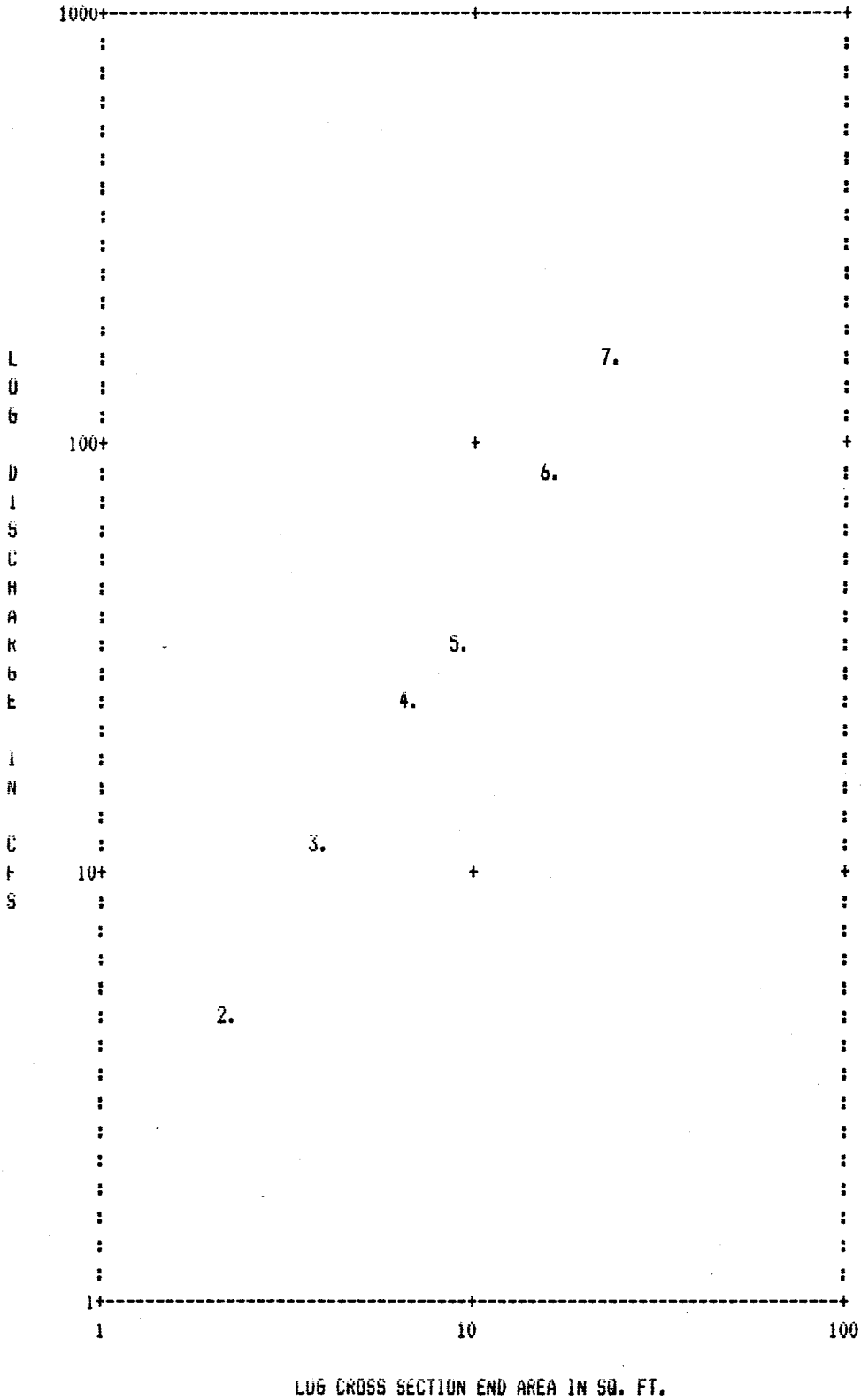


CROSS SECTION 83 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.57
2	2.00	1.40	1.57
3	13.00	4.60	1.57
4	18.00	6.20	1.44
5	27.00	7.80	1.55
6	37.00	9.40	1.59
7	40.00	11.00	1.50
8	60.00	12.60	2.00

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

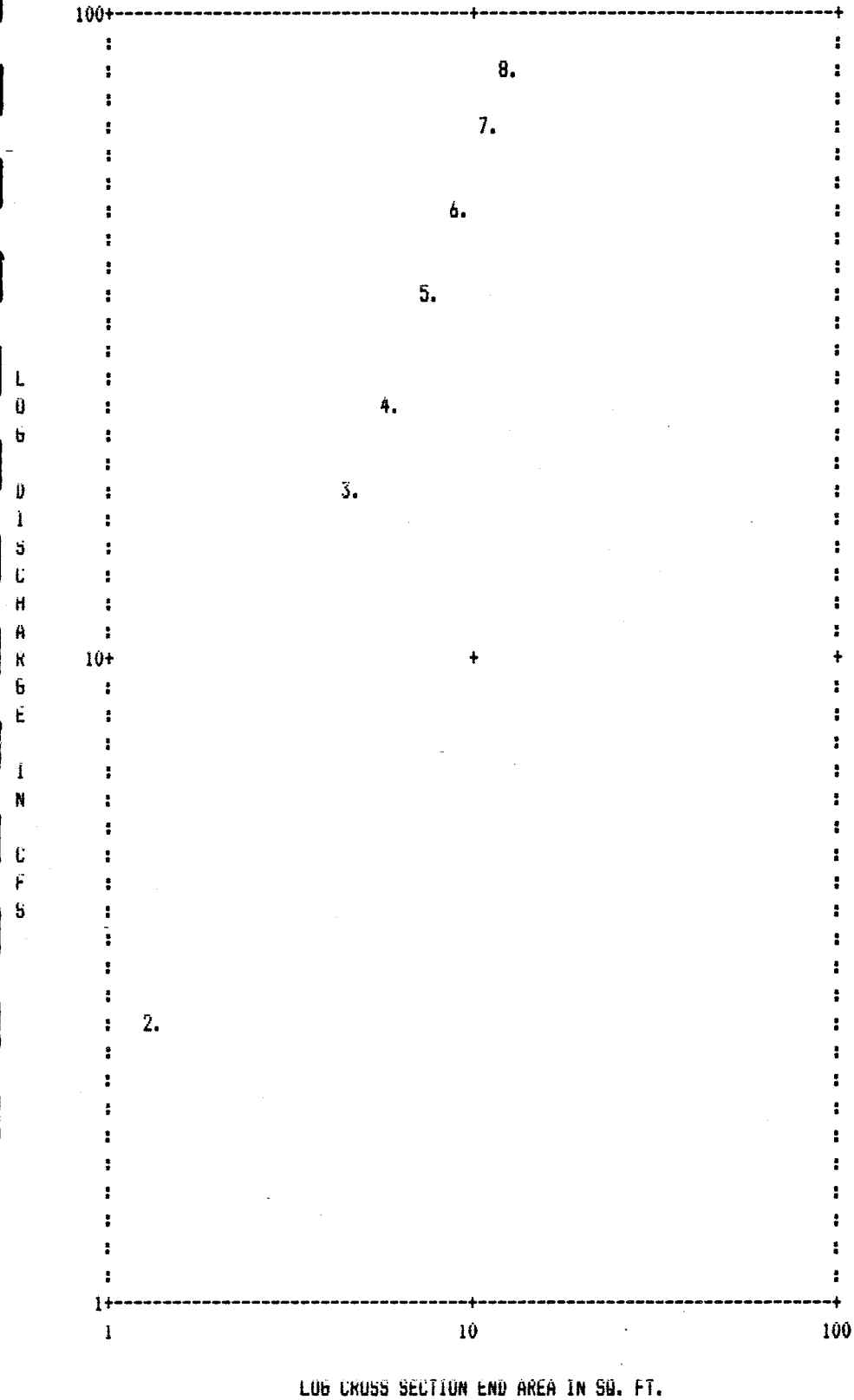


CROSS SECTION 81 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.58
2	5.00	2.30	1.58
3	12.00	4.00	1.58
4	25.00	7.10	1.42
5	33.00	9.40	1.32
6	84.00	16.50	1.53
7	152.00	23.40	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

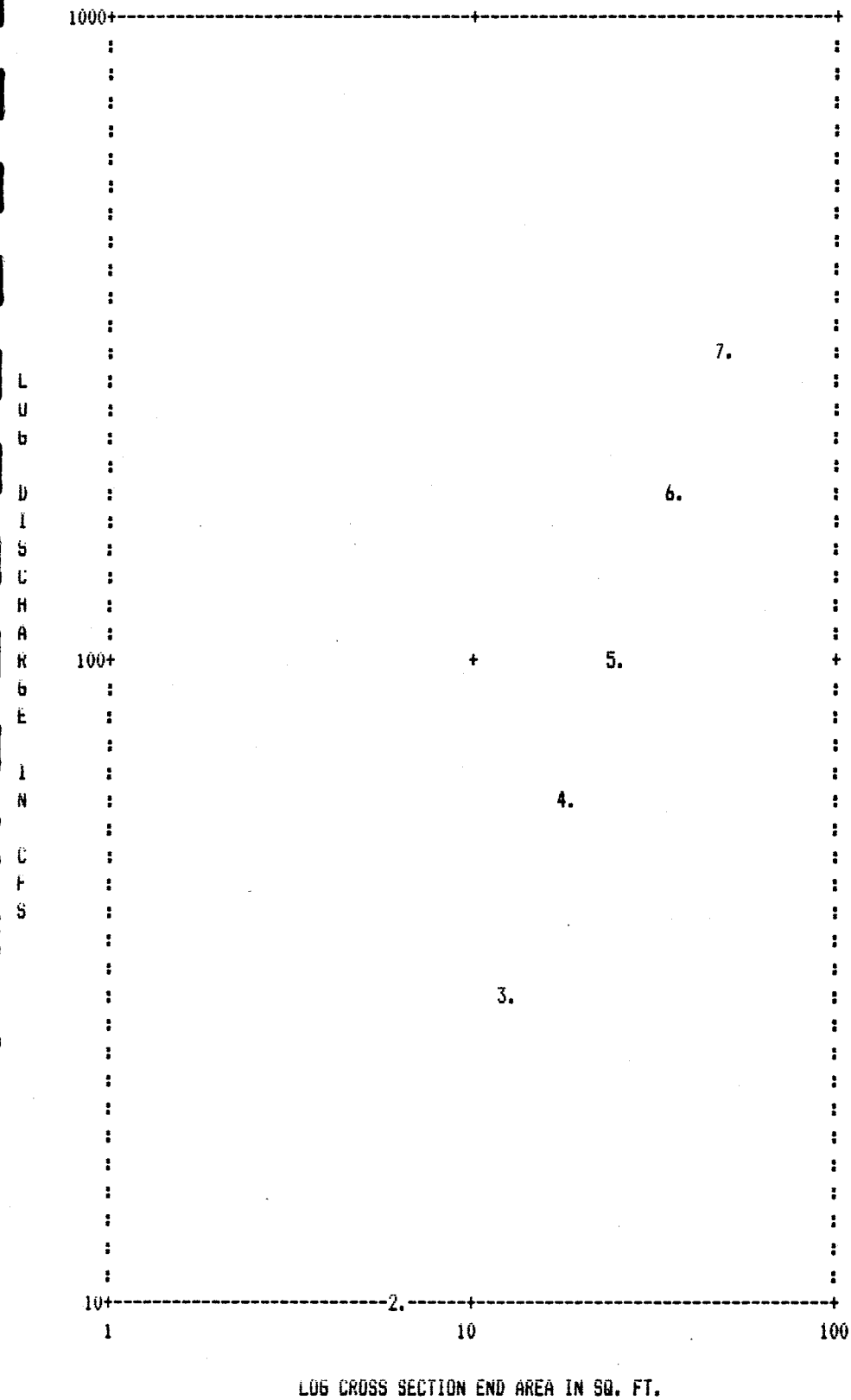


CROSS SECTION 80 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	2.70	1.40	1.60
3	18.10	4.60	1.60
4	24.80	6.20	1.45
5	36.40	7.70	1.55
6	49.80	9.40	1.56
7	64.70	11.00	1.58
8	81.20	12.60	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

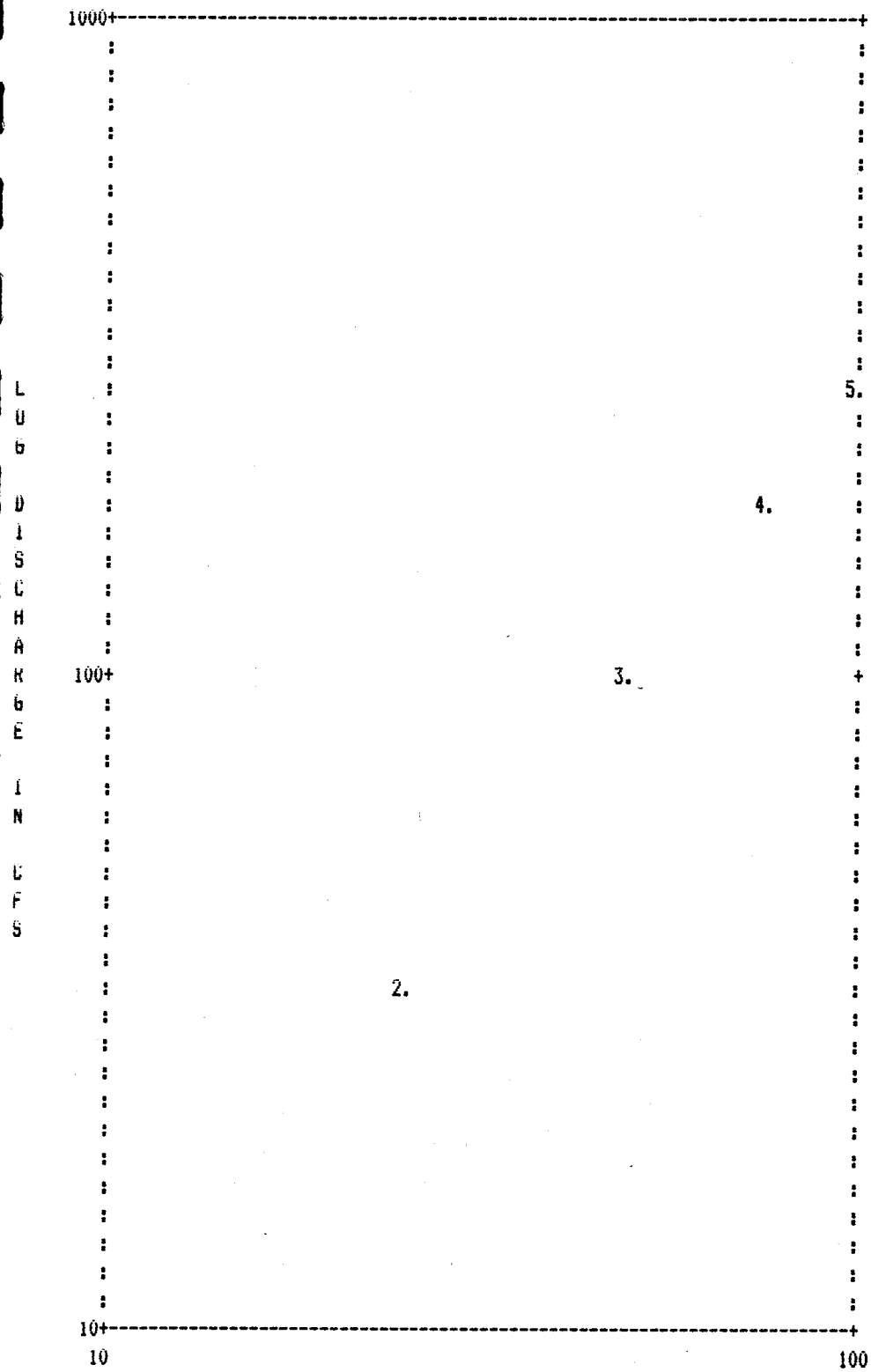


CROSS SECTION 84 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.66
2	10.00	6.30	1.66
3	31.20	12.50	1.66
4	60.60	18.80	1.64
5	96.70	25.00	1.64
6	185.40	37.50	1.62
7	292.60	50.00	1.61

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

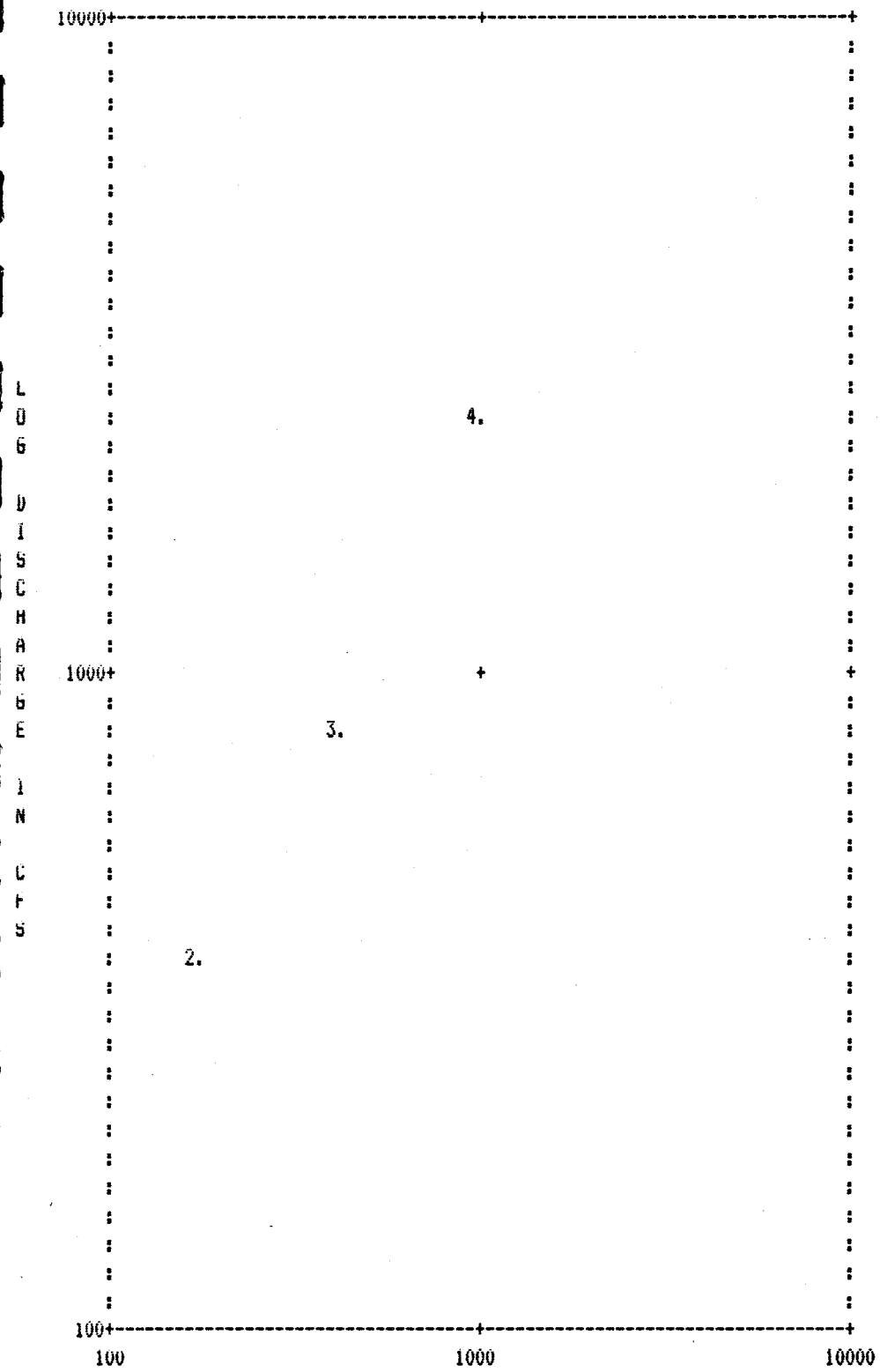


CROSS SECTION 85 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	33.80	25.00	1.51
3	96.00	50.00	1.51
4	175.00	75.00	1.49
5	270.00	100.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



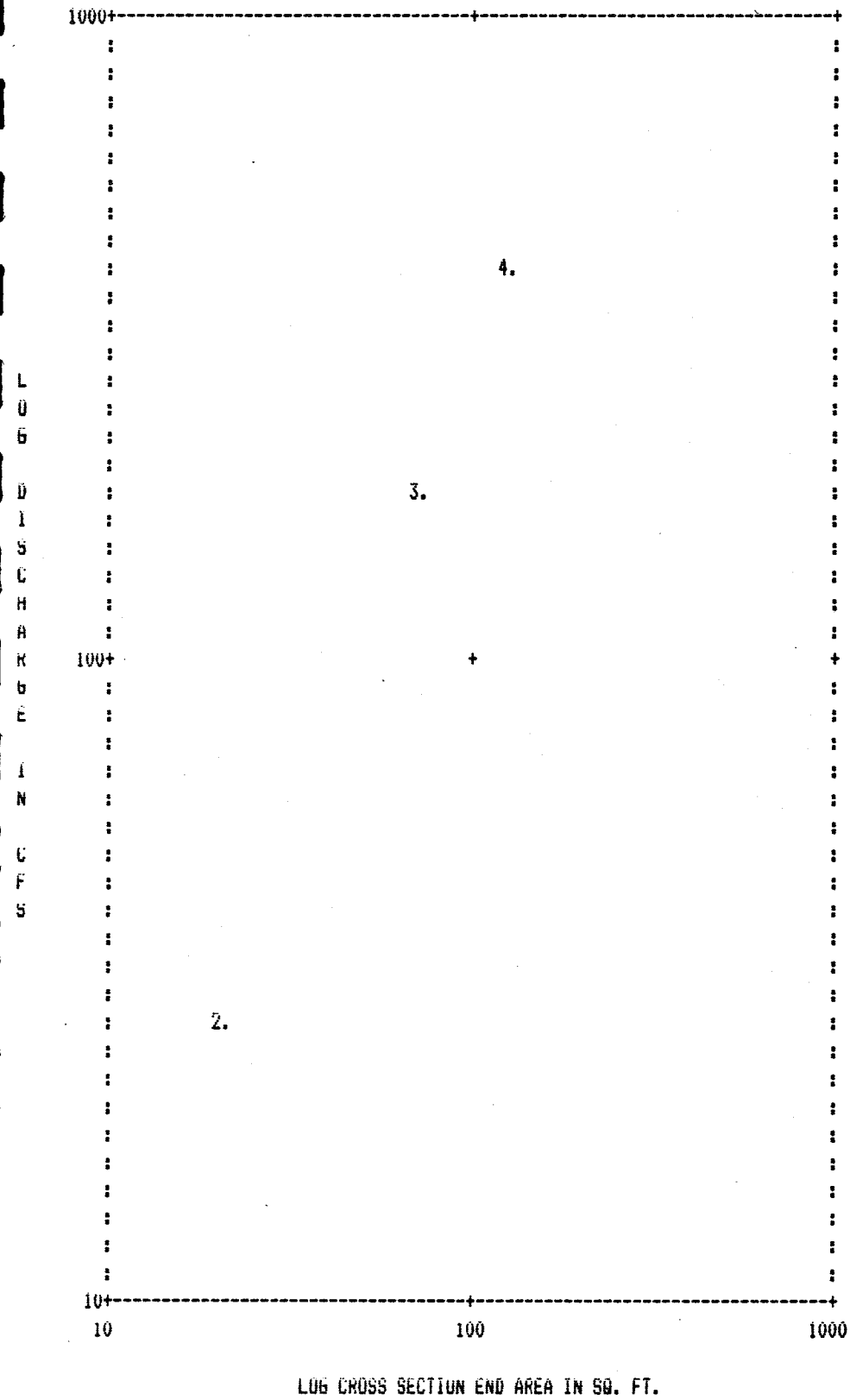
CROSS SECTION 86 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	0.91 *
2	371.00	173.00	0.91 *
3	821.00	416.00	0.91 *
4	2440.00	1003.00	1.13

A STAR (*) INDICATES A COMPUTED M VALUE IS OUTSIDE THE 1.00 - 2.00 RANGE. IN ROUTING THIS REACH THE M VALUE WILL BE SET TO THE CLOSEST LIMIT VALUE.

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

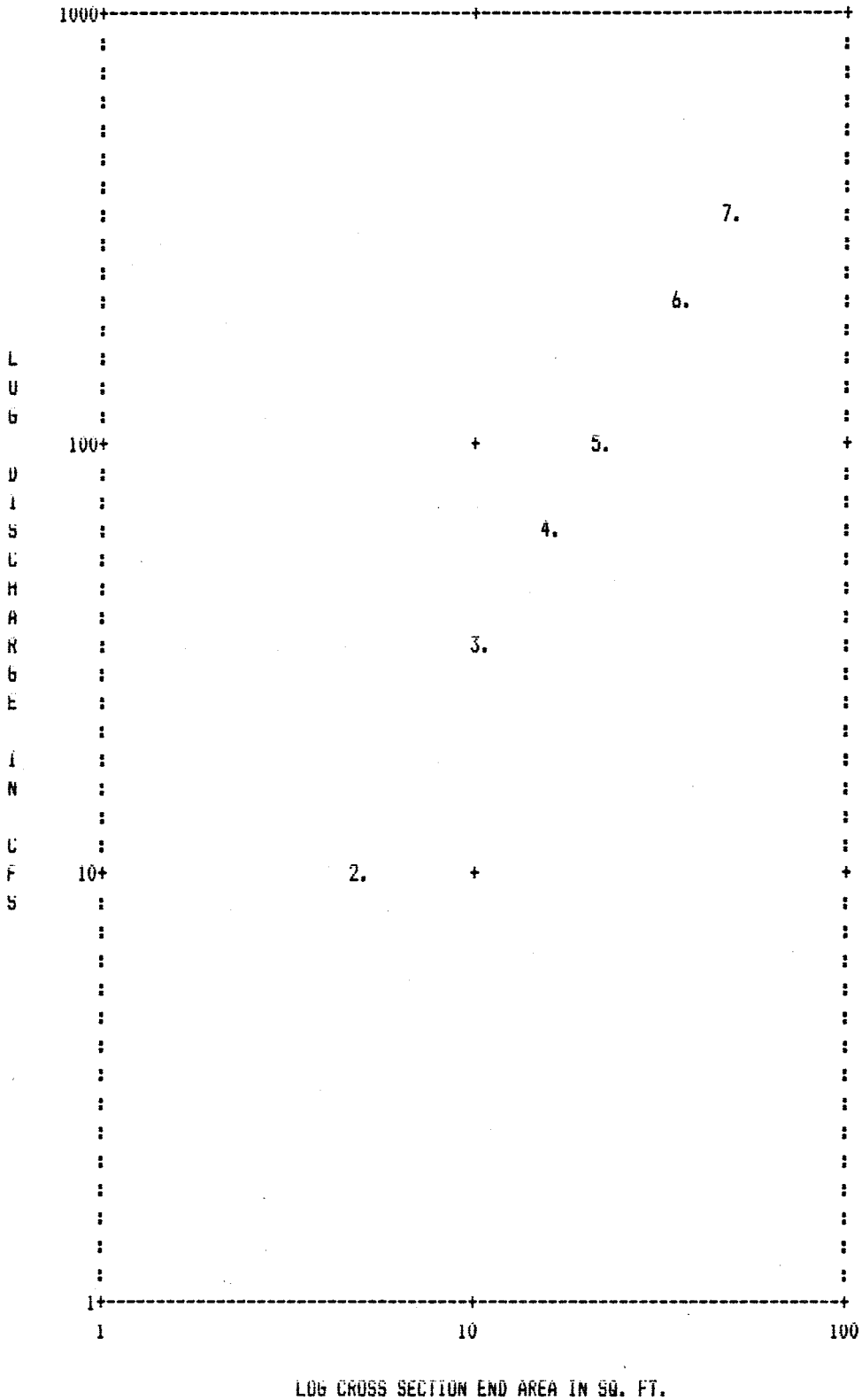


CROSS SECTION 88 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	28.00	21.00	1.51
3	185.00	73.50	1.51
4	414.00	126.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



CROSS SECTION 89 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	9.90	5.20	1.60
3	31.80	10.80	1.60
4	63.30	16.70	1.59
5	103.60	23.00	1.57
6	209.80	36.80	1.53
7	349.50	52.00	1.51

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

STARTING TIME = 0.00 RAIN DEPTH = 1.44 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	93.78	(RUNOFF)
15.13	29.67	(RUNOFF)
16.17	41.52	(RUNOFF)
21.15	3.31	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 175.06 CFS-HRS, 14.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	57.73	0.70
15.13	15.45	0.43
16.17	22.86	0.51

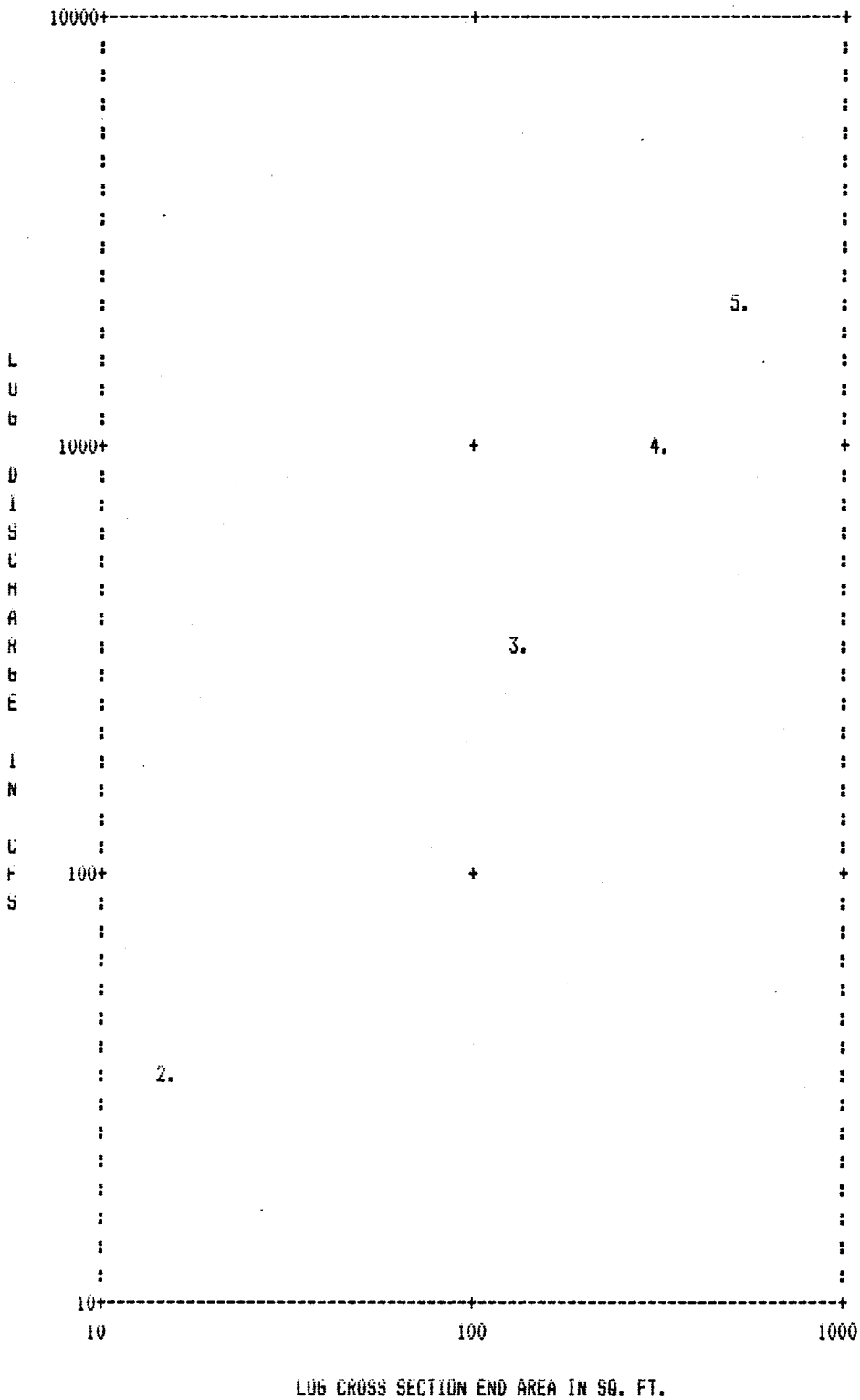
RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.85 CFS-HRS, 7.43 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	36.05	0.70
15.13	14.22	0.43
16.17	18.67	0.51
21.15	2.31	0.22

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.21 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	34.85	(NULL)
15.25	13.80	(NULL)
16.29	18.04	(NULL)
21.27	2.31	(NULL)



CROSS SECTION 99 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.04
2	32.20	15.00	1.04
3	330.80	140.30	1.04
4	944.00	323.00	1.18
5	2115.00	523.70	1.45

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

EXECUTIVE CONTROL OPERATION INCREM MAIN TIME INCREMENT = 0.08 HOURS RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 73 RECORD ID

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.16 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	55.54	(NULL)
15.24	14.89	(NULL)
16.29	22.01	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.83 CFS-HRS, 7.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	88.30	(RUNOFF)
15.00	27.51	(RUNOFF)
16.02	39.59	(RUNOFF)
20.99	2.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.57 WATERSHED INCHES, 125.44 CFS-HRS, 10.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	(NULL)
15.04	38.86	(NULL)
16.05	52.49	(NULL)
21.02	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.67 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 83

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	35.98	0.79
15.04	14.62	0.53
16.05	18.97	0.61
21.02	2.37	0.25

RUNOFF VOLUME ABOVE BASEFLOW = 0.81 WATERSHED INCHES, 83.38 CFS-HRS, 6.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	75.61	0.79
15.04	24.24	0.53
16.05	33.52	0.61
21.02	2.43	0.25

RUNOFF VOLUME ABOVE BASEFLOW = 0.61 WATERSHED INCHES, 127.22 CFS-HRS, 10.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 21 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 21

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	72.85	(NULL)
15.13	23.69	(NULL)
16.15	32.53	(NULL)
21.12	2.43	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.61 WATERSHED INCHES, 127.23 CFS-HRS, 10.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.18	35.89	(NULL)
15.12	14.60	(NULL)
16.13	18.93	(NULL)
21.10	2.37	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.81 WATERSHED INCHES, 83.32 CFS-HRS, 6.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	85.95	(NULL)
15.17	28.63	(NULL)
16.21	39.08	(NULL)
21.17	3.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 173.15 CFS-HRS, 14.31 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	177.74	(RUNOFF)
14.97	59.39	(RUNOFF)
15.99	85.22	(RUNOFF)
18.99	6.18	(RUNOFF)
20.98	5.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 247.12 CFS-HRS, 20.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	240.13	(NULL)
15.00	82.82	(NULL)
16.03	116.25	(NULL)
19.04	10.08	(NULL)
21.01	8.62	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.24 SQ.MI.

10.50	DISCHG	0.00	0.01	0.03	0.08	0.17	0.32	0.54	0.81	1.12	1.47
11.25	DISCHG	1.75	2.25	3.10	4.18	7.69	21.42	49.41	87.70	130.31	174.38
12.00	DISCHG	216.50	239.76	226.81	196.07	168.82	150.79	137.69	126.68	114.06	99.07
12.75	DISCHG	85.77	75.69	68.49	63.13	58.70	54.10	49.46	45.69	43.07	41.19
13.50	DISCHG	39.77	38.28	36.30	34.18	32.50	31.34	30.48	29.77	28.91	27.87
14.25	DISCHG	26.90	26.18	25.70	25.41	27.70	37.18	51.11	63.64	72.29	78.69
15.00	DISCHG	82.82	78.61	64.47	48.67	36.89	28.63	22.38	19.07	27.27	49.24
15.75	DISCHG	72.83	90.02	102.63	112.43	115.72	104.57	84.37	66.02	53.41	44.39
16.50	DISCHG	37.37	31.67	27.02	23.16	20.19	18.01	16.47	15.30	14.27	13.35
17.25	DISCHG	12.61	12.05	11.65	11.34	11.11	10.91	10.74	10.62	10.52	10.45
18.00	DISCHG	10.39	10.26	10.00	9.71	9.48	9.32	9.21	9.14	9.22	9.43
18.75	DISCHG	9.65	9.82	9.95	10.04	10.08	10.00	9.86	9.73	9.64	9.58
19.50	DISCHG	9.52	9.41	9.23	9.04	8.89	8.78	8.70	8.61	8.45	8.22
20.25	DISCHG	8.01	7.85	7.73	7.65	7.65	7.80	8.04	8.26	8.41	8.53
21.00	DISCHG	8.61	8.58	8.39	8.16	7.97	7.84	7.74	7.49	6.61	5.17
21.75	DISCHG	3.88	2.97	2.32	1.93	1.70	1.55	1.32	1.01	0.75	0.57

RUNOFF VOLUME ABOVE BASEFLOW = 0.52 WATERSHED INCHES, 420.27 CFS-HRS, 34.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	240.13	(NULL)
15.00	82.82	(NULL)
16.03	116.25	(NULL)
19.04	10.08	(NULL)
21.01	8.62	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.52 WATERSHED INCHES, 420.27 CFS-HRS, 34.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	16.27	(RUNOFF)
14.97	5.37	(RUNOFF)
15.97	7.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 21.97 CFS-HRS, 1.82 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	255.88	(NULL)
15.00	88.15	(NULL)
16.03	123.87	(NULL)
19.03	10.63	(NULL)
21.01	9.09	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.52 WATERSHED INCHES, 442.24 CFS-HRS, 36.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	2.62	(RUNOFF)
15.94	1.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 3.13 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 31

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	257.93	(NULL)
15.00	88.91	(NULL)
16.03	124.91	(NULL)
19.03	10.70	(NULL)
21.01	9.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.52 WATERSHED INCHES, 445.37 CFS-HRS, 36.81 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	26.16	(RUNOFF)
15.13	9.72	(RUNOFF)
16.17	13.64	(RUNOFF)
21.15	1.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 52.74 CFS-HRS, 4.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	98.62	(NULL)
15.13	33.41	(NULL)
16.15	46.13	(NULL)
21.13	3.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.56 WATERSHED INCHES, 179.96 CFS-HRS, 14.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(RUNOFF)
14.99	2.13	(RUNOFF)
16.02	3.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	103.70	(NULL)
15.12	35.11	(NULL)
16.14	48.72	(NULL)
21.12	3.74	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.53 SQ.MI.

10.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
11.25	DISCHG	0.37	0.84	1.40	1.97	2.59	4.20	8.61	18.19	32.72	50.62
12.00	DISCHG	69.98	88.24	101.00	103.47	96.94	86.70	76.76	68.49	61.46	55.06
12.75	DISCHG	48.77	42.94	37.96	33.96	30.77	28.14	25.83	23.70	21.82	20.23
13.50	DISCHG	18.96	17.92	17.01	16.15	15.30	14.55	13.92	13.42	13.01	12.62
14.25	DISCHG	12.22	11.83	11.49	11.24	11.22	11.98	14.32	18.41	23.36	28.06
15.00	DISCHG	31.90	34.48	34.89	32.08	27.04	21.48	16.78	13.15	10.91	11.46
15.75	DISCHG	15.77	23.42	31.84	39.20	45.09	48.56	47.49	42.67	36.21	29.88
16.50	DISCHG	24.48	20.03	16.55	13.84	11.70	10.03	8.74	7.76	7.01	6.42
17.25	DISCHG	5.95	5.56	5.25	5.01	4.82	4.68	4.57	4.50	4.45	4.41
18.00	DISCHG	4.38	4.36	4.32	4.26	4.18	4.10	4.03	3.98	3.95	3.96
18.75	DISCHG	4.00	4.07	4.13	4.18	4.22	4.24	4.24	4.21	4.17	4.13
19.50	DISCHG	4.10	4.07	4.04	3.99	3.93	3.88	3.83	3.80	3.76	3.71
20.25	DISCHG	3.65	3.58	3.52	3.47	3.44	3.43	3.46	3.52	3.58	3.65
21.00	DISCHG	3.70	3.73	3.73	3.70	3.64	3.58	3.52	3.46	3.36	3.13
21.75	DISCHG	2.70	2.16	1.67	1.27	0.90	0.54	0.27	0.17	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.56 WATERSHED INCHES, 189.28 CFS-HRS, 15.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.18	(RUNOFF)
12.94	8.89	(RUNOFF)
13.41	6.60	(RUNOFF)
14.92	19.28	(RUNOFF)
15.94	29.02	(RUNOFF)
20.90	1.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 84.35 CFS-HRS, 6.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	0.67
12.94	8.89	0.22
13.41	6.60	0.16
14.92	19.28	0.36
15.94	29.02	0.47
20.90	1.66	0.04

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	22.45	0.67

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.20 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	(NULL)
12.94	8.89	(NULL)
13.41	6.60	(NULL)
14.92	19.28	(NULL)
15.94	29.02	(NULL)
20.90	1.66	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.57	(RUNOFF)
12.43	3.45	(RUNOFF)
14.90	4.16	(RUNOFF)
15.94	6.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.53 WATERSHED INCHES, 17.03 CFS-HRS, 1.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.48	(NULL)
12.94	11.83	(NULL)
13.40	8.78	(NULL)
14.92	25.73	(NULL)
15.94	38.80	(NULL)
20.90	2.22	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.88 WATERSHED INCHES, 104.53 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	41.19	0.57
12.94	6.89	0.17
13.40	5.11	0.13
14.92	14.53	0.30
15.94	21.46	0.38
20.99	1.29	0.03

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.20 CFS-HRS, 4.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	32.29	0.57
12.94	4.94	0.17
14.92	11.20	0.30
15.94	17.34	0.38

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.33 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	39.53	(NULL)
15.02	14.43	(NULL)
16.02	21.09	(NULL)
20.99	1.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.32 CFS-HRS, 4.90 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	20.98	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.17 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	28.04	(NULL)
14.94	2.30	(NULL)
15.95	3.41	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.18 WATERSHED INCHES, 15.52 CFS-HRS, 1.28 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	29.87	(NULL)
15.04	11.19	(NULL)
16.03	16.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.37 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	57.76	(NULL)
15.00	13.08	(NULL)
16.02	19.72	(NULL)
20.99	1.13	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.89 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	55.97	(NULL)
15.09	12.95	(NULL)
16.10	19.44	(NULL)
21.08	1.12	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.88 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	33.45	(RUNOFF)
14.98	11.20	(RUNOFF)
16.00	15.98	(RUNOFF)
20.98	1.02	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 46.79 CFS-HRS, 3.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	130.05	(NULL)
15.07	44.48	(NULL)
16.10	61.95	(NULL)
19.09	5.40	(NULL)
21.06	4.74	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.54 WATERSHED INCHES, 236.07 CFS-HRS, 19.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	257.93	1300.76
15.00	88.91	1300.19
16.03	124.91	1300.31
19.03	10.70	1299.33
21.01	9.16	1299.28

RUNOFF VOLUME ABOVE BASEFLOW = 1.04 WATERSHED INCHES, 445.37 CFS-HRS, 36.81 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	130.05	(NULL)
15.07	44.48	(NULL)
16.10	61.95	(NULL)
19.09	5.40	(NULL)
21.06	4.74	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.34 SQ.MI.

10.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
11.25	DISCHG	0.40	0.93	1.60	2.31	3.48	7.23	16.02	31.54	52.40	76.44
12.00	DISCHG	101.25	121.59	129.92	125.25	113.12	99.84	88.27	79.07	71.00	63.18
12.75	DISCHG	55.63	49.00	43.60	39.39	36.04	33.12	30.42	27.98	25.92	24.24
13.50	DISCHG	22.93	21.80	20.68	19.60	18.60	17.76	17.09	16.56	16.08	15.58
14.25	DISCHG	15.07	14.62	14.25	14.01	14.40	16.81	21.43	27.41	33.54	38.92
15.00	DISCHG	43.03	44.45	42.07	36.37	29.37	22.76	17.49	13.83	13.29	17.69
15.75	DISCHG	26.16	36.71	46.79	55.14	60.75	61.56	56.46	48.32	39.91	32.52
16.50	DISCHG	26.52	21.74	18.08	15.26	13.07	11.37	10.07	9.08	8.30	7.67
17.25	DISCHG	7.16	6.75	6.43	6.19	5.99	5.84	5.74	5.67	5.61	5.58
18.00	DISCHG	5.55	5.51	5.43	5.33	5.22	5.13	5.05	5.00	5.00	5.05
18.75	DISCHG	5.15	5.22	5.29	5.35	5.39	5.39	5.36	5.30	5.25	5.21
19.50	DISCHG	5.17	5.13	5.07	5.00	4.92	4.86	4.81	4.77	4.71	4.63
20.25	DISCHG	4.54	4.46	4.39	4.33	4.31	4.33	4.41	4.50	4.59	4.66
21.00	DISCHG	4.72	4.73	4.70	4.62	4.53	4.45	4.39	4.30	4.05	3.60
21.75	DISCHG	2.97	2.31	1.75	1.32	0.93	0.55	0.28	0.17	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.27 WATERSHED INCHES, 236.07 CFS-HRS, 19.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	257.93	(NULL)
15.00	88.91	(NULL)
16.03	124.91	(NULL)
19.03	10.70	(NULL)
21.01	9.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.04 WATERSHED INCHES, 445.37 CFS-HRS, 36.81 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	22.90	(RUNOFF)
15.01	7.95	(RUNOFF)
16.02	11.34	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 34.39 CFS-HRS, 2.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 59

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	280.82	(NULL)
15.00	96.85	(NULL)
16.02	136.25	(NULL)
19.03	11.56	(NULL)
21.01	9.90	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.96 WATERSHED INCHES, 479.76 CFS-HRS, 39.65 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.70	36.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
14.63	36.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.68	36.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
19.03	11.56	(DIVERT)	
21.01	9.90	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 236.57 CFS-HRS, 19.55 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	244.82	2.45
15.00	60.85	1.61
16.02	100.25	1.79

RUNOFF VOLUME ABOVE BASEFLOW = 0.98 WATERSHED INCHES, 243.24 CFS-HRS, 20.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	201.40	1.54
15.00	47.59	1.06
16.02	81.49	1.17

RUNOFF VOLUME ABOVE BASEFLOW = 1.57 WATERSHED INCHES, 195.17 CFS-HRS, 16.13 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	43.41	1.54
15.00	13.27	1.06
16.02	18.75	1.17

RUNOFF VOLUME ABOVE BASEFLOW = 0.39 WATERSHED INCHES, 48.06 CFS-HRS, 3.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	237.40	1.61
15.00	83.59	1.18
16.02	117.49	1.29
19.03	11.56	0.71
21.01	9.90	0.68

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 431.71 CFS-HRS, 35.68 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.78	18.00	0.29
15.02	14.43	0.26
15.83	18.00	0.29
20.99	1.29	0.02

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 52.13 CFS-HRS, 4.31 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	21.53	(DIVERT)
16.02	3.05	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.24 WATERSHED INCHES, 7.22 CFS-HRS, 0.60 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	64.84	(NULL)
15.00	13.27	(NULL)
16.02	21.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.36 WATERSHED INCHES, 55.25 CFS-HRS, 4.57 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	255.40	(NULL)
15.00	98.00	(NULL)
16.02	135.53	(NULL)
19.03	13.05	(NULL)
21.01	11.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.20 WATERSHED INCHES, 483.85 CFS-HRS, 39.98 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	64.62	(NULL)
15.07	13.26	(NULL)
16.10	21.77	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.36 WATERSHED INCHES, 55.02 CFS-HRS, 4.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	7.56	(RUNOFF)
14.93	2.32	(RUNOFF)
15.95	3.46	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.38 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	68.98	(NULL)
15.03	14.99	(NULL)
16.07	23.74	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.37 WATERSHED INCHES, 64.40 CFS-HRS, 5.32 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.23	66.92	(NULL)
15.12	14.92	(NULL)
16.16	23.74	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.37 WATERSHED INCHES, 64.57 CFS-HRS, 5.34 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	118.36	(NULL)
15.11	27.75	(NULL)
16.13	42.46	(NULL)
21.06	1.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.39 WATERSHED INCHES, 125.45 CFS-HRS, 10.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	9.99	(RUNOFF)
14.92	2.73	(RUNOFF)
15.95	4.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 12.02 CFS-HRS, 0.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	122.61	(NULL)
15.07	29.45	(NULL)
16.11	44.61	(NULL)
21.02	1.56	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.40 WATERSHED INCHES, 137.47 CFS-HRS, 11.36 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	255.40	(NULL)
15.00	98.00	(NULL)
16.02	135.53	(NULL)
19.03	13.05	(NULL)
21.01	11.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.20 WATERSHED INCHES, 483.85 CFS-HRS, 39.98 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	15.11	(RUNOFF)
14.93	4.64	(RUNOFF)
15.95	6.92	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 18.76 CFS-HRS, 1.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	268.76	(NULL)
14.99	102.58	(NULL)
16.02	142.07	(NULL)
19.02	13.52	(NULL)
21.00	11.60	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.14 WATERSHED INCHES, 502.61 CFS-HRS, 41.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.44	(RUNOFF)
14.95	2.32	(RUNOFF)
15.95	3.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 9.40 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	275.65	(NULL)
14.99	104.90	(NULL)
16.02	145.36	(NULL)
19.02	13.75	(NULL)
21.00	11.81	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.72 SQ.MI.

9.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
10.50	DISCHG	0.06	0.10	0.18	0.29	0.45	0.67	0.95	1.29	1.70	2.26
11.25	DISCHG	2.88	3.76	5.01	6.52	11.59	33.87	74.27	120.24	167.57	215.68
12.00	DISCHG	260.78	275.56	255.99	219.18	188.31	165.36	150.70	139.45	126.01	108.56
12.75	DISCHG	93.45	82.77	75.63	71.10	67.52	63.23	58.56	54.96	52.63	51.07
13.50	DISCHG	49.96	48.64	46.49	44.23	42.59	41.39	40.45	39.68	38.60	37.13
14.25	DISCHG	35.82	34.93	34.37	34.08	37.70	51.18	69.04	83.35	93.68	100.74
15.00	DISCHG	104.83	98.22	76.60	55.78	41.77	31.64	23.92	20.73	35.47	67.24
15.75	DISCHG	97.67	119.51	132.66	142.45	143.71	127.12	95.71	70.63	56.78	47.96
16.50	DISCHG	41.76	36.53	31.55	27.52	24.45	22.22	20.65	19.45	18.33	17.25
17.25	DISCHG	16.39	15.77	15.33	15.01	14.78	14.56	14.40	14.28	14.19	14.12
18.00	DISCHG	14.06	13.87	13.46	13.03	12.72	12.52	12.38	12.33	12.49	12.86
18.75	DISCHG	13.21	13.45	13.61	13.72	13.74	13.59	13.34	13.14	13.02	12.93
19.50	DISCHG	12.86	12.72	12.45	12.17	11.97	11.83	11.74	11.64	11.41	11.07
20.25	DISCHG	10.77	10.56	10.42	10.33	10.36	10.64	11.04	11.36	11.57	11.72
21.00	DISCHG	11.81	11.72	11.37	11.00	10.74	10.57	10.45	10.10	8.73	6.44
21.75	DISCHG	4.54	3.30	2.48	2.01	1.74	1.57	1.33	1.01	0.75	0.57

RUNOFF VOLUME ABOVE BASEFLOW = 1.11 WATERSHED INCHES, 512.00 CFS-HRS, 42.31 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	27.42	(RUNOFF)
15.01	9.58	(RUNOFF)
16.05	13.67	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 43.50 CFS-HRS, 3.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.18	147.21	(NULL)
15.05	38.87	(NULL)
16.09	57.97	(NULL)
21.02	2.50	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.67 SQ.MI.

9.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
10.50	DISCHG	0.03	0.06	0.10	0.15	0.21	0.27	0.33	0.40	0.49	0.61
11.25	DISCHG	0.78	1.03	1.33	1.65	2.66	6.02	13.26	26.11	48.32	77.82
12.00	DISCHG	107.87	132.18	146.24	143.56	113.81	84.42	63.75	54.25	48.50	43.68
12.75	DISCHG	38.35	33.19	29.16	26.37	24.47	22.56	20.51	18.30	16.26	14.67
13.50	DISCHG	13.59	12.79	12.05	11.15	10.10	9.12	8.38	8.00	7.83	7.64
14.25	DISCHG	7.38	7.15	7.00	6.94	7.41	9.31	13.17	19.78	27.92	34.66
15.00	DISCHG	38.13	38.72	36.18	29.73	21.46	12.42	5.71	2.79	3.87	8.80
15.75	DISCHG	17.70	31.36	43.88	51.64	56.89	57.49	52.04	39.32	28.38	20.38
16.50	DISCHG	13.76	9.20	6.08	4.27	3.74	3.53	3.42	3.36	3.29	3.21
17.25	DISCHG	3.10	3.01	2.96	2.92	2.91	2.90	2.89	2.89	2.89	2.89
18.00	DISCHG	2.89	2.87	2.82	2.74	2.65	2.58	2.54	2.53	2.54	2.60
18.75	DISCHG	2.69	2.78	2.84	2.87	2.88	2.87	2.82	2.76	2.71	2.68
19.50	DISCHG	2.66	2.63	2.60	2.54	2.49	2.45	2.42	2.41	2.38	2.33
20.25	DISCHG	2.26	2.20	2.16	2.14	2.14	2.17	2.25	2.34	2.42	2.47
21.00	DISCHG	2.49	2.49	2.44	2.36	2.27	2.21	2.17	2.11	1.94	1.59
21.75	DISCHG	1.10	0.68	0.39	0.22	0.12	0.07	0.04	0.02	0.01	0.01

RUNOFF VOLUME ABOVE BASEFLOW = 0.42 WATERSHED INCHES, 180.97 CFS-HRS, 14.96 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 1 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 73 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 2.53 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 2 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	257.50	(RUNOFF)
15.12	65.31	(RUNOFF)
16.17	91.13	(RUNOFF)
19.18	8.27	(RUNOFF)
21.14	7.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.58 WATERSHED INCHES, 448.40 CFS-HRS, 37.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	168.36	1.05
15.12	38.16	0.62
16.17	55.91	0.69
21.14	3.08	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.39 CFS-HRS, 21.44 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	89.14	1.05
15.12	27.15	0.62
16.17	35.22	0.69
21.14	3.97	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 189.02 CFS-HRS, 15.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	87.77	(NULL)
15.22	26.80	(NULL)
16.27	34.72	(NULL)
21.24	3.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 188.95 CFS-HRS, 15.61 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	166.55	(NULL)
15.22	37.69	(NULL)
16.26	55.20	(NULL)
21.24	3.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.36 CFS-HRS, 21.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	246.12	(RUNOFF)
14.99	61.98	(RUNOFF)
16.02	88.99	(RUNOFF)
19.01	6.40	(RUNOFF)
20.99	5.51	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 331.60 CFS-HRS, 27.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	(NULL)
15.03	84.07	(NULL)
16.04	114.96	(NULL)
19.07	10.91	(NULL)
21.04	9.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.66 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 83

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	100.81	1.20
15.03	27.76	0.71
16.04	36.99	0.80
19.07	5.11	0.31
21.04	4.45	0.30

RUNOFF VOLUME ABOVE BASEFLOW = 1.78 WATERSHED INCHES, 183.70 CFS-HRS, 15.18 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	207.29	1.20
15.03	56.31	0.71
16.04	77.97	0.80
19.07	5.80	0.31
21.04	4.90	0.30

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 336.85 CFS-HRS, 27.84 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 21 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 21

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	205.70	(NULL)
15.12	56.36	(NULL)
16.13	77.34	(NULL)
19.15	5.80	(NULL)
21.13	4.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.60 WATERSHED INCHES, 336.66 CFS-HRS, 27.82 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	100.81	(NULL)
15.03	27.76	(NULL)
16.04	36.99	(NULL)
19.07	5.11	(NULL)
21.04	4.45	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.78 WATERSHED INCHES, 183.70 CFS-HRS, 15.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	240.86	(NULL)
15.13	61.35	(NULL)
16.18	83.78	(NULL)
19.15	8.69	(NULL)
21.10	7.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 443.06 CFS-HRS, 36.61 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	534.30	(RUNOFF)
14.97	141.05	(RUNOFF)
15.98	202.03	(RUNOFF)
17.90	14.23	(RUNOFF)
18.98	14.20	(RUNOFF)
20.98	12.27	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 698.58 CFS-HRS, 57.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	747.19	(NULL)
14.99	195.43	(NULL)
16.02	274.67	(NULL)
19.02	22.81	(NULL)
21.00	19.65	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.24 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.01	0.02	0.04	0.07	0.12	0.20	0.30
8.25	DISCHG	0.44	0.60	0.78	0.97	1.18	1.39	1.47	1.52	1.60	1.73
9.00	DISCHG	1.91	2.15	2.44	2.80	3.22	3.65	4.10	4.59	5.14	5.76
9.75	DISCHG	6.41	7.04	7.65	8.26	8.94	9.88	11.04	12.18	13.22	14.20
10.50	DISCHG	15.17	16.45	18.34	20.52	22.56	24.35	25.99	27.85	31.07	35.99
11.25	DISCHG	41.10	43.48	49.25	52.71	72.22	146.50	267.37	390.16	511.40	619.84
12.00	DISCHG	715.74	745.06	671.44	556.13	461.20	398.74	353.21	316.62	281.93	242.58
12.75	DISCHG	206.47	181.15	163.63	150.64	139.65	128.03	116.41	107.20	100.84	96.20
13.50	DISCHG	92.66	88.87	83.74	78.60	74.69	72.06	70.13	68.51	66.47	63.96
14.25	DISCHG	61.71	60.12	59.05	58.41	64.56	89.01	123.47	152.67	172.47	186.67
15.00	DISCHG	195.34	182.90	146.07	107.23	78.67	59.08	44.71	38.34	61.52	118.90
15.75	DISCHG	176.48	217.37	245.95	267.37	272.34	241.52	190.06	145.59	116.28	95.16
16.50	DISCHG	78.22	64.81	54.57	46.89	41.33	37.39	34.53	32.38	30.47	28.70
17.25	DISCHG	27.25	26.18	25.42	24.87	24.46	24.14	23.89	23.70	23.56	23.45
18.00	DISCHG	23.35	23.04	22.42	21.76	21.28	20.96	20.73	20.63	20.88	21.43
18.75	DISCHG	21.97	22.34	22.58	22.76	22.80	22.56	22.18	21.87	21.67	21.53
19.50	DISCHG	21.40	21.16	20.74	20.30	19.98	19.77	19.62	19.45	19.08	18.55
20.25	DISCHG	18.06	17.73	17.51	17.36	17.41	17.83	18.43	18.94	19.27	19.50
21.00	DISCHG	19.65	19.50	18.99	18.42	17.99	17.71	17.50	16.88	14.72	11.25
21.75	DISCHG	8.12	5.97	4.61	3.53	2.68	2.00	1.63	1.42	1.05	0.78

RUNOFF VOLUME ABOVE BASEFLOW = 1.42 WATERSHED INCHES, 1141.64 CFS-HRS, 94.35 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	747.19	(NULL)
14.99	195.43	(NULL)
16.02	274.67	(NULL)
19.02	22.81	(NULL)
21.00	19.65	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.42 WATERSHED INCHES, 1141.64 CFS-HRS, 94.35 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	48.54	(RUNOFF)
14.97	12.73	(RUNOFF)
15.97	18.29	(RUNOFF)
20.96	1.09	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 62.07 CFS-HRS, 5.13 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	795.04	(NULL)
14.99	208.08	(NULL)
16.02	292.78	(NULL)
19.02	24.07	(NULL)
21.00	20.74	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.42 WATERSHED INCHES, 1203.71 CFS-HRS, 99.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	7.64	(RUNOFF)
14.91	1.85	(RUNOFF)
15.94	2.77	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 8.85 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 31

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	801.41	(NULL)
14.99	209.91	(NULL)
16.02	295.27	(NULL)
19.02	24.25	(NULL)
21.00	20.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.42 WATERSHED INCHES, 1212.56 CFS-HRS, 100.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	83.91	(RUNOFF)
15.12	23.19	(RUNOFF)
16.17	32.39	(RUNOFF)
21.15	2.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 149.26 CFS-HRS, 12.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.17	288.19	(NULL)
15.12	79.54	(NULL)
16.14	109.41	(NULL)
19.16	8.77	(NULL)
21.13	7.43	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.52 WATERSHED INCHES, 485.92 CFS-HRS, 40.16 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(RUNOFF)
14.99	5.07	(RUNOFF)
16.02	7.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.17	304.98	(NULL)
15.11	83.39	(NULL)
16.13	115.81	(NULL)
19.15	9.30	(NULL)
21.12	7.88	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.53 SQ.MI.

8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.49
9.00	DISCHG	0.69	0.90	1.12	1.38	1.63	1.85	2.06	2.27	2.44	2.62
9.75	DISCHG	2.82	3.04	3.26	3.47	3.68	3.92	4.22	4.61	5.04	5.48
10.50	DISCHG	5.91	6.34	6.86	7.56	8.40	9.27	10.11	10.92	11.81	13.02
11.25	DISCHG	14.70	16.75	18.92	20.98	23.85	32.82	56.38	99.00	156.11	204.76
12.00	DISCHG	248.42	285.11	304.35	296.77	269.17	236.38	207.50	184.20	163.47	141.51
12.75	DISCHG	120.70	104.43	91.23	81.00	73.12	66.83	61.29	56.19	51.73	48.09

13.50	DISCH6	45.38	43.17	41.13	39.01	36.90	35.03	33.54	32.37	31.38	30.42
14.25	DISCH6	29.39	28.40	27.56	26.98	26.96	29.16	35.99	46.62	58.69	69.36
15.00	DISCH6	77.70	82.88	82.48	73.57	60.09	46.61	35.93	27.43	22.43	25.49
15.75	DISCH6	39.19	59.44	80.18	96.95	109.68	115.80	110.60	96.58	79.56	64.29
16.50	DISCH6	52.02	42.65	35.17	29.10	24.41	20.92	18.33	16.45	15.04	13.93
17.25	DISCH6	13.03	12.28	11.68	11.21	10.83	10.52	10.27	10.08	9.94	9.83
18.00	DISCH6	9.74	9.67	9.56	9.39	9.18	8.98	8.81	8.67	8.59	8.60
18.75	DISCH6	8.70	8.85	9.00	9.13	9.23	9.29	9.28	9.21	9.11	9.02
19.50	DISCH6	8.94	8.86	8.76	8.62	8.47	8.33	8.21	8.11	8.01	7.88
20.25	DISCH6	7.72	7.55	7.40	7.28	7.19	7.16	7.22	7.36	7.51	7.66
21.00	DISCH6	7.78	7.86	7.87	7.79	7.65	7.50	7.37	7.23	6.97	6.40
21.75	DISCH6	5.48	4.45	3.52	2.65	1.96	1.45	1.06	0.65	0.28	0.18

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 512.30 CFS-HRS, 42.34 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	186.91	(RUNOFF)
14.91	42.23	(RUNOFF)
15.94	63.36	(RUNOFF)
18.94	4.10	(RUNOFF)
20.90	3.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 215.83 CFS-HRS, 17.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	0.99
14.91	36.33	0.54
15.94	46.16	0.63
18.94	4.10	0.10
20.90	3.53	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	0.99
14.91	5.90	0.54
15.94	17.20	0.63

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	(NULL)
14.91	36.33	(NULL)
15.94	46.16	(NULL)
18.94	4.10	(NULL)
20.90	3.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	42.38	(RUNOFF)
12.42	8.60	(RUNOFF)
12.94	4.57	(RUNOFF)
14.90	9.58	(RUNOFF)
15.94	14.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.44 WATERSHED INCHES, 46.52 CFS-HRS, 3.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	158.61	(NULL)
14.91	51.37	(NULL)
15.94	68.85	(NULL)
18.94	5.58	(NULL)
20.90	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 241.56 CFS-HRS, 19.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	91.75	0.93
14.91	28.12	0.46
15.94	38.29	0.55
20.90	2.80	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.24 CFS-HRS, 11.34 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	66.87	0.93
14.91	23.24	0.46
15.94	30.55	0.55
20.90	2.00	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.31 CFS-HRS, 8.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	90.35	(NULL)
15.00	28.06	(NULL)
16.02	38.02	(NULL)
20.98	2.79	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.49 CFS-HRS, 11.36 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	(NULL)
14.91	5.90	(NULL)
15.94	17.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	114.03	(NULL)
14.92	11.36	(NULL)
15.94	25.26	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.85 WATERSHED INCHES, 73.71 CFS-HRS, 6.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	64.15	(NULL)
15.03	23.01	(NULL)
16.02	29.97	(NULL)
21.00	2.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.54 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	101.46	(RUNOFF)
14.97	26.60	(RUNOFF)
15.99	37.88	(RUNOFF)
20.98	2.33	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 132.33 CFS-HRS, 10.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	390.70	(NULL)
15.06	106.76	(NULL)
16.09	148.06	(NULL)
19.10	11.94	(NULL)
21.07	10.15	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.48 WATERSHED INCHES, 644.63 CFS-HRS, 53.27 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	111.99	1301.35

RUNOFF VOLUME ABOVE BASEFLOW = 0.07 WATERSHED INCHES, 27.86 CFS-HRS, 2.30 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	689.42	1301.35
14.99	209.91	1300.60
16.02	295.27	1300.88
19.02	24.25	1299.75
21.00	20.89	1299.65

RUNOFF VOLUME ABOVE BASEFLOW = 2.77 WATERSHED INCHES, 1184.71 CFS-HRS, 97.90 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	103.42	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.66 SQ.MI.

11.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.53
12.00	DISCHG	43.73	84.05	103.40	81.76	36.57	9.72	2.58	0.69	0.18	0.05
12.75	DISCHG	0.01	0.00								

RUNOFF VOLUME ABOVE BASEFLOW = 0.06 WATERSHED INCHES, 27.60 CFS-HRS, 2.28 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	492.84	(NULL)
15.06	106.76	(NULL)
16.09	148.06	(NULL)
19.10	11.94	(NULL)
21.07	10.15	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.34 SQ.MI.

8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.31	0.51
9.00	DISCHG	0.74	0.98	1.24	1.54	1.84	2.11	2.38	2.63	2.86	3.11
9.75	DISCHG	3.39	3.67	3.96	4.23	4.52	4.86	5.30	5.83	6.39	6.93
10.50	DISCHG	7.46	8.04	8.80	9.78	10.88	11.96	12.98	13.99	15.30	17.17
11.25	DISCHG	19.54	22.18	24.79	27.34	33.30	53.47	95.82	158.22	231.67	300.13
12.00	DISCHG	391.13	468.87	491.46	440.24	350.70	281.87	240.83	212.69	188.43	162.49
12.75	DISCHG	138.29	119.86	105.51	94.69	86.37	79.29	72.76	66.84	61.92	58.05
13.50	DISCHG	55.20	52.74	50.20	47.51	44.99	42.91	41.31	40.05	38.89	37.64
14.25	DISCHG	36.34	35.19	34.26	33.68	34.66	40.83	53.08	68.23	83.03	95.24
15.00	DISCHG	104.11	106.47	99.45	83.72	65.59	49.66	37.62	29.05	28.17	40.54
15.75	DISCHG	64.19	91.32	115.86	134.76	146.66	146.41	131.67	109.83	88.25	70.48
16.50	DISCHG	56.79	46.63	38.73	32.42	27.60	24.03	21.41	19.51	18.05	16.84
17.25	DISCHG	15.85	15.04	14.41	13.93	13.54	13.22	12.98	12.78	12.64	12.53
18.00	DISCHG	12.44	12.33	12.13	11.86	11.59	11.35	11.16	11.02	10.99	11.09
18.75	DISCHG	11.29	11.49	11.68	11.82	11.92	11.93	11.85	11.72	11.59	11.49
19.50	DISCHG	11.40	11.29	11.13	10.93	10.74	10.58	10.44	10.33	10.18	9.98
20.25	DISCHG	9.76	9.55	9.38	9.25	9.18	9.23	9.39	9.60	9.80	9.97
21.00	DISCHG	10.10	10.15	10.07	9.90	9.69	9.51	9.35	9.13	8.54	7.47
21.75	DISCHG	6.10	4.79	3.71	2.75	2.01	1.48	1.07	0.65	0.28	0.19

RUNOFF VOLUME ABOVE BASEFLOW = 0.78 WATERSHED INCHES, 672.23 CFS-HRS, 55.55 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	689.42	(NULL)
14.99	209.91	(NULL)
16.02	295.27	(NULL)
19.02	24.25	(NULL)
21.00	20.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.77 WATERSHED INCHES, 1184.71 CFS-HRS, 97.90 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	70.59	(RUNOFF)
15.00	18.88	(RUNOFF)
16.02	26.89	(RUNOFF)
21.00	1.69	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 97.21 CFS-HRS, 8.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 59

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	760.00	(NULL)
14.99	228.78	(NULL)
16.02	322.15	(NULL)
19.02	26.22	(NULL)
21.00	22.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.57 WATERSHED INCHES, 1281.92 CFS-HRS, 105.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.18	36.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
19.02	26.22	(DIVERT)
21.00	22.59	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 1.43 WATERSHED INCHES, 356.66 CFS-HRS, 29.47 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	724.00	4.61
14.99	192.78	2.21
16.02	286.15	2.63

RUNOFF VOLUME ABOVE BASEFLOW = 3.71 WATERSHED INCHES, 925.26 CFS-HRS, 76.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	524.52	2.24
14.99	161.14	1.42
16.02	229.27	1.60

RUNOFF VOLUME ABOVE BASEFLOW = 5.77 WATERSHED INCHES, 719.43 CFS-HRS, 59.45 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	199.48	2.24
14.99	31.64	1.42
16.02	56.88	1.60

RUNOFF VOLUME ABOVE BASEFLOW = 1.65 WATERSHED INCHES, 205.83 CFS-HRS, 17.01 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	560.52	2.32
14.99	197.14	1.53
16.02	265.27	1.68
19.02	26.22	0.97
21.00	22.59	0.90

RUNOFF VOLUME ABOVE BASEFLOW = 2.88 WATERSHED INCHES, 1076.09 CFS-HRS, 88.93 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.63	18.00	0.29
14.70	18.00	0.29
15.68	18.00	0.29
20.98	2.79	0.05

RUNOFF VOLUME ABOVE BASEFLOW = 3.03 WATERSHED INCHES, 90.57 CFS-HRS, 7.49 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	(DIVERT)
15.00	10.06	(DIVERT)
16.02	20.02	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 1.57 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	271.79	(NULL)
14.99	41.69	(NULL)
16.02	76.90	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.64 WATERSHED INCHES, 252.74 CFS-HRS, 20.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	578.52	(NULL)
14.99	215.14	(NULL)
16.02	283.27	(NULL)
19.02	29.47	(NULL)
21.00	25.38	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.89 WATERSHED INCHES, 1166.66 CFS-HRS, 96.41 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	271.79	(NULL)
14.99	41.69	(NULL)
16.02	76.90	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.64 WATERSHED INCHES, 252.74 CFS-HRS, 20.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.31	(RUNOFF)
14.92	5.51	(RUNOFF)
15.95	8.18	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.52 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	292.28	(NULL)
14.98	47.19	(NULL)
16.01	84.68	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 279.27 CFS-HRS, 23.08 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	292.28	(NULL)
14.98	47.19	(NULL)
16.01	84.68	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 279.27 CFS-HRS, 23.08 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	455.36	(NULL)
14.97	81.82	(NULL)
15.98	135.40	(NULL)
20.97	2.94	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.43 WATERSHED INCHES, 457.52 CFS-HRS, 37.81 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	25.86	(RUNOFF)
14.92	5.98	(RUNOFF)
15.95	8.87	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 30.77 CFS-HRS, 2.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	480.86	(NULL)
14.97	87.89	(NULL)
15.98	144.14	(NULL)
18.97	3.98	(NULL)
20.97	3.44	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.44 WATERSHED INCHES, 488.30 CFS-HRS, 40.35 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	578.52	(NULL)
14.99	215.14	(NULL)
16.02	283.27	(NULL)
19.02	29.47	(NULL)
21.00	25.38	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.89 WATERSHED INCHES, 1166.66 CFS-HRS, 96.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	44.62	(RUNOFF)
14.92	11.01	(RUNOFF)
15.95	16.35	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 53.04 CFS-HRS, 4.38 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	619.47	(NULL)
14.99	226.10	(NULL)
16.01	298.83	(NULL)
19.01	30.55	(NULL)
20.99	26.32	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.76 WATERSHED INCHES, 1219.71 CFS-HRS, 100.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.04	(RUNOFF)
14.94	5.49	(RUNOFF)
15.95	8.12	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.56 CFS-HRS, 2.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	640.45	(NULL)
14.99	231.63	(NULL)
16.01	304.46	(NULL)
19.01	31.09	(NULL)
20.99	26.78	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.72 SQ.MI.

7.50	DISCHG	0.00	0.00	0.01	0.04	0.07	0.12	0.18	0.25	0.35	0.50
8.25	DISCHG	0.68	0.88	1.10	1.32	1.57	1.83	1.96	2.07	2.20	2.41
9.00	DISCHG	2.70	3.05	3.50	4.06	4.65	5.26	5.86	6.51	7.24	8.12
9.75	DISCHG	9.02	9.87	10.69	11.48	12.38	13.72	15.46	17.09	18.51	19.80
10.50	DISCHG	21.07	22.80	25.65	28.92	31.78	34.18	36.34	38.78	43.35	49.64
11.25	DISCHG	55.65	60.40	64.31	67.88	90.91	189.99	317.44	426.62	524.09	582.24
12.00	DISCHG	630.86	634.20	574.83	503.43	434.78	382.52	346.65	318.61	289.98	257.56
12.75	DISCHG	224.19	197.85	180.62	168.42	157.99	145.53	132.27	122.33	115.86	111.44
13.50	DISCHG	108.15	104.25	98.05	91.86	87.51	84.79	82.93	81.38	79.09	76.01
14.25	DISCHG	73.63	72.10	71.15	70.68	78.06	112.75	157.04	188.29	208.96	223.29
15.00	DISCHG	231.16	213.50	168.89	116.14	79.44	58.04	44.97	40.87	72.51	154.85
15.75	DISCHG	218.33	262.24	285.75	302.51	302.12	267.08	210.98	154.16	118.89	95.91
16.50	DISCHG	79.00	66.75	58.68	52.74	48.49	45.51	43.35	41.71	39.66	37.51
17.25	DISCHG	35.78	34.57	33.74	33.17	32.74	32.41	32.16	31.97	31.83	31.72
18.00	DISCHG	31.61	31.17	30.20	29.22	28.55	28.15	27.88	27.80	28.25	29.18
18.75	DISCHG	29.99	30.50	30.82	31.03	31.03	30.60	29.97	29.50	29.23	29.06
19.50	DISCHG	28.90	28.57	27.93	27.30	26.87	26.62	26.44	26.23	25.70	24.90
20.25	DISCHG	24.22	23.79	23.52	23.35	23.47	24.20	25.17	25.89	26.33	26.62
21.00	DISCHG	26.78	26.50	25.63	24.74	24.14	23.78	23.53	22.70	19.38	13.94
21.75	DISCHG	9.47	6.64	4.95	3.71	2.77	2.05	1.66	1.43	1.06	0.79

RUNOFF VOLUME ABOVE BASEFLOW = 2.70 WATERSHED INCHES, 1246.27 CFS-HRS, 102.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	85.19	(RUNOFF)
15.01	22.79	(RUNOFF)
16.04	32.43	(RUNOFF)
21.02	2.14	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 123.08 CFS-HRS, 10.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	561.11	(NULL)
14.97	110.43	(NULL)
15.99	175.54	(NULL)
19.00	6.47	(NULL)
20.98	5.58	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.67 SQ.MI.

7.50	DISCHG	0.00	0.00	0.01	0.03	0.05	0.07	0.10	0.12	0.15	0.19
8.25	DISCHG	0.23	0.27	0.30	0.33	0.37	0.41	0.47	0.51	0.56	0.63
9.00	DISCHG	0.70	0.78	0.91	1.05	1.19	1.32	1.44	1.57	1.71	1.91
9.75	DISCHG	2.10	2.28	2.44	2.59	2.76	3.06	3.48	3.85	4.16	4.43
10.50	DISCHG	4.68	5.04	5.71	6.49	7.14	7.67	8.11	8.59	9.60	12.86
11.25	DISCHG	16.24	19.02	21.31	23.37	36.41	112.41	231.14	346.63	441.86	508.22
12.00	DISCHG	559.54	538.43	431.43	326.49	249.76	199.76	169.71	148.43	124.63	97.16
12.75	DISCHG	77.10	67.74	61.88	58.12	55.09	51.12	46.56	43.13	40.92	39.53
13.50	DISCHG	38.60	37.41	35.23	32.99	31.43	30.44	29.83	29.37	28.62	27.36
14.25	DISCHG	26.06	25.19	24.63	24.44	28.55	42.65	69.66	89.03	100.26	106.99
15.00	DISCHG	109.49	95.97	67.28	42.36	26.73	15.78	7.88	5.64	23.37	71.12
15.75	DISCHG	113.70	139.49	161.39	175.23	168.51	127.11	80.81	55.73	39.96	30.32
16.50	DISCHG	24.19	19.60	15.55	12.69	10.70	9.34	8.37	7.63	7.35	7.06
17.25	DISCHG	6.82	6.67	6.59	6.55	6.53	6.51	6.51	6.50	6.50	6.50
18.00	DISCHG	6.50	6.41	6.19	5.96	5.81	5.71	5.66	5.65	5.77	6.01
18.75	DISCHG	6.21	6.34	6.42	6.46	6.45	6.34	6.18	6.06	5.99	5.95
19.50	DISCHG	5.92	5.85	5.71	5.57	5.47	5.41	5.38	5.35	5.24	5.06
20.25	DISCHG	4.91	4.82	4.77	4.74	4.77	4.96	5.20	5.37	5.48	5.54
21.00	DISCHG	5.57	5.50	5.28	5.06	4.91	4.83	4.77	4.61	3.85	2.59
21.75	DISCHG	1.59	0.93	0.54	0.31	0.19	0.11	0.07	0.05	0.03	0.02

RUNOFF VOLUME ABOVE BASEFLOW = 1.42 WATERSHED INCHES, 611.38 CFS-HRS, 50.52 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 2 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 73 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 3.12 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 3 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	353.46	(RUNOFF)
15.12	84.74	(RUNOFF)
16.17	118.16	(RUNOFF)
19.18	10.66	(RUNOFF)
21.14	9.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 610.03 CFS-HRS, 50.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	232.97	1.24
15.12	51.52	0.67
16.17	73.75	0.76
19.18	4.73	0.29
21.14	4.00	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.70 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	120.49	1.24
15.12	33.22	0.67
16.17	44.41	0.76
19.18	5.93	0.29
21.14	5.07	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.32 CFS-HRS, 20.52 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.30	119.17	(NULL)
15.22	32.91	(NULL)
16.26	43.91	(NULL)
19.28	5.93	(NULL)
21.24	5.06	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.20 CFS-HRS, 20.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	231.43	(NULL)
15.21	51.13	(NULL)
16.26	73.20	(NULL)
19.27	4.73	(NULL)
21.23	4.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.72 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	338.96	(RUNOFF)
14.99	80.89	(RUNOFF)
16.02	116.07	(RUNOFF)
19.01	8.30	(RUNOFF)
20.99	7.13	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES, 454.81 CFS-HRS, 37.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	(NULL)
15.03	108.27	(NULL)
16.04	148.38	(NULL)
19.07	14.07	(NULL)
21.04	12.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.25 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 83

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	145.61	1.43
15.03	34.99	0.78
16.04	39.86	0.90
19.07	6.41	0.34
21.04	5.57	0.32

RUNOFF VOLUME ABOVE BASEFLOW = 2.37 WATERSHED INCHES, 245.36 CFS-HRS, 20.28 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	278.97	1.43
15.03	73.28	0.78
16.04	108.52	0.90
19.07	7.66	0.34
21.04	6.47	0.32

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES, 457.65 CFS-HRS, 37.82 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 21 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 21

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	277.91	(NULL)
15.11	73.07	(NULL)
16.12	107.99	(NULL)
19.15	7.66	(NULL)
21.12	6.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES, 457.89 CFS-HRS, 37.84 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	145.61	(NULL)
15.03	34.99	(NULL)
16.04	39.86	(NULL)
19.07	6.41	(NULL)
21.04	5.57	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.37 WATERSHED INCHES, 245.36 CFS-HRS, 20.28 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	342.95	(NULL)
15.12	80.74	(NULL)
16.20	108.84	(NULL)
19.15	11.08	(NULL)
21.11	9.50	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES, 607.08 CFS-HRS, 50.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	750.58	(RUNOFF)
14.97	186.51	(RUNOFF)
15.98	267.02	(RUNOFF)
17.90	18.69	(RUNOFF)
18.98	18.62	(RUNOFF)
20.98	16.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 974.63 CFS-HRS, 80.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1056.67	(NULL)
14.97	258.11	(NULL)
16.02	356.13	(NULL)
19.02	29.61	(NULL)
21.00	25.46	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.24 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6.75	DISCHG	0.02	0.04	0.07	0.11	0.18	0.28	0.42	0.58	0.77	0.97
7.50	DISCHG	1.19	1.41	1.47	1.53	1.60	1.71	1.88	2.08	2.34	2.66
8.25	DISCHG	3.07	3.51	3.95	4.43	4.94	5.48	6.06	6.64	7.21	7.76
9.00	DISCHG	8.31	8.91	9.66	10.47	11.23	11.94	12.61	13.29	14.09	15.07
9.75	DISCHG	16.06	16.97	17.80	18.59	19.53	21.00	22.91	24.76	26.35	27.76
10.50	DISCHG	29.12	31.08	34.21	37.82	40.93	43.48	45.76	48.34	53.14	60.59
11.25	DISCHG	68.37	75.04	80.68	85.72	115.85	228.52	401.61	593.34	758.36	900.38
12.00	DISCHG	1019.46	1051.29	941.31	776.41	640.92	551.01	485.55	431.93	377.03	318.32
12.75	DISCHG	273.92	241.70	217.46	199.92	185.31	169.90	154.40	142.03	133.38	127.15
13.50	DISCHG	122.35	117.34	110.63	103.92	98.71	95.25	92.71	90.52	87.77	84.39
14.25	DISCHG	81.37	79.22	77.76	76.87	85.08	117.68	162.56	201.20	227.44	246.34
15.00	DISCHG	258.01	241.58	192.47	140.65	102.91	77.12	57.39	48.95	80.05	156.52
15.75	DISCHG	232.56	287.37	322.35	347.91	352.76	313.40	249.29	190.46	151.20	123.35
16.50	DISCHG	101.60	83.95	70.09	60.07	53.08	48.04	44.43	41.82	39.56	37.32
17.25	DISCHG	35.45	34.09	33.12	32.39	31.82	31.39	31.05	30.79	30.59	30.45
18.00	DISCHG	30.31	29.90	29.09	28.23	27.59	27.17	26.88	26.75	27.07	27.80
18.75	DISCHG	28.50	28.99	29.31	29.54	29.59	29.27	28.77	28.35	28.08	27.90
19.50	DISCHG	27.73	27.41	26.86	26.29	25.87	25.60	25.40	25.17	24.70	24.02
20.25	DISCHG	23.40	22.96	22.69	22.49	22.56	23.12	23.90	24.55	24.97	25.27
21.00	DISCHG	25.46	25.26	24.59	23.85	23.30	22.94	22.66	21.87	19.07	14.56
21.75	DISCHG	10.46	7.65	5.75	4.46	3.37	2.50	1.84	1.55	1.30	0.97

RUNOFF VOLUME ABOVE BASEFLOW = 1.97 WATERSHED INCHES, 1581.71 CFS-HRS, 130.71 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1056.67	(NULL)
14.99	258.11	(NULL)
16.02	356.13	(NULL)
19.02	29.61	(NULL)
21.00	25.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.97 WATERSHED INCHES, 1581.71 CFS-HRS, 130.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	68.09	(RUNOFF)
14.97	16.83	(RUNOFF)
15.97	24.17	(RUNOFF)
20.96	1.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.92 WATERSHED INCHES, 86.59 CFS-HRS, 7.16 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1123.74	(NULL)
14.99	274.83	(NULL)
16.02	380.09	(NULL)
19.02	31.26	(NULL)
21.00	26.88	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.97 WATERSHED INCHES, 1668.30 CFS-HRS, 137.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	10.62	(RUNOFF)
14.91	2.45	(RUNOFF)
15.94	3.65	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 12.34 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 31

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1132.71	(NULL)
14.99	277.25	(NULL)
16.02	383.39	(NULL)
19.02	31.50	(NULL)
20.99	27.08	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.97 WATERSHED INCHES, 1680.64 CFS-HRS, 138.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	119.26	(RUNOFF)
15.12	30.69	(RUNOFF)
16.17	42.83	(RUNOFF)
21.14	3.32	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 208.31 CFS-HRS, 17.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.17	395.23	(NULL)
15.11	104.19	(NULL)
16.13	150.30	(NULL)
19.15	11.55	(NULL)
21.13	9.78	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.09 WATERSHED INCHES, 666.20 CFS-HRS, 55.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(RUNOFF)
14.99	6.71	(RUNOFF)
16.02	9.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	419.09	(NULL)
15.10	109.42	(NULL)
16.12	158.85	(NULL)
19.15	12.24	(NULL)
21.12	10.37	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.53 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.15	0.32	0.50	0.69	0.88	1.08	1.30
8.25	DISCHG	1.55	1.78	2.00	2.21	2.39	2.56	2.74	2.93	3.13	3.32
9.00	DISCHG	3.51	3.70	3.91	4.15	4.43	4.73	5.03	5.32	5.61	5.94
9.75	DISCHG	6.31	6.70	7.08	7.47	7.85	8.28	8.84	9.55	10.31	11.05
10.50	DISCHG	11.73	12.42	13.23	14.31	15.61	17.05	18.42	19.70	21.12	23.14
11.25	DISCHG	26.08	29.44	32.63	35.46	39.45	52.88	89.51	158.93	226.22	291.47
12.00	DISCHG	349.18	396.30	418.88	404.06	362.68	315.67	274.92	242.25	214.66	190.17
12.75	DISCHG	166.58	140.79	120.85	107.55	97.13	88.62	81.05	74.15	68.26	63.58
13.50	DISCHG	60.04	57.18	54.44	51.48	48.52	46.04	44.05	42.48	41.19	39.95
14.25	DISCHG	38.63	37.37	36.29	35.56	35.58	38.54	47.62	62.56	78.58	92.35
15.00	DISCHG	102.86	109.01	107.78	95.58	77.74	59.73	45.57	35.12	28.94	33.46
15.75	DISCHG	52.21	79.91	106.81	131.08	150.00	158.85	149.57	126.41	103.22	83.31
16.50	DISCHG	67.09	54.33	44.62	37.28	31.49	27.05	23.83	21.45	19.58	18.03
17.25	DISCHG	16.85	15.89	15.13	14.54	14.07	13.71	13.42	13.20	13.03	12.90
18.00	DISCHG	12.81	12.72	12.58	12.36	12.08	11.81	11.59	11.42	11.31	11.32
18.75	DISCHG	11.46	11.66	11.86	12.03	12.16	12.24	12.22	12.11	11.98	11.86
19.50	DISCHG	11.76	11.65	11.52	11.34	11.14	10.96	10.80	10.67	10.54	10.37
20.25	DISCHG	10.14	9.91	9.70	9.54	9.42	9.38	9.47	9.66	9.88	10.07
21.00	DISCHG	10.24	10.35	10.36	10.24	10.05	9.84	9.66	9.47	9.11	8.32
21.75	DISCHG	7.08	5.73	4.52	3.52	2.54	1.85	1.34	0.98	0.55	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	251.82	(RUNOFF)
14.91	54.74	(RUNOFF)
15.94	82.06	(RUNOFF)
18.94	5.29	(RUNOFF)
20.90	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.17 WATERSHED INCHES, 293.53 CFS-HRS, 24.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	1.12
14.91	42.15	0.59
15.94	54.86	0.70
18.94	5.29	0.13
20.90	4.54	0.11

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	1.12
14.91	12.59	0.59
15.94	27.20	0.70

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	(NULL)
14.91	42.15	(NULL)
15.94	54.86	(NULL)
18.94	5.29	(NULL)
20.90	4.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	57.96	(RUNOFF)
12.42	11.51	(RUNOFF)
12.94	6.07	(RUNOFF)
14.89	12.58	(RUNOFF)
15.94	19.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.99 WATERSHED INCHES, 64.34 CFS-HRS, 5.32 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.93	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	206.27	(NULL)
14.91	61.94	(NULL)
15.94	84.68	(NULL)
16.91	8.19	(NULL)
17.89	7.18	(NULL)
18.94	7.22	(NULL)
20.90	6.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.66 WATERSHED INCHES, 317.26 CFS-HRS, 26.22 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	119.10	1.07
14.91	34.05	0.52
15.94	48.12	0.63
18.94	4.20	0.11
20.90	3.61	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.40 CFS-HRS, 14.91 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	87.17	1.07
14.91	27.89	0.52
15.94	36.55	0.63
20.90	2.59	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.29 WATERSHED INCHES, 136.86 CFS-HRS, 11.31 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	117.82	(NULL)
14.99	33.98	(NULL)
16.02	47.85	(NULL)
19.01	4.20	(NULL)
20.98	3.61	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.56 CFS-HRS, 14.92 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	(NULL)
14.91	12.59	(NULL)
15.94	27.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.95	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	164.22	(NULL)
14.92	19.81	(NULL)
15.94	37.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 114.46 CFS-HRS, 9.46 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	84.46	(NULL)
15.02	27.70	(NULL)
16.02	36.00	(NULL)
21.00	2.58	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.12 CFS-HRS, 11.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	141.22	(RUNOFF)
14.97	35.18	(RUNOFF)
15.99	50.07	(RUNOFF)
20.98	3.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 184.64 CFS-HRS, 15.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.11	541.13	(NULL)
15.05	140.75	(NULL)
16.09	201.81	(NULL)
19.09	15.71	(NULL)
21.07	13.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.04 WATERSHED INCHES, 887.65 CFS-HRS, 73.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	251.35	1301.54

RUNOFF VOLUME ABOVE BASEFLOW = 0.21 WATERSHED INCHES, 91.69 CFS-HRS, 7.58 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	881.37	1301.54
14.99	277.25	1300.82
16.02	383.39	1301.05
19.02	31.50	1299.98
20.99	27.08	1299.84

RUNOFF VOLUME ABOVE BASEFLOW = 3.72 WATERSHED INCHES, 1588.95 CFS-HRS, 131.31 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	247.34	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.66 SQ.MI.

11.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.88	111.79
12.00	DISCHG	175.66	229.38	245.59	199.98	127.08	64.50	21.93	2.63	0.32	0.04
12.75	DISCHG	0.00									

RUNOFF VOLUME ABOVE BASEFLOW = 0.21 WATERSHED INCHES, 91.45 CFS-HRS, 7.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	787.23	(NULL)
15.05	140.75	(NULL)
16.09	201.81	(NULL)
19.09	15.71	(NULL)
21.07	13.35	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.34 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.15	0.32	0.52	0.73	0.95	1.18	1.45
8.25	DISCHG	1.73	2.03	2.30	2.56	2.80	3.02	3.26	3.52	3.78	4.03
9.00	DISCHG	4.27	4.53	4.82	5.16	5.52	5.90	6.28	6.64	7.03	7.47
9.75	DISCHG	7.96	8.45	8.93	9.41	9.90	10.51	11.33	12.28	13.23	14.12
10.50	DISCHG	14.95	15.87	17.09	18.64	20.35	22.10	23.73	25.30	27.36	30.46
11.25	DISCHG	34.51	38.75	42.58	46.09	54.85	85.44	150.08	247.73	378.88	530.94
12.00	DISCHG	664.76	764.94	780.52	689.19	551.53	429.07	338.70	282.57	248.46	218.44
12.75	DISCHG	190.25	161.54	140.04	125.92	114.89	105.31	96.39	88.40	81.89	76.89
13.50	DISCHG	73.16	69.96	66.53	62.82	59.31	56.54	54.39	52.70	51.18	49.55
14.25	DISCHG	47.87	46.39	45.20	44.46	45.81	54.03	70.30	91.20	110.81	126.59
15.00	DISCHG	137.77	140.17	130.19	108.98	85.00	63.75	47.80	37.27	36.57	53.45
15.75	DISCHG	85.39	122.16	154.05	181.07	198.83	199.23	177.37	143.89	114.67	91.46
16.50	DISCHG	73.38	59.58	49.31	41.65	35.68	31.14	27.87	25.47	23.53	21.86
17.25	DISCHG	20.56	19.52	18.72	18.11	17.63	17.26	16.97	16.75	16.58	16.45
18.00	DISCHG	16.35	16.21	15.96	15.60	15.24	14.92	14.67	14.50	14.46	14.60
18.75	DISCHG	14.86	15.13	15.37	15.56	15.69	15.70	15.59	15.41	15.24	15.10
19.50	DISCHG	14.98	14.84	14.63	14.37	14.11	13.90	13.73	13.58	13.39	13.12
20.25	DISCHG	12.81	12.52	12.29	12.11	12.02	12.08	12.30	12.60	12.87	13.10
21.00	DISCHG	13.28	13.35	13.24	13.00	12.71	12.46	12.25	11.95	11.17	9.71
21.75	DISCHG	7.88	6.17	4.76	3.65	2.61	1.88	1.36	0.99	0.55	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 1.13 WATERSHED INCHES, 979.11 CFS-HRS, 80.91 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	881.37	(NULL)
14.99	277.25	(NULL)
16.02	383.39	(NULL)
19.02	31.50	(NULL)
20.99	27.08	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.72 WATERSHED INCHES, 1588.95 CFS-HRS, 131.31 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.48	(RUNOFF)
15.00	24.97	(RUNOFF)
16.02	35.54	(RUNOFF)
21.00	2.22	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 135.62 CFS-HRS, 11.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 59

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	980.85	(NULL)
14.99	302.20	(NULL)
16.02	418.93	(NULL)
19.02	34.08	(NULL)
20.99	29.30	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.46 WATERSHED INCHES, 1724.57 CFS-HRS, 142.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
10.65	36.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
19.02	34.08	(DIVERT)
20.99	29.30	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 1.67 WATERSHED INCHES, 417.24 CFS-HRS, 34.48 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	944.85	5.61
14.99	266.20	2.54
16.02	382.93	3.07

RUNOFF VOLUME ABOVE BASEFLOW = 5.24 WATERSHED INCHES, 1307.34 CFS-HRS, 108.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	673.44	2.57
14.99	215.82	1.57
16.02	294.53	1.74

RUNOFF VOLUME ABOVE BASEFLOW = 8.05 WATERSHED INCHES, 1003.35 CFS-HRS, 82.92 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	271.40	2.57
14.99	50.38	1.57
16.02	88.40	1.74

RUNOFF VOLUME ABOVE BASEFLOW = 2.44 WATERSHED INCHES, 303.99 CFS-HRS, 25.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	709.44	2.65
14.99	251.82	1.65
16.02	330.53	1.82
19.02	34.08	1.02
20.99	29.30	1.00

RUNOFF VOLUME ABOVE BASEFLOW = 3.80 WATERSHED INCHES, 1420.59 CFS-HRS, 117.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.63	18.00	0.29
14.70	18.00	0.29
13.68	18.00	0.29
19.01	4.20	0.08
20.78	3.61	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 3.64 WATERSHED INCHES, 108.62 CFS-HRS, 8.98 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	(DIVERT)
14.99	15.98	(DIVERT)
16.02	29.85	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 2.41 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	371.20	(NULL)
14.99	66.36	(NULL)
16.02	118.25	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.43 WATERSHED INCHES, 375.92 CFS-HRS, 31.07 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	727.44	(NULL)
14.99	269.82	(NULL)
16.02	348.53	(NULL)
19.02	38.28	(NULL)
20.99	32.91	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.79 WATERSHED INCHES, 1529.21 CFS-HRS, 126.37 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	371.20	(NULL)
14.99	66.36	(NULL)
16.02	118.25	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.43 WATERSHED INCHES, 375.92 CFS-HRS, 31.07 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	31.12	(RUNOFF)
14.92	7.28	(RUNOFF)
15.95	10.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.00 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	399.86	(NULL)
14.99	73.60	(NULL)
16.01	128.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.38 WATERSHED INCHES, 412.93 CFS-HRS, 34.12 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	399.86	(NULL)
14.99	73.60	(NULL)
16.01	128.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.38 WATERSHED INCHES, 412.93 CFS-HRS, 34.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	630.11	(NULL)
14.97	121.77	(NULL)
15.98	196.88	(NULL)
18.97	4.42	(NULL)
20.97	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES, 664.51 CFS-HRS, 54.91 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	34.96	(RUNOFF)
14.92	7.76	(RUNOFF)
15.94	11.50	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.16 WATERSHED INCHES, 41.86 CFS-HRS, 3.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	664.68	(NULL)
14.97	129.62	(NULL)
15.98	208.23	(NULL)
18.97	5.17	(NULL)
20.96	4.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.08 WATERSHED INCHES, 706.36 CFS-HRS, 58.37 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	727.44	(NULL)
14.99	269.82	(NULL)
16.02	348.53	(NULL)
19.02	38.28	(NULL)
20.99	32.91	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.79 WATERSHED INCHES, 1529.21 CFS-HRS. 126.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	62.23	(RUNOFF)
14.92	14.56	(RUNOFF)
15.95	21.60	(RUNOFF)
20.92	1.23	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 74.01 CFS-HRS, 6.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	784.86	(NULL)
14.99	284.30	(NULL)
16.01	366.55	(NULL)
19.01	39.70	(NULL)
20.99	34.13	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.62 WATERSHED INCHES, 1603.22 CFS-HRS, 132.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	30.78	(RUNOFF)
14.94	7.26	(RUNOFF)
15.95	10.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.06 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	811.49	(NULL)
14.98	291.61	(NULL)
16.01	376.80	(NULL)
19.01	40.37	(NULL)
20.99	34.75	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.72 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
6.75	DISCHG	0.07	0.11	0.17	0.24	0.34	0.47	0.65	0.86	1.09	1.33
7.50	DISCHG	1.59	1.86	1.97	2.06	2.17	2.37	2.62	2.94	3.32	3.84
8.25	DISCHG	4.45	5.06	5.67	6.31	6.97	7.71	8.52	9.30	10.05	10.78
9.00	DISCHG	11.49	12.30	13.37	14.53	15.58	16.53	17.42	18.32	19.41	20.83
9.75	DISCHG	22.23	23.47	24.57	25.61	26.87	29.03	31.96	34.60	36.74	38.59
10.50	DISCHG	40.36	43.01	46.93	51.20	54.60	57.24	59.52	62.12	67.54	76.97
11.25	DISCHG	86.59	94.58	101.01	106.75	144.87	283.73	445.16	578.86	668.86	743.98
12.00	DISCHG	804.56	802.76	716.54	615.26	539.63	491.68	451.10	410.19	365.98	318.37
12.75	DISCHG	283.03	258.12	237.48	221.26	207.44	191.81	175.08	161.76	153.01	147.07
13.50	DISCHG	142.62	137.44	129.24	121.12	115.39	111.82	109.37	107.28	104.21	99.95
14.25	DISCHG	96.37	94.04	92.56	91.79	102.80	148.92	201.30	242.63	267.91	282.87
15.00	DISCHG	291.02	271.43	216.82	151.47	103.50	73.90	55.04	49.66	94.24	198.47
15.75	DISCHG	279.02	325.55	354.67	374.86	373.12	327.73	266.05	200.98	154.41	124.33
16.50	DISCHG	102.62	85.89	73.14	65.12	59.75	55.94	53.21	51.22	49.30	47.19
17.25	DISCHG	45.49	44.33	43.55	42.98	42.55	42.19	41.85	41.59	41.40	41.25
18.00	DISCHG	41.10	40.53	39.24	37.96	37.09	36.56	36.21	36.10	36.69	37.92
18.75	DISCHG	38.98	39.65	40.06	40.33	40.33	39.75	38.92	38.31	37.95	37.72
19.50	DISCHG	37.51	37.08	36.24	35.41	34.85	34.52	34.29	34.01	33.33	32.28
20.25	DISCHG	31.42	30.87	30.52	30.31	30.46	31.42	32.68	33.61	34.18	34.54
21.00	DISCHG	34.74	34.37	33.22	32.07	31.30	30.84	30.51	29.44	25.13	18.01
21.75	DISCHG	12.18	8.50	6.17	4.68	3.49	2.57	1.87	1.57	1.32	0.98

RUNOFF VOLUME ABOVE BASEFLOW = 3.55 WATERSHED INCHES, 1640.27 CFS-HRS, 135.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	120.33	(RUNOFF)
15.01	30.16	(RUNOFF)
16.04	42.87	(RUNOFF)
21.02	2.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 171.77 CFS-HRS, 14.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	778.71	(NULL)
14.98	159.49	(NULL)
15.99	249.66	(NULL)
19.00	8.43	(NULL)
20.98	7.25	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.67 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
6.75	DISCHG	0.05	0.07	0.10	0.12	0.15	0.18	0.23	0.27	0.31	0.35
7.50	DISCHG	0.39	0.43	0.47	0.51	0.55	0.60	0.67	0.74	0.85	0.99
8.25	DISCHG	1.14	1.28	1.41	1.54	1.66	1.81	1.98	2.14	2.29	2.43
9.00	DISCHG	2.57	2.73	2.96	3.23	3.45	3.65	3.83	4.01	4.24	4.56
9.75	DISCHG	4.87	5.13	5.36	5.57	5.83	6.33	7.04	7.64	8.12	8.50
10.50	DISCHG	8.85	9.39	11.32	13.69	15.65	17.20	18.50	19.95	23.01	28.40
11.25	DISCHG	33.13	36.41	38.96	41.18	66.54	189.37	379.81	528.24	633.35	716.51
12.00	DISCHG	777.91	741.60	587.00	442.63	347.19	290.64	253.93	223.71	187.08	145.80
12.75	DISCHG	116.21	95.73	84.90	79.64	75.55	69.23	62.08	57.48	54.53	52.69
13.50	DISCHG	51.44	49.85	46.93	43.93	41.82	40.51	39.70	39.08	38.06	36.48
14.25	DISCHG	35.13	34.24	33.69	33.53	37.78	61.77	99.43	123.65	139.89	152.41
15.00	DISCHG	157.87	132.31	91.04	54.59	34.40	22.00	12.78	9.95	36.54	102.04
15.75	DISCHG	160.34	205.42	232.60	249.41	239.83	180.38	113.84	72.05	51.65	39.27
16.50	DISCHG	31.46	26.17	22.64	19.20	16.67	14.92	13.68	12.78	11.87	10.84
17.25	DISCHG	10.00	9.42	9.05	8.79	8.61	8.50	8.49	8.49	8.48	8.48
18.00	DISCHG	8.47	8.36	8.06	7.76	7.56	7.44	7.38	7.37	7.53	7.84
18.75	DISCHG	8.10	8.27	8.37	8.42	8.41	8.26	8.04	7.89	7.80	7.74
19.50	DISCHG	7.71	7.62	7.43	7.24	7.12	7.05	7.01	6.96	6.82	6.58
20.25	DISCHG	6.37	6.27	6.20	6.16	6.21	6.46	6.77	7.00	7.14	7.22
21.00	DISCHG	7.25	7.15	6.86	6.57	6.39	6.27	6.20	5.99	5.00	3.32
21.75	DISCHG	2.02	1.18	0.68	0.40	0.24	0.15	0.10	0.06	0.04	0.02

RUNOFF VOLUME ABOVE BASEFLOW = 2.04 WATERSHED INCHES, 878.13 CFS-HRS, 72.57 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 3 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 73 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 4.04 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 4 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	506.65	(RUNOFF)
15.12	114.87	(RUNOFF)
16.17	160.07	(RUNOFF)
19.18	14.36	(RUNOFF)
21.14	12.21	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.07 WATERSHED INCHES, 871.28 CFS-HRS, 72.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	336.11	1.54
15.12	71.59	0.75
16.17	102.27	0.85
19.18	6.68	0.32
21.14	5.52	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.90 CFS-HRS, 43.71 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	170.55	1.54
15.12	43.28	0.75
16.17	57.80	0.85
19.18	7.68	0.32
21.14	6.69	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.39 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 MT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	169.38	(NULL)
15.21	42.99	(NULL)
16.26	57.42	(NULL)
19.27	7.67	(NULL)
21.23	6.68	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.31 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	335.07	(NULL)
15.20	71.35	(NULL)
16.25	101.89	(NULL)
19.26	6.68	(NULL)
21.23	5.51	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.85 CFS-HRS, 43.70 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	487.37	(RUNOFF)
14.99	110.26	(RUNOFF)
16.02	158.12	(RUNOFF)
19.01	11.23	(RUNOFF)
20.99	9.64	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.98 WATERSHED INCHES, 654.93 CFS-HRS, 54.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	(NULL)
15.03	145.49	(NULL)
16.04	201.05	(NULL)
19.06	18.74	(NULL)
21.04	16.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 997.24 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 83

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	217.53	1.79
15.03	39.61	0.89
16.04	59.63	1.00
19.06	8.34	0.39
21.04	7.27	0.36

RUNOFF VOLUME ABOVE BASEFLOW = 3.34 WATERSHED INCHES, 345.28 CFS-HRS, 28.53 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	394.05	1.79
15.03	105.87	0.89
16.04	141.41	1.00
19.06	10.40	0.39
21.04	8.87	0.36

RUNOFF VOLUME ABOVE BASEFLOW = 3.11 WATERSHED INCHES, 651.95 CFS-HRS, 53.88 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 21 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 21

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	393.96	(NULL)
15.10	105.85	(NULL)
16.12	141.38	(NULL)
19.13	10.39	(NULL)
21.11	8.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.11 WATERSHED INCHES, 651.69 CFS-HRS, 53.86 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	217.53	(NULL)
15.03	39.61	(NULL)
16.04	59.63	(NULL)
19.06	8.34	(NULL)
21.04	7.27	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.34 WATERSHED INCHES, 345.28 CFS-HRS, 28.53 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.18	508.22	(NULL)
15.15	107.84	(NULL)
16.15	145.99	(NULL)
19.15	14.93	(NULL)
21.11	12.67	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.98 WATERSHED INCHES, 874.13 CFS-HRS, 72.24 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	1100.77	(RUNOFF)
14.97	257.44	(RUNOFF)
15.98	368.43	(RUNOFF)
17.89	25.63	(RUNOFF)
18.98	25.51	(RUNOFF)
20.97	21.96	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 1427.77 CFS-HRS, 117.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1556.24	(NULL)
14.99	350.11	(NULL)
16.02	497.45	(NULL)
19.02	40.30	(NULL)
21.00	34.48	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.24 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.11	0.20	0.34
6.00	DISCHG	0.52	0.72	0.95	1.19	1.43	1.48	1.54	1.62	1.75	1.93
6.75	DISCHG	2.16	2.41	2.73	3.08	3.45	3.89	4.43	5.05	5.66	6.26
7.50	DISCHG	6.86	7.45	8.02	8.58	9.13	9.66	10.15	10.66	11.32	12.19
8.25	DISCHG	13.11	13.96	14.75	15.50	16.25	17.11	18.03	18.93	19.75	20.51
9.00	DISCHG	21.26	22.15	23.37	24.72	25.97	27.07	28.07	29.08	30.35	31.98
9.75	DISCHG	33.62	35.06	36.34	37.53	38.96	41.36	44.56	47.57	50.01	52.10
10.50	DISCHG	54.07	57.03	62.04	67.79	72.87	76.98	80.52	84.57	92.47	104.94
11.25	DISCHG	117.57	127.89	136.09	143.13	190.17	364.50	648.07	932.79	1166.51	1359.00
12.00	DISCHG	1514.12	1543.89	1573.50	1127.79	926.31	791.74	694.01	614.95	535.65	450.95
12.75	DISCHG	379.74	329.41	299.02	276.33	256.92	235.18	213.67	196.53	184.52	175.85
13.50	DISCHG	169.15	161.98	152.45	142.96	135.75	130.87	127.37	124.41	120.69	116.11

14.25	DISCH6	112.02	109.11	107.16	105.95	117.18	161.55	223.58	277.44	311.94	335.73
15.00	DISCH6	349.84	326.79	262.35	192.52	139.85	104.71	77.94	65.66	109.05	214.62
15.75	DISCH6	320.79	389.97	443.82	484.51	492.68	433.98	336.66	258.53	205.81	166.31
16.50	DISCH6	136.67	113.37	94.87	80.85	71.26	64.62	59.87	56.31	53.11	50.13
17.25	DISCH6	47.76	46.05	44.83	43.93	43.23	42.69	42.27	41.95	41.70	41.50
18.00	DISCH6	41.32	40.76	39.64	38.46	37.57	36.98	36.56	36.37	36.80	37.79
18.75	DISCH6	38.76	39.43	39.88	40.21	40.27	39.84	39.16	38.58	38.20	37.93
19.50	DISCH6	37.69	37.25	36.49	35.70	35.12	34.73	34.46	34.14	33.48	32.54
20.25	DISCH6	31.69	31.10	30.69	30.42	30.50	31.25	32.32	33.21	33.80	34.22
21.00	DISCH6	34.48	34.22	33.30	32.28	31.52	31.02	30.63	29.54	25.71	19.61
21.75	DISCH6	14.09	10.24	7.62	5.70	4.40	3.27	2.39	1.76	1.51	1.26

RUNOFF VOLUME ABOVE BASEFLOW = 2.87 WATERSHED INCHES, 2301.90 CFS-HRS, 190.23 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1556.24	(NULL)
14.99	350.11	(NULL)
16.02	497.45	(NULL)
19.02	40.30	(NULL)
21.00	34.48	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.87 WATERSHED INCHES, 2301.90 CFS-HRS, 190.23 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	99.70	(RUNOFF)
14.97	23.22	(RUNOFF)
15.97	33.35	(RUNOFF)
20.96	1.95	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.81 WATERSHED INCHES, 126.83 CFS-HRS, 10.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDMYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1654.35	(NULL)
14.99	373.21	(NULL)
16.02	530.44	(NULL)
19.02	42.57	(NULL)
21.00	36.43	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.86 WATERSHED INCHES, 2428.73 CFS-HRS, 200.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.41	(RUNOFF)
14.90	3.37	(RUNOFF)
15.94	5.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 18.09 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 31

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1667.51	(NULL)
14.99	376.56	(NULL)
16.02	534.98	(NULL)
19.02	42.89	(NULL)
21.00	36.71	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.86 WATERSHED INCHES, 2446.82 CFS-HRS, 202.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	176.88	(RUNOFF)
15.12	42.40	(RUNOFF)
16.17	59.12	(RUNOFF)
19.18	5.33	(RUNOFF)
21.14	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 305.27 CFS-HRS, 25.23 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	568.03	(NULL)
15.11	148.10	(NULL)
16.13	199.77	(NULL)
19.15	15.73	(NULL)
21.12	13.41	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.00 WATERSHED INCHES, 956.95 CFS-HRS, 79.08 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(RUNOFF)
14.99	9.27	(RUNOFF)
16.02	13.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 53.95 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	603.38	(NULL)
15.10	156.10	(NULL)
16.12	211.56	(NULL)
19.14	16.67	(NULL)
21.11	14.22	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.53 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.39	0.58	0.79
6.75	DISCHG	1.00	1.22	1.44	1.62	1.77	1.94	2.15	2.39	2.60	2.81
7.50	DISCHG	3.02	3.22	3.42	3.61	3.79	3.98	4.16	4.35	4.56	4.82
8.25	DISCHG	5.14	5.49	5.85	6.19	6.51	6.84	7.20	7.59	7.98	8.36
9.00	DISCHG	8.72	9.07	9.47	9.94	10.48	11.02	11.53	12.01	12.48	13.00
9.75	DISCHG	13.60	14.24	14.86	15.42	15.97	16.66	17.66	18.99	20.38	21.66
10.50	DISCHG	22.82	23.96	25.40	27.40	29.81	32.11	34.10	35.89	37.88	40.89
11.25	DISCHG	43.33	50.60	55.59	60.08	66.40	88.42	150.59	242.33	341.05	434.29
12.00	DISCHG	513.89	577.10	603.38	575.45	511.20	441.19	381.43	333.75	293.54	258.03
12.75	DISCHG	225.25	196.74	173.97	151.96	135.30	122.31	111.96	102.28	94.03	87.51
13.50	DISCHG	82.61	78.65	74.98	71.02	67.06	63.61	60.92	58.74	56.91	55.11
14.25	DISCHG	53.17	51.33	49.78	48.70	48.72	53.06	66.72	87.71	109.29	129.65
15.00	DISCHG	145.88	155.54	153.21	131.94	104.99	80.48	60.66	46.08	38.60	45.68
15.75	DISCHG	73.39	111.66	155.27	182.92	202.50	211.55	201.15	176.57	141.19	112.07
16.50	DISCHG	90.79	73.24	59.37	49.20	42.03	36.49	32.29	29.14	26.77	24.89
17.25	DISCHG	23.33	21.93	20.80	19.92	19.23	18.69	18.26	17.93	17.68	17.51
18.00	DISCHG	17.38	17.26	17.08	16.77	16.40	16.05	15.76	15.53	15.40	15.44
18.75	DISCHG	15.65	15.93	16.19	16.42	16.59	16.67	16.63	16.48	16.29	16.13
19.50	DISCHG	15.99	15.85	15.67	15.43	15.17	14.92	14.72	14.56	14.39	14.16
20.25	DISCHG	13.85	13.54	13.28	13.07	12.92	12.88	13.02	13.29	13.59	13.85
21.00	DISCHG	14.06	14.21	14.20	14.02	13.74	13.46	13.22	12.97	12.49	11.39
21.75	DISCHG	9.61	7.69	6.05	4.70	3.57	2.51	1.79	1.30	0.95	0.52

RUNOFF VOLUME ABOVE BASEFLOW = 2.98 WATERSHED INCHES, 1010.90 CFS-HRS, 83.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.15	(RUNOFF)
14.91	74.12	(RUNOFF)
15.94	111.03	(RUNOFF)
16.91	8.10	(RUNOFF)
17.89	7.09	(RUNOFF)
18.94	7.10	(RUNOFF)
20.90	6.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES, 419.11 CFS-HRS, 34.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	1.32
14.91	51.17	0.67
15.94	66.82	0.79
16.91	8.10	0.20
17.89	7.09	0.18
18.94	7.10	0.18
20.90	6.11	0.15

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES, 290.27 CFS-HRS, 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	1.32
14.91	22.95	0.67
15.94	44.21	0.79

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	(NULL)
14.91	51.17	(NULL)
15.94	66.82	(NULL)
16.91	8.10	(NULL)
17.89	7.09	(NULL)
18.94	7.10	(NULL)
20.90	6.11	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES, 290.27 CFS-HRS, 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(82.70) AT XSECTION 40 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 5 %.

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.96	82.70	(RUNOFF)
12.42	16.07	(RUNOFF)
12.94	8.42	(RUNOFF)
13.40	6.13	(RUNOFF)
14.89	17.24	(RUNOFF)
15.93	25.09	(RUNOFF)
21.41	1.22	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.05 SQ.MI.

6.00	DISCHG	0.00	0.00	0.01	0.02	0.04	0.05	0.07	0.08	0.10	0.11
6.75	DISCHG	0.13	0.14	0.16	0.17	0.20	0.24	0.26	0.28	0.30	0.32
7.50	DISCHG	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.56	0.60
8.25	DISCHG	0.63	0.66	0.68	0.70	0.74	0.80	0.83	0.86	0.88	0.91
9.00	DISCHG	0.94	1.03	1.11	1.15	1.19	1.22	1.25	1.29	1.43	1.50
9.75	DISCHG	1.54	1.57	1.61	1.64	1.83	2.11	2.22	2.29	2.34	2.39
10.50	DISCHG	2.45	2.97	3.35	3.49	3.58	3.66	3.74	4.09	5.48	6.07
11.25	DISCHG	6.35	6.50	6.65	6.85	24.20	52.93	64.41	70.45	74.59	77.74
12.00	DISCHG	78.68	43.81	21.76	17.02	16.05	15.90	15.96	14.91	10.22	8.69
12.75	DISCHG	8.37	8.31	8.31	8.33	7.52	6.43	6.17	6.12	6.12	6.12
13.50	DISCHG	6.08	5.33	4.90	4.80	4.79	4.79	4.79	4.68	4.28	4.15
14.25	DISCHG	4.13	4.12	4.12	4.15	9.08	15.21	16.67	17.02	17.13	17.18
15.00	DISCHG	16.54	6.67	1.41	0.29	0.05	0.00	0.00	3.99	18.76	23.53
15.75	DISCHG	24.65	24.96	25.08	25.07	15.69	5.03	2.54	1.99	1.88	1.87
16.50	DISCHG	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.83	1.69	1.65
17.25	DISCHG	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.65
18.00	DISCHG	1.63	1.49	1.43	1.41	1.41	1.41	1.41	1.46	1.60	1.64
18.75	DISCHG	1.65	1.65	1.65	1.65	1.57	1.50	1.49	1.49	1.49	1.49
19.50	DISCHG	1.48	1.39	1.35	1.35	1.35	1.35	1.35	1.31	1.21	1.19
20.25	DISCHG	1.18	1.18	1.18	1.18	1.29	1.39	1.41	1.42	1.42	1.42
21.00	DISCHG	1.40	1.26	1.20	1.19	1.18	1.18	1.18	0.87	0.22	0.05
21.75	DISCHG	0.01	0.00								

RUNOFF VOLUME ABOVE BASEFLOW = 2.90 WATERSHED INCHES, 93.44 CFS-HRS, 7.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	236.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	236.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.95	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	280.55	(NULL)
14.91	78.35	(NULL)
15.94	107.75	(NULL)
16.91	11.09	(NULL)
17.89	9.71	(NULL)
18.94	9.75	(NULL)
20.90	8.37	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.67 WATERSHED INCHES, 437.82 CFS-HRS, 36.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	161.59	1.27
14.91	44.21	0.60
15.94	62.40	0.74
18.94	5.68	0.14
20.90	4.87	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 4.18 WATERSHED INCHES, 249.58 CFS-HRS, 20.63 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	118.96	1.27
14.91	34.14	0.60
15.94	45.35	0.74
18.94	4.07	0.14
20.90	3.49	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 3.15 WATERSHED INCHES, 188.23 CFS-HRS, 15.56 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	160.55	(NULL)
14.99	44.15	(NULL)
16.01	62.17	(NULL)
19.01	5.68	(NULL)
20.98	4.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.19 WATERSHED INCHES, 249.91 CFS-HRS, 20.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	(NULL)
14.91	22.95	(NULL)
15.94	44.21	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.95	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	245.01	(NULL)
14.91	32.92	(NULL)
15.94	58.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.10 WATERSHED INCHES, 182.93 CFS-HRS, 15.12 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	116.41	(NULL)
15.01	33.97	(NULL)
16.02	44.84	(NULL)
19.02	4.07	(NULL)
20.99	3.49	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.16 WATERSHED INCHES, 188.49 CFS-HRS, 15.58 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	207.09	(RUNOFF)
14.97	48.56	(RUNOFF)
15.99	69.08	(RUNOFF)
18.99	4.84	(RUNOFF)
20.98	4.16	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 270.52 CFS-HRS, 22.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	784.67	(NULL)
15.06	199.17	(NULL)
16.08	271.23	(NULL)
19.09	21.43	(NULL)
21.06	18.30	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.94 WATERSHED INCHES, 1281.42 CFS-HRS, 105.90 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	388.75	1301.71

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 205.14 CFS-HRS, 16.95 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1278.81	1301.71
14.99	376.56	1301.04
16.02	534.98	1301.20
19.02	42.89	1300.04
21.00	36.71	1300.02

RUNOFF VOLUME ABOVE BASEFLOW = 5.24 WATERSHED INCHES, 2241.79 CFS-HRS, 185.26 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	387.93	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.66 SQ.MI.

11.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.65	197.98	297.81
12.00	DISCHG	340.97	376.79	384.88	341.23	274.34	184.43	123.73	80.47	45.98	11.22
12.75	DISCHG	0.43	0.02	0.00							

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 204.78 CFS-HRS, 16.92 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.11	1168.41	(NULL)
15.06	199.17	(NULL)
16.08	271.23	(NULL)
19.09	21.43	(NULL)
21.06	18.30	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.34 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.39	0.60	0.84
6.75	DISCHG	1.08	1.33	1.59	1.81	2.01	2.23	2.51	2.81	3.09	3.36
7.50	DISCHG	3.63	3.89	4.14	4.39	4.64	4.87	5.11	5.36	5.65	6.02
8.25	DISCHG	6.45	6.91	7.35	7.77	8.18	8.60	9.07	9.57	10.06	10.52
9.00	DISCHG	10.96	11.42	11.97	12.62	13.32	13.98	14.60	15.19	15.81	16.52
9.75	DISCHG	17.34	18.15	18.90	19.60	20.31	21.33	22.79	24.53	26.23	27.75
10.50	DISCHG	29.12	30.63	32.77	35.58	38.66	41.44	43.80	46.03	49.07	53.85
11.25	DISCHG	60.11	66.76	72.70	78.19	92.11	141.35	246.90	452.22	707.95	923.22
12.00	DISCHG	1061.03	1156.69	1156.06	1039.23	874.06	695.38	564.59	467.53	386.75	309.00
12.75	DISCHG	258.94	225.87	200.86	177.67	160.15	145.64	133.39	122.18	113.04	106.07
13.50	DISCHG	100.90	96.45	91.83	86.80	82.07	78.21	75.30	72.95	70.79	68.45
14.25	DISCHG	66.01	63.86	62.14	61.06	62.91	74.52	98.12	127.35	153.85	176.95
15.00	DISCHG	174.05	198.32	184.11	150.41	115.01	86.01	63.74	49.04	49.16	73.38

15.75	DISCH6	119.33	170.10	220.54	251.90	269.81	267.18	239.41	200.64	156.96	123.28
16.50	DISCH6	99.43	80.45	65.80	55.20	47.79	42.12	37.84	34.66	32.19	30.14
17.25	DISCH6	28.41	26.91	25.73	24.82	24.11	23.56	23.13	22.80	22.54	22.37
18.00	DISCH6	22.24	22.05	21.71	21.22	20.72	20.30	19.98	19.76	19.71	19.93
18.75	DISCH6	20.30	20.68	21.00	21.26	21.42	21.41	21.24	20.99	20.75	20.56
19.50	DISCH6	20.40	20.21	19.93	19.58	19.23	18.95	18.73	18.54	18.28	17.92
20.25	DISCH6	17.50	17.12	16.82	16.59	16.48	16.58	16.89	17.30	17.69	17.99
21.00	DISCH6	18.22	18.30	18.13	17.79	17.39	17.04	16.76	16.36	15.30	13.30
21.75	DISCH6	10.70	8.29	6.38	4.88	3.67	2.56	1.81	1.31	0.95	0.52

RUNOFF VOLUME ABOVE BASEFLOW = 1.72 WATERSHED INCHES, 1486.20 CFS-HRS, 122.82 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1278.81	(NULL)
14.99	376.56	(NULL)
16.02	534.98	(NULL)
19.02	42.89	(NULL)
21.00	36.71	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 5.24 WATERSHED INCHES, 2241.79 CFS-HRS, 185.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	146.32	(RUNOFF)
15.00	34.47	(RUNOFF)
16.02	49.03	(RUNOFF)
21.00	3.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 198.67 CFS-HRS, 16.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 59

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1425.14	(NULL)
14.99	411.00	(NULL)
16.02	584.01	(NULL)
19.02	46.42	(NULL)
21.00	39.74	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.90 WATERSHED INCHES, 2440.47 CFS-HRS, 201.68 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
9.68	36.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
20.70	36.00*	(DIVERT) * FIRST POINT OF FLAT PEAK

RUNOFF VOLUME ABOVE BASEFLOW = 1.94 WATERSHED INCHES, 482.92 CFS-HRS, 39.91 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1389.14	7.62
14.99	375.00	3.03
16.02	548.01	3.82
19.02	10.42	1.01
21.00	3.74	0.69

RUNOFF VOLUME ABOVE BASEFLOW = 7.85 WATERSHED INCHES, 1957.55 CFS-HRS, 161.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	973.04	3.22
14.99	289.18	1.73
16.02	405.85	1.98
19.02	7.66	0.64
21.00	2.75	0.55

RUNOFF VOLUME ABOVE BASEFLOW = 11.84 WATERSHED INCHES, 1475.99 CFS-HRS. 121.98 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	416.10	3.22
14.99	85.82	1.73
16.02	142.16	1.98
19.02	2.76	0.64

RUNOFF VOLUME ABOVE BASEFLOW = 3.86 WATERSHED INCHES, 481.55 CFS-HRS, 39.80 ACRE-FEET: BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1009.04	3.30
14.99	325.18	1.81
16.02	441.85	2.06
19.02	43.66	1.05
21.00	38.75	1.03

RUNOFF VOLUME ABOVE BASEFLOW = 5.24 WATERSHED INCHES, 1958.92 CFS-HRS, 161.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.25	18.00	0.29
14.65	18.00	0.29
15.68	18.00	0.29
19.01	5.68	0.11
20.98	4.87	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 4.50 WATERSHED INCHES, 134.35 CFS-HRS, 11.10 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	(DIVERT)
14.99	26.15	(DIVERT)
16.01	44.17	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 3.88 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	558.65	(NULL)
14.99	111.96	(NULL)
16.02	186.32	(NULL)
19.02	2.76	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.87 WATERSHED INCHES, 597.12 CFS-HRS, 49.35 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1027.04	(NULL)
14.99	343.18	(NULL)
16.02	459.85	(NULL)
19.02	49.34	(NULL)
20.99	43.62	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 5.18 WATERSHED INCHES, 2093.26 CFS-HRS, 172.99 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	558.65	(NULL)
14.99	111.96	(NULL)
16.02	186.32	(NULL)
19.02	2.76	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.87 WATERSHED INCHES, 597.12 CFS-HRS, 49.35 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	45.28	(RUNOFF)
14.92	10.04	(RUNOFF)
15.94	14.89	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.21 CFS-HRS, 4.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	600.48	(NULL)
14.98	121.98	(NULL)
16.01	200.49	(NULL)
19.01	3.72	(NULL)
20.99	1.83	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.75 WATERSHED INCHES, 651.33 CFS-HRS, 53.83 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	600.48	(NULL)
14.98	121.98	(NULL)
16.01	200.49	(NULL)
19.01	3.72	(NULL)
20.99	1.83	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.75 WATERSHED INCHES, 651.33 CFS-HRS, 53.83 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	937.07	(NULL)
14.97	189.90	(NULL)
15.98	296.29	(NULL)
19.01	8.75	(NULL)
20.99	6.15	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 1022.75 CFS-HRS, 84.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	49.35	(RUNOFF)
14.91	10.51	(RUNOFF)
15.94	15.56	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES, 59.77 CFS-HRS, 4.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	985.84	(NULL)
14.97	200.55	(NULL)
15.98	311.64	(NULL)
19.00	9.76	(NULL)
20.98	7.03	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 1082.52 CFS-HRS, 89.46 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	1027.04	(NULL)
14.99	343.18	(NULL)
16.02	459.85	(NULL)
19.02	49.34	(NULL)
20.99	43.62	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 5.18 WATERSHED INCHES, 2093.26 CFS-HRS, 172.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	90.56	(RUNOFF)
14.92	20.09	(RUNOFF)
15.94	29.78	(RUNOFF)
20.92	1.68	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 108.42 CFS-HRS, 8.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	1106.57	(NULL)
14.98	363.22	(NULL)
16.01	488.17	(NULL)
19.01	51.28	(NULL)
20.99	45.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.98 WATERSHED INCHES, 2201.69 CFS-HRS, 181.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.85	(RUNOFF)
14.93	10.01	(RUNOFF)
15.95	14.79	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.28 CFS-HRS, 4.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	1149.45	(NULL)
14.98	373.33	(NULL)
16.01	498.52	(NULL)
19.01	52.20	(NULL)
20.99	46.13	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.72 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.01	0.04	0.09	0.17	0.27	0.40	0.58
6.00	DISCHG	0.81	1.06	1.32	1.61	1.90	2.00	2.11	2.23	2.45	2.74
6.75	DISCHG	3.08	3.46	3.90	4.37	4.87	5.52	6.35	7.22	8.04	8.83
7.50	DISCHG	9.61	10.38	11.13	11.86	12.58	13.27	13.94	14.62	15.54	16.85
8.25	DISCHG	18.19	19.36	20.40	21.38	22.37	23.55	24.87	26.10	27.20	28.22
9.00	DISCHG	29.20	30.41	32.21	34.20	35.92	37.38	38.69	40.01	41.75	44.03
9.75	DISCHG	45.85	47.35	48.63	49.81	51.29	54.14	58.16	61.54	64.08	66.17

10.50	DISCHG	68.11	71.25	77.39	84.71	90.82	95.50	99.42	103.94	113.92	131.36
11.25	DISCHG	145.40	156.28	164.76	172.19	231.57	414.62	623.76	781.69	911.27	1041.33
12.00	DISCHG	1140.49	1129.97	974.46	793.62	681.83	610.54	562.62	525.35	485.02	423.15
12.75	DISCHG	367.46	329.00	306.12	289.53	274.92	257.33	237.21	220.43	208.90	200.82
13.50	DISCHG	194.65	187.34	177.15	166.35	158.44	153.43	150.06	147.21	143.02	137.17
14.25	DISCHG	132.30	129.14	127.15	126.10	141.22	200.22	269.17	314.78	343.42	362.46
15.00	DISCHG	372.30	344.98	280.64	205.87	140.18	100.15	72.43	63.51	129.09	266.04
15.75	DISCHG	360.11	419.91	463.73	495.13	493.62	428.03	336.98	265.57	209.85	167.76
16.50	DISCHG	138.25	116.11	99.08	86.40	77.79	72.16	68.58	65.85	63.15	60.30
17.25	DISCHG	58.12	56.66	55.67	54.96	54.43	54.02	53.71	53.48	53.29	53.15
18.00	DISCHG	52.99	52.38	50.95	49.55	48.64	48.08	47.71	47.60	48.25	49.62
18.75	DISCHG	50.76	51.46	51.89	52.17	52.16	51.51	50.59	49.93	49.55	49.30
19.50	DISCHG	49.09	48.62	47.69	46.80	46.21	45.85	45.62	45.33	44.58	43.43
20.25	DISCHG	42.51	41.84	41.36	41.05	41.26	42.56	43.96	44.95	45.54	45.92
21.00	DISCHG	46.12	45.72	44.43	43.17	42.36	41.76	41.30	39.83	33.91	24.22
21.75	DISCHG	16.37	11.38	8.21	6.00	4.56	3.36	2.44	1.79	1.52	1.27

RUNOFF VOLUME ABOVE BASEFLOW = 4.88 WATERSHED INCHES, 2255.97 CFS-HRS, 186.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	177.39	(RUNOFF)
15.01	41.65	(RUNOFF)
16.04	59.16	(RUNOFF)
19.04	4.47	(RUNOFF)
21.02	3.83	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 251.70 CFS-HRS, 20.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	1155.40	(NULL)
14.97	241.78	(NULL)
15.98	368.83	(NULL)
19.01	14.23	(NULL)
20.99	10.85	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.67 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.01	0.04	0.07	0.11	0.15	0.19	0.24
6.00	DISCHG	0.28	0.32	0.36	0.40	0.44	0.49	0.53	0.58	0.65	0.72
6.75	DISCHG	0.80	0.89	0.98	1.08	1.19	1.34	1.56	1.75	1.92	2.08
7.50	DISCHG	2.22	2.37	2.51	2.64	2.78	2.91	3.04	3.18	3.38	3.70
8.25	DISCHG	4.01	4.27	4.49	4.68	4.87	5.11	5.41	5.67	5.90	6.11
9.00	DISCHG	6.30	6.55	6.97	7.44	7.81	8.12	8.38	8.64	9.00	9.66
9.75	DISCHG	10.68	11.53	12.25	12.90	13.73	15.34	17.57	19.51	21.01	22.22

10.50	DISCHG	23.31	25.07	28.56	32.07	34.55	36.41	37.88	39.50	43.34	50.57
11.25	DISCHG	59.61	65.97	70.56	74.40	122.73	344.74	610.37	803.75	948.06	1069.95
12.00	DISCHG	1154.98	1092.26	851.74	623.12	488.87	408.13	361.04	328.18	287.11	229.95
12.75	DISCHG	184.57	155.38	138.39	127.00	116.53	102.38	90.58	82.81	78.23	75.50
13.50	DISCHG	73.72	71.39	65.81	60.93	58.03	56.22	55.11	54.27	52.85	50.63
14.25	DISCHG	48.77	47.56	46.82	46.60	52.44	96.07	147.03	190.85	216.78	232.75
15.00	DISCHG	239.32	204.06	132.57	73.08	46.02	29.58	19.51	16.72	56.34	150.46
15.75	DISCHG	248.30	306.48	344.42	368.52	354.20	269.04	172.37	103.27	69.81	53.07
16.50	DISCHG	42.62	35.60	30.87	27.56	25.35	23.60	21.96	20.72	19.45	18.05
17.25	DISCHG	16.94	16.20	15.72	15.40	15.17	15.00	14.87	14.78	14.71	14.65
18.00	DISCHG	14.58	14.26	13.49	12.71	12.17	11.82	11.61	11.56	11.92	12.68
18.75	DISCHG	13.34	13.77	14.04	14.21	14.20	13.84	13.32	12.93	12.69	12.54
19.50	DISCHG	12.41	12.16	11.65	11.16	10.82	10.60	10.47	10.31	9.91	9.28
20.25	DISCHG	8.76	8.52	8.43	8.38	8.44	8.79	9.55	10.13	10.50	10.73
21.00	DISCHG	10.85	10.61	9.91	9.20	8.71	8.51	8.43	8.14	6.77	4.44
21.75	DISCHG	2.66	1.55	0.90	0.54	0.33	0.20	0.13	0.08	0.05	0.03

RUNOFF VOLUME ABOVE BASEFLOW = 3.10 WATERSHED INCHES, 1334.22 CFS-HRS, 110.26 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 4 RECORD ID

EXECUTIVE CONTROL OPERATION ENDJOB RECORD ID

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	1.44	24.00	0.62	---	12.24	93.78	213.1
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	1.44	24.00	0.47	0.70	12.24	57.73	195.8
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	1.44	24.00	0.91	0.70	12.24	36.05	248.3
XSECTION 13	REACH	0.15	2	2	0.08	0.0	1.44	24.00	0.91	---	12.37	34.85	240.0
XSECTION 15	REACH	0.29	2	2	0.08	0.0	1.44	24.00	0.47	---	12.36	55.54	188.4
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	1.44	24.00	0.57	---	12.07	88.30	259.7
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	1.44	24.00	0.67	---	12.10	111.59	230.0
XSECTION 83	DIVERT	0.16	2	2	0.08	0.0	1.44	24.00	0.81	0.79	12.10	35.98	224.7
XSECTION 82	DIVERT	0.33	2	2	0.08	0.0	1.44	24.00	0.61	0.79	12.10	75.61	232.6
XSECTION 21	REACH	0.33	2	2	0.08	0.0	1.44	24.00	0.61	---	12.20	72.85	224.1
XSECTION 23	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.81	---	12.18	35.89	224.1
XSECTION 25	ADDHYD	0.45	2	2	0.08	0.0	1.44	24.00	0.59	---	12.29	85.95	188.9
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	177.74	225.0
XSECTION 27	ADDHYD	1.24	2	2	0.08	0.0	1.44	24.00	0.52	---	12.09	240.13	192.9
XSECTION 27	REACH	1.24	2	2	0.08	0.0	1.44	24.00	0.52	---	12.09	240.13	192.9
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	1.44	24.00	0.49	---	12.04	16.27	232.4
XSECTION 29	ADDHYD	1.31	2	2	0.08	0.0	1.44	24.00	0.52	---	12.08	255.88	194.6
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	1.44	24.00	0.48	---	11.99	2.62	261.9
XSECTION 31	ADDHYD	1.32	2	2	0.08	0.0	1.44	24.00	0.52	---	12.08	257.93	194.7
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	1.44	24.00	0.48	---	12.26	26.16	153.9
XSECTION 33	ADDHYD	0.50	2	2	0.08	0.0	1.44	24.00	0.56	---	12.22	98.62	199.2
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.09	6.21	206.9
XSECTION 35	ADDHYD	0.53	2	2	0.08	0.0	1.44	24.00	0.56	---	12.21	103.70	197.5
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	1.44	24.00	0.62	---	11.98	73.18	348.5
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	1.15	0.67	11.98	50.73	483.1
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	0.09	0.67	11.98	22.45	213.8
XSECTION 39	REACH	0.10	2	2	0.08	0.0	1.44	24.00	1.15	---	11.98	50.73	483.1
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	1.44	24.00	0.53	---	11.97	15.57	311.3
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 45	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	1.44	24.00	0.88	---	11.98	73.48	397.2

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.99	0.57	11.98	41.19	445.3
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.76	0.57	11.98	32.29	349.1
XSECTION 2	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.99	---	12.07	39.53	427.4
XSECTION 43	REACH	0.10	2	2	0.08	0.0	1.44	24.00	0.09	---	12.06	20.98	199.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	1.44	24.00	0.18	---	12.06	28.04	207.7
XSECTION 1	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.76	---	12.08	29.87	323.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.06	57.76	253.9
XSECTION 91	REACH	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.15	55.97	246.0
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	33.45	223.0
XSECTION 51	ADDHYD	0.68	2	2	0.08	0.0	1.44	24.00	0.54	---	12.16	130.05	192.6
XSECTION 86	DIVERT	0.66	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.66	2	2	0.08	0.0	1.44	24.00	1.04	1300.76	12.08	257.93	389.3
XSECTION 53	REACH	0.66	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	1.34	2	2	0.08	0.0	1.44	24.00	0.27	---	12.16	130.05	97.2
XSECTION 57	REACH	0.66	2	2	0.08	0.0	1.44	24.00	1.04	---	12.08	257.93	389.3
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	1.44	24.00	0.48	---	12.08	22.90	208.1
XSECTION 59	ADDHYD	0.77	2	2	0.08	0.0	1.44	24.00	0.96	---	12.08	280.82	363.5
XSECTION 4	DIVERT	0.39	2	2	0.08	0.0	1.44	24.00	0.95	---	15.68*	36.00*	93.2
XSECTION 5	DIVERT	0.39	2	2	0.08	0.0	1.44	24.00	0.98	2.45	12.08	244.82	633.9
XSECTION 88	DIVERT	0.19	2	2	0.08	0.0	1.44	24.00	1.57	1.54	12.08	201.40	1042.9
XSECTION 6	DIVERT	0.19	2	2	0.08	0.0	1.44	24.00	0.39	1.54	12.08	43.41	224.8
XSECTION 88	ADDHYD	0.58	2	2	0.08	0.0	1.44	24.00	1.15	1.61	12.08	237.40	409.8
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	1.75	0.29	15.83*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	0.24	---	12.07	21.53	465.6
XSECTION 2	ADDHYD	0.24	2	2	0.08	0.0	1.44	24.00	0.36	---	12.07	64.84	270.9
XSECTION 1	ADDHYD	0.63	2	2	0.08	0.0	1.44	24.00	1.20	---	12.08	255.40	408.3
XSECTION 3	REACH	0.24	2	2	0.08	0.0	1.44	24.00	0.36	---	12.15	64.62	270.0
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	7.56	251.9
XSECTION 3	ADDHYD	0.27	2	2	0.08	0.0	1.44	24.00	0.37	---	12.14	68.98	256.1
XSECTION 47	REACH	0.27	2	2	0.08	0.0	1.44	24.00	0.37	---	12.23	66.92	248.4
XSECTION 47	ADDHYD	0.50	2	2	0.08	0.0	1.44	24.00	0.39	---	12.19	118.36	238.2
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.62	---	11.99	9.99	333.1
XSECTION 49	ADDHYD	0.53	2	2	0.08	0.0	1.44	24.00	0.40	---	12.19	122.61	232.7
XSECTION 63	REACH	0.63	2	2	0.08	0.0	1.44	24.00	1.20	---	12.08	255.40	408.3
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	15.11	251.9

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 65	ADDHYD	0.69	2	2	0.08	0.0	1.44	24.00	1.14	---	12.07	268.76	392.0
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.49	---	12.01	7.44	248.0
XSECTION 67	ADDHYD	0.72	2	2	0.08	0.0	1.44	24.00	1.11	---	12.07	275.65	385.2
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	1.44	24.00	0.48	---	12.12	27.42	195.9
XSECTION 73	ADDHYD	0.67	2	2	0.08	0.0	1.44	24.00	0.42	---	12.18	147.21	220.7
ALTERNATE 1 STORM 2													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	2.53	24.00	1.58	---	12.21	257.50	585.2
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	2.53	24.00	1.36	1.05	12.21	168.36	571.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	2.53	24.00	2.02	1.05	12.21	89.14	613.9
XSECTION 13	REACH	0.15	2	2	0.08	0.0	2.53	24.00	2.02	---	12.31	87.77	604.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	2.53	24.00	1.36	---	12.31	166.55	564.9
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	2.53	24.00	1.51	---	12.05	246.12	723.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	2.53	24.00	1.66	---	12.08	308.10	635.0
XSECTION 83	DIVERT	0.16	2	2	0.08	0.0	2.53	24.00	1.78	1.20	12.08	100.81	629.6
XSECTION 82	DIVERT	0.33	2	2	0.08	0.0	2.53	24.00	1.61	1.20	12.08	207.29	637.7
XSECTION 21	REACH	0.33	2	2	0.08	0.0	2.53	24.00	1.60	---	12.16	205.70	632.8
XSECTION 23	REACH	0.16	2	2	0.08	0.0	2.53	24.00	1.78	---	12.08	100.81	629.6
XSECTION 25	ADDHYD	0.45	2	2	0.08	0.0	2.53	24.00	1.51	---	12.20	240.86	529.5
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	2.53	24.00	1.37	---	12.03	534.30	676.3
XSECTION 27	ADDHYD	1.24	2	2	0.08	0.0	2.53	24.00	1.42	---	12.06	747.19	600.2
XSECTION 27	REACH	1.24	2	2	0.08	0.0	2.53	24.00	1.42	---	12.06	747.19	600.2
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	2.53	24.00	1.37	---	12.02	48.54	693.4
XSECTION 29	ADDHYD	1.31	2	2	0.08	0.0	2.53	24.00	1.42	---	12.06	795.04	604.6
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	2.53	24.00	1.37	---	11.98	7.64	764.0
XSECTION 31	ADDHYD	1.32	2	2	0.08	0.0	2.53	24.00	1.42	---	12.06	801.41	604.9
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	2.53	24.00	1.36	---	12.22	83.91	493.6
XSECTION 33	ADDHYD	0.50	2	2	0.08	0.0	2.53	24.00	1.52	---	12.17	288.19	582.1
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.36	---	12.06	19.16	638.7
XSECTION 35	ADDHYD	0.53	2	2	0.08	0.0	2.53	24.00	1.51	---	12.17	304.98	580.8
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	2.53	24.00	1.59	---	11.97	186.91	890.0
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	2.49	0.99	11.97	94.57	900.7
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	0.70	0.99	11.97	92.34	879.4
XSECTION 39	REACH	0.10	2	2	0.08	0.0	2.53	24.00	2.49	---	11.97	94.57	900.7
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	2.53	24.00	1.44	---	11.97	42.38	847.6
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5
XSECTION 45	REACH	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	2.53	24.00	2.02	---	11.97	158.61	857.4
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	2.30	0.93	11.97	91.75	991.9
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	1.75	0.93	11.97	66.87	722.9
XSECTION 2	REACH	0.09	2	2	0.08	0.0	2.53	24.00	2.30	---	12.05	90.35	976.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	2.53	24.00	0.70	---	11.97	92.34	879.4
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	2.53	24.00	0.85	---	11.97	114.03	844.6
XSECTION 1	REACH	0.09	2	2	0.08	0.0	2.53	24.00	1.75	---	12.06	64.15	693.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 91	REACH	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	2.53	24.00	1.37	---	12.04	101.46	676.4
XSECTION 51	ADDHYD	0.68	2	2	0.08	0.0	2.53	24.00	1.48	---	12.12	390.70	578.7
XSECTION 86	DIVERT	0.66	2	2	0.08	0.0	2.53	24.00	0.07	1301.35	12.06	111.99	169.1
XSECTION 99	DIVERT	0.66	2	2	0.08	0.0	2.53	24.00	2.77	1301.35	12.06	689.42	1040.7
XSECTION 53	REACH	0.66	2	2	0.08	0.0	2.53	24.00	0.06	---	12.15	103.42	156.1
XSECTION 55	ADDHYD	1.34	2	2	0.08	0.0	2.53	24.00	0.78	---	12.14	492.84	368.5
XSECTION 57	REACH	0.66	2	2	0.08	0.0	2.53	24.00	2.77	---	12.06	689.42	1040.7
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	2.53	24.00	1.37	---	12.06	70.59	641.7
XSECTION 59	ADDHYD	0.77	2	2	0.08	0.0	2.53	24.00	2.57	---	12.06	760.00	983.9
XSECTION 4	DIVERT	0.39	2	2	0.08	0.0	2.53	24.00	1.43	---	11.18*	36.00*	93.2
XSECTION 5	DIVERT	0.39	2	2	0.08	0.0	2.53	24.00	3.71	4.61	12.06	724.00	1874.5
XSECTION 88	DIVERT	0.19	2	2	0.08	0.0	2.53	24.00	5.77	2.24	12.06	524.52	2716.1
XSECTION 6	DIVERT	0.19	2	2	0.08	0.0	2.53	24.00	1.65	2.24	12.06	199.48	1033.0
XSECTION 88	ADDHYD	0.58	2	2	0.08	0.0	2.53	24.00	2.88	2.32	12.06	560.52	967.5
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	3.03	0.29	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	1.57	---	12.05	72.35	1564.2
XSECTION 2	ADDHYD	0.24	2	2	0.08	0.0	2.53	24.00	1.64	---	12.05	271.79	1135.5
XSECTION 1	ADDHYD	0.63	2	2	0.08	0.0	2.53	24.00	2.89	---	12.06	578.52	924.8
XSECTION 3	REACH	0.24	2	2	0.08	0.0	2.53	24.00	1.64	---	12.05	271.79	1135.5
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.31	743.6
XSECTION 3	ADDHYD	0.27	2	2	0.08	0.0	2.53	24.00	1.61	---	12.05	292.28	1085.1
XSECTION 47	REACH	0.27	2	2	0.08	0.0	2.53	24.00	1.61	---	12.05	292.28	1085.1
XSECTION 47	ADDHYD	0.50	2	2	0.08	0.0	2.53	24.00	1.43	---	12.01	455.36	916.5
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.59	---	11.98	25.86	861.9
XSECTION 49	ADDHYD	0.53	2	2	0.08	0.0	2.53	24.00	1.44	---	12.01	480.86	912.7

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
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SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 63	REACH	0.63	2	2	0.08	0.0	2.53	24.00	2.89	---	12.06	578.52	924.8
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	44.62	743.6
XSECTION 65	ADDHYD	0.69	2	2	0.08	0.0	2.53	24.00	2.76	---	12.05	619.47	903.6
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.04	734.8
XSECTION 67	ADDHYD	0.72	2	2	0.08	0.0	2.53	24.00	2.70	---	12.04	640.45	895.0
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	2.53	24.00	1.36	---	12.09	85.19	608.5
XSECTION 73	ADDHYD	0.67	2	2	0.08	0.0	2.53	24.00	1.42	---	12.02	561.11	841.4
ALTERNATE 1 STORM 3													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	3.12	24.00	2.15	---	12.20	353.46	803.3
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	3.12	24.00	1.90	1.24	12.20	232.97	790.2
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	3.12	24.00	2.65	1.24	12.20	120.49	829.8
XSECTION 13	REACH	0.15	2	2	0.08	0.0	3.12	24.00	2.65	---	12.30	119.17	820.7
XSECTION 15	REACH	0.29	2	2	0.08	0.0	3.12	24.00	1.90	---	12.29	231.43	785.0
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	3.12	24.00	2.07	---	12.04	338.96	996.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	3.12	24.00	2.25	---	12.07	424.58	875.1
XSECTION 83	DIVERT	0.16	2	2	0.08	0.0	3.12	24.00	2.37	1.43	12.07	145.61	909.4
XSECTION 82	DIVERT	0.33	2	2	0.08	0.0	3.12	24.00	2.18	1.43	12.07	278.97	858.2
XSECTION 21	REACH	0.33	2	2	0.08	0.0	3.12	24.00	2.18	---	12.15	277.91	854.9
XSECTION 23	REACH	0.16	2	2	0.08	0.0	3.12	24.00	2.37	---	12.07	145.61	909.4
XSECTION 25	ADDHYD	0.45	2	2	0.08	0.0	3.12	24.00	2.07	---	12.19	342.95	753.9
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	3.12	24.00	1.91	---	12.02	750.58	950.1
XSECTION 27	ADDHYD	1.24	2	2	0.08	0.0	3.12	24.00	1.97	---	12.05	1056.67	848.8
XSECTION 27	REACH	1.24	2	2	0.08	0.0	3.12	24.00	1.97	---	12.05	1056.67	848.8
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	3.12	24.00	1.92	---	12.01	68.09	972.6
XSECTION 29	ADDHYD	1.31	2	2	0.08	0.0	3.12	24.00	1.97	---	12.05	1123.74	854.6
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	3.12	24.00	1.91	---	11.97	10.62	1062.2
XSECTION 31	ADDHYD	1.32	2	2	0.08	0.0	3.12	24.00	1.97	---	12.05	1132.71	854.9
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	3.12	24.00	1.90	---	12.21	119.26	701.6
XSECTION 33	ADDHYD	0.50	2	2	0.08	0.0	3.12	24.00	2.09	---	12.17	395.23	798.3
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.90	---	12.06	27.00	900.1
XSECTION 35	ADDHYD	0.53	2	2	0.08	0.0	3.12	24.00	2.07	---	12.16	419.09	798.1
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	3.12	24.00	2.17	---	11.97	251.82	1199.2
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	3.19	1.12	11.97	117.97	1123.5
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	1.15	1.12	11.97	133.85	1274.8
XSECTION 39	REACH	0.10	2	2	0.08	0.0	3.12	24.00	3.19	---	11.97	117.97	1123.5
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	3.12	24.00	1.99	---	11.97	57.96	1159.2

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 45	REACH	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	3.12	24.00	2.66	---	11.97	206.27	1115.0
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	3.02	1.07	11.97	119.10	1287.6
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	2.29	1.07	11.97	87.17	942.4
XSECTION 2	REACH	0.09	2	2	0.08	0.0	3.12	24.00	3.02	---	12.05	117.82	1273.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	3.12	24.00	1.15	---	11.97	133.85	1274.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	3.12	24.00	1.31	---	11.97	164.22	1216.5
XSECTION 1	REACH	0.09	2	2	0.08	0.0	3.12	24.00	2.30	---	12.05	84.46	913.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 91	REACH	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	3.12	24.00	1.91	---	12.03	141.22	941.5
XSECTION 51	ADDHYD	0.68	2	2	0.08	0.0	3.12	24.00	2.04	---	12.11	541.13	801.6
XSECTION 86	DIVERT	0.66	2	2	0.08	0.0	3.12	24.00	0.21	1301.54	12.05	251.35	379.4
XSECTION 99	DIVERT	0.66	2	2	0.08	0.0	3.12	24.00	3.72	1301.54	12.05	881.37	1330.4
XSECTION 53	REACH	0.66	2	2	0.08	0.0	3.12	24.00	0.21	---	12.13	247.34	373.4
XSECTION 55	ADDHYD	1.34	2	2	0.08	0.0	3.12	24.00	1.13	---	12.12	787.23	588.6
XSECTION 57	REACH	0.66	2	2	0.08	0.0	3.12	24.00	3.72	---	12.05	881.37	1330.4
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	3.12	24.00	1.91	---	12.05	99.48	904.4
XSECTION 59	ADDHYD	0.77	2	2	0.08	0.0	3.12	24.00	3.46	---	12.05	980.85	1269.8
XSECTION 4	DIVERT	0.39	2	2	0.08	0.0	3.12	24.00	1.67	---	10.65*	36.00*	93.2
XSECTION 5	DIVERT	0.39	2	2	0.08	0.0	3.12	24.00	5.24	5.61	12.05	944.85	2446.3
XSECTION 88	DIVERT	0.19	2	2	0.08	0.0	3.12	24.00	8.05	2.57	12.05	673.44	3487.3
XSECTION 6	DIVERT	0.19	2	2	0.08	0.0	3.12	24.00	2.44	2.57	12.05	271.40	1405.4
XSECTION 88	ADDHYD	0.58	2	2	0.08	0.0	3.12	24.00	3.80	2.65	12.05	709.44	1224.6
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	3.64	0.29	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	2.41	---	12.05	99.82	2158.2
XSECTION 2	ADDHYD	0.24	2	2	0.08	0.0	3.12	24.00	2.43	---	12.05	371.20	1550.8
XSECTION 1	ADDHYD	0.63	2	2	0.08	0.0	3.12	24.00	3.79	---	12.05	727.44	1162.8
XSECTION 3	REACH	0.24	2	2	0.08	0.0	3.12	24.00	2.43	---	12.05	371.20	1550.8
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	31.12	1037.2
XSECTION 3	ADDHYD	0.27	2	2	0.08	0.0	3.12	24.00	2.38	---	12.04	399.86	1484.5
XSECTION 47	REACH	0.27	2	2	0.08	0.0	3.12	24.00	2.38	---	12.04	399.86	1484.5
XSECTION 47	ADDHYD	0.50	2	2	0.08	0.0	3.12	24.00	2.07	---	12.00	630.11	1268.2

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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	2.16	---	11.98	34.96	1165.4
XSECTION 49	ADDHYD	0.53	2	2	0.08	0.0	3.12	24.00	2.08	---	12.00	664.68	1261.6
XSECTION 63	REACH	0.63	2	2	0.08	0.0	3.12	24.00	3.79	---	12.05	727.44	1162.8
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	62.23	1037.2
XSECTION 65	ADDHYD	0.69	2	2	0.08	0.0	3.12	24.00	3.62	---	12.04	784.86	1144.8
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	30.78	1026.0
XSECTION 67	ADDHYD	0.72	2	2	0.08	0.0	3.12	24.00	3.55	---	12.04	811.49	1134.0
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	3.12	24.00	1.90	---	12.08	120.33	859.5
XSECTION 73	ADDHYD	0.67	2	2	0.08	0.0	3.12	24.00	2.04	---	12.01	778.71	1167.7
ALTERNATE 1 STORM 4													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	4.04	24.00	3.07	---	12.20	506.65	1151.5
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	4.04	24.00	2.78	1.54	12.20	336.11	1140.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	4.04	24.00	3.65	1.54	12.20	170.55	1174.6
XSECTION 13	REACH	0.15	2	2	0.08	0.0	4.04	24.00	3.65	---	12.29	169.38	1166.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	4.04	24.00	2.78	---	12.28	335.07	1136.6
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	4.04	24.00	2.98	---	12.04	487.37	1433.4
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	4.04	24.00	3.18	---	12.07	611.58	1260.5
XSECTION 83	DIVERT	0.16	2	2	0.08	0.0	4.04	24.00	3.34	1.79	12.07	217.53	1358.6
XSECTION 82	DIVERT	0.33	2	2	0.08	0.0	4.04	24.00	3.11	1.79	12.07	394.05	1212.1
XSECTION 21	REACH	0.33	2	2	0.08	0.0	4.04	24.00	3.11	---	12.14	393.96	1211.9
XSECTION 23	REACH	0.16	2	2	0.08	0.0	4.04	24.00	3.34	---	12.07	217.53	1358.6
XSECTION 25	ADDHYD	0.45	2	2	0.08	0.0	4.04	24.00	2.98	---	12.18	508.22	1117.2
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	4.04	24.00	2.80	---	12.02	1100.77	1393.4
XSECTION 27	ADDHYD	1.24	2	2	0.08	0.0	4.04	24.00	2.87	---	12.05	1556.24	1250.1
XSECTION 27	REACH	1.24	2	2	0.08	0.0	4.04	24.00	2.87	---	12.05	1556.24	1250.1
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	4.04	24.00	2.81	---	12.00	99.70	1424.2
XSECTION 29	ADDHYD	1.31	2	2	0.08	0.0	4.04	24.00	2.86	---	12.05	1654.35	1258.1
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	4.04	24.00	2.80	---	11.97	15.41	1540.8
XSECTION 31	ADDHYD	1.32	2	2	0.08	0.0	4.04	24.00	2.86	---	12.04	1667.51	1258.6
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	4.04	24.00	2.78	---	12.20	176.88	1040.5
XSECTION 33	ADDHYD	0.50	2	2	0.08	0.0	4.04	24.00	3.00	---	12.16	568.03	1147.3
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	12.05	39.71	1323.8
XSECTION 35	ADDHYD	0.53	2	2	0.08	0.0	4.04	24.00	2.98	---	12.15	603.38	1149.1
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	354.15	1686.4
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	4.28	1.32	11.97	153.51	1462.0
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	1.90	1.32	11.97	200.64	1910.9

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SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 39	REACH	0.10	2	2	0.08	0.0	4.04	24.00	4.28	---	11.97	153.51	1462.0
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	4.04	24.00	2.90	---	11.96	82.70	1654.0
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 45	REACH	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	4.04	24.00	3.67	---	11.97	280.55	1516.5
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	4.18	1.27	11.97	161.59	1746.9
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	3.15	1.27	11.97	118.96	1286.0
XSECTION 2	REACH	0.09	2	2	0.08	0.0	4.04	24.00	4.19	---	12.04	160.55	1735.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	4.04	24.00	1.90	---	11.97	200.64	1910.9
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	4.04	24.00	2.10	---	11.97	245.01	1814.9
XSECTION 1	REACH	0.09	2	2	0.08	0.0	4.04	24.00	3.16	---	12.05	116.41	1258.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 91	REACH	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	4.04	24.00	2.79	---	12.02	207.09	1380.6
XSECTION 51	ADDHYD	0.68	2	2	0.08	0.0	4.04	24.00	2.94	---	12.10	784.67	1162.3
XSECTION 86	DIVERT	0.66	2	2	0.08	0.0	4.04	24.00	0.48	1301.71	12.05	388.75	586.8
XSECTION 99	DIVERT	0.66	2	2	0.08	0.0	4.04	24.00	5.24	1301.71	12.04	1278.81	1930.4
XSECTION 53	REACH	0.66	2	2	0.08	0.0	4.04	24.00	0.48	---	12.12	387.93	585.6
XSECTION 55	ADDHYD	1.34	2	2	0.08	0.0	4.04	24.00	1.72	---	12.11	1168.41	873.6
XSECTION 57	REACH	0.66	2	2	0.08	0.0	4.04	24.00	5.24	---	12.04	1278.81	1930.4
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	4.04	24.00	2.80	---	12.04	146.32	1330.2
XSECTION 59	ADDHYD	0.77	2	2	0.08	0.0	4.04	24.00	4.90	---	12.04	1425.14	1844.9
XSECTION 4	DIVERT	0.39	2	2	0.08	0.0	4.04	24.00	1.94	---	20.70*	36.00*	93.2
XSECTION 5	DIVERT	0.39	2	2	0.08	0.0	4.04	24.00	7.85	7.62	12.04	1389.14	3596.7
XSECTION 88	DIVERT	0.19	2	2	0.08	0.0	4.04	24.00	11.84	3.22	12.04	973.04	5038.7
XSECTION 6	DIVERT	0.19	2	2	0.08	0.0	4.04	24.00	3.86	3.22	12.04	416.10	2154.7
XSECTION 88	ADDHYD	0.58	2	2	0.08	0.0	4.04	24.00	5.24	3.30	12.04	1009.04	1741.7
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	4.50	0.29	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	3.88	---	12.04	142.55	3082.1
XSECTION 2	ADDHYD	0.24	2	2	0.08	0.0	4.04	24.00	3.87	---	12.04	558.65	2333.9
XSECTION 1	ADDHYD	0.63	2	2	0.08	0.0	4.04	24.00	5.18	---	12.04	1027.04	1641.7
XSECTION 3	REACH	0.24	2	2	0.08	0.0	4.04	24.00	3.87	---	12.04	558.65	2333.9
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	45.28	1509.4
XSECTION 3	ADDHYD	0.27	2	2	0.08	0.0	4.04	24.00	3.75	---	12.04	600.48	2229.2

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SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 47	REACH	0.27	2	2	0.08	0.0	4.04	24.00	3.75	---	12.04	600.48	2229.2
XSECTION 47	ADDHYD	0.50	2	2	0.08	0.0	4.04	24.00	3.19	---	12.00	937.07	1886.0
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	49.35	1645.1
XSECTION 49	ADDHYD	0.53	2	2	0.08	0.0	4.04	24.00	3.18	---	12.00	985.84	1871.1
XSECTION 63	REACH	0.63	2	2	0.08	0.0	4.04	24.00	5.18	---	12.04	1027.04	1641.7
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	90.56	1509.4
XSECTION 65	ADDHYD	0.69	2	2	0.08	0.0	4.04	24.00	4.98	---	12.03	1106.57	1614.0
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	44.85	1494.9
XSECTION 67	ADDHYD	0.72	2	2	0.08	0.0	4.04	24.00	4.88	---	12.03	1149.45	1606.3
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	4.04	24.00	2.79	---	12.07	177.39	1267.1
XSECTION 73	ADDHYD	0.67	2	2	0.08	0.0	4.04	24.00	3.10	---	12.01	1155.40	1732.6

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS									PEAK TRAVEL TIME	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION							
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE 1 STORM 1																			
13	2640	36	12.2	35	12.4	---	---	0	0.91	0.08	1	1.50	1.60	0.012	0.967	334	0.58	0.15	0.09
15	2900	58	12.2	55	12.4	---	---	0	0.47	0.08	1	1.50	1.60	0.020	0.962	308	0.61	0.15	0.09
21	2640	75	12.1	73	12.2	---	---	0	0.61	0.08	1	1.50	1.60	0.013	0.966	253	0.70?	0.15	0.07
23	1150	36	12.1	36	12.2	---	---	0	0.81	0.08	1	1.50	1.60	0.003	0.996	146	0.96?	0.08	0.04
27	2000	240	12.1	240	12.1	---	---	0	0.52	0.08	0	1.50	1.60	0.004	1.000	124	1.00?	0.00	0.00
39	800	50	12.0	50	12.0	---	---	0	1.15	0.08	0	1.50	1.60	0.003	1.000	89	1.00?	0.00	0.00
45	1300	66	12.0	66	12.0	73	12.0	0	0.95	0.08	0	1.50	1.60	0.006	1.000	131	1.00?	0.00	0.00
2	1300	41	12.0	39	12.1	---	---	0	0.99	0.08	1	1.60	1.38	0.022	0.967	241	0.72?	0.08	0.07
43	1500	22	12.0	21	12.1	28	12.1	0	0.09	0.08	1	1.50	1.60	0.195	0.948	228	0.74?	0.08	0.06
1	1050	32	12.0	30	12.1	---	---	0	0.76	0.08	1	0.430	1.52	0.035	0.932	368	0.54	0.08	0.10
91	1100	58	12.1	56	12.2	---	---	0	0.41	0.08	1	0.500	1.65	0.019	0.972	206	0.79?	0.08	0.06
53	2800	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
57	1500	258	12.1	258	12.1	---	---	0	1.04	0.08	0	1.50	1.60	0.002	1.000	91	1.00?	0.00	0.00
3	500	65	12.1	65	12.2	69	12.2	0	0.36	0.08	1	0.190	1.70	0.013	0.997	140	0.98?	0.08	0.04
47	800	69	12.2	67	12.2	---	---	0	0.37	0.08	1	0.430	1.56	0.023	0.971	193	0.82?	0.08	0.05
63	1550	255	12.1	255	12.1	---	---	0	1.20	0.08	0	1.50	1.60	0.002	1.000	82	1.00?	0.00	0.00
ALTERNATE 1 STORM 2																			
13	2640	89	12.2	88	12.3	---	---	0	2.02	0.08	1	1.50	1.60	0.008	0.985	238	0.72?	0.08	0.07
15	2900	168	12.2	167	12.3	---	---	0	1.36	0.08	1	1.50	1.60	0.011	0.990	206	0.79?	0.08	0.06
21	2640	207	12.1	205	12.2	---	---	0	1.61	0.08	1	1.50	1.60	0.008	0.991	173	0.88?	0.08	0.05
23	1150	101	12.1	101	12.1	---	---	0	1.78	0.08	0	1.50	1.60	0.003	1.000	99	1.00?	0.00	0.00
27	2000	745	12.1	745	12.1	---	---	0	1.42	0.08	0	1.50	1.60	0.002	1.000	81	1.00?	0.00	0.00
39	800	93	12.0	93	12.0	---	---	0	2.49	0.08	0	1.50	1.60	0.002	1.000	71	1.00?	0.00	0.00
45	1300	134	12.0	134	12.0	156	12.0	0	2.15	0.08	0	1.50	1.60	0.003	1.000	101	1.00?	0.00	0.00
2	1300	90	12.0	89	12.1	---	---	0	2.30	0.08	1	1.60	1.38	0.015	0.991	194	0.82?	0.08	0.05
43	1500	90	12.0	90	12.0	112	12.0	0	0.70	0.08	0	1.50	1.60	0.031	1.000	135	1.00?	0.00	0.00
1	1050	66	12.0	64	12.1	---	---	0	1.75	0.08	1	0.430	1.52	0.020	0.973	288	0.64	0.08	0.08
91	1100	172	12.0	172	12.0	---	---	0	1.21	0.08	0	0.500	1.65	0.009	1.000	133	1.00?	0.00	0.00
53	2800	110	12.1	103	12.2	---	---	0	0.07	0.08	1	1.50	1.60	0.240	0.937	233	0.73?	0.08	0.07
57	1500	687	12.1	687	12.1	---	---	0	2.77	0.08	0	1.50	1.60	0.001	1.000	63	1.00?	0.00	0.00
3	500	270	12.1	270	12.1	289	12.1	0	1.64	0.08	0	0.190	1.70	0.004	1.000	78	1.00?	0.00	0.00
47	800	289	12.1	289	12.1	---	---	0	1.61	0.08	0	0.430	1.56	0.010	1.000	115	1.00?	0.00	0.00

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION							TRAVEL TIME	
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE 1 STORM 2																			
63	1350	577	12.1	577	12.1	---	---	0	2.89	0.08	0	1.50	1.60	0.001	1.000	60	1.00?	0.00	0.00
ALTERNATE 1 STORM 3																			
13	2640	120	12.2	119	12.3	---	---	0	2.65	0.08	1	1.50	1.60	0.007	0.991	213	0.78?	0.08	0.06
15	2900	232	12.2	231	12.3	---	---	0	1.90	0.08	1	1.50	1.60	0.009	0.996	182	0.85?	0.08	0.05
21	2640	279	12.1	278	12.2	---	---	0	2.18	0.08	1	1.50	1.60	0.006	0.996	155	0.93?	0.08	0.04
23	1150	146	12.1	146	12.1	---	---	0	2.37	0.08	0	1.50	1.60	0.002	1.000	86	1.00?	0.00	0.00
27	2000	1051	12.1	1051	12.1	---	---	0	1.97	0.08	0	1.50	1.60	0.002	1.000	71	1.00?	0.00	0.00
39	800	116	12.0	116	12.0	---	---	0	3.19	0.08	0	1.50	1.60	0.001	1.000	65	1.00?	0.00	0.00
45	1300	171	12.0	171	12.0	202	12.0	0	2.80	0.08	0	1.50	1.60	0.003	1.000	92	1.00?	0.00	0.00
2	1300	116	12.0	116	12.1	---	---	0	3.02	0.08	1	1.60	1.38	0.014	0.995	181	0.85?	0.08	0.05
43	1500	130	12.0	130	12.0	160	12.0	0	1.14	0.08	0	1.50	1.60	0.020	1.000	117	1.00?	0.00	0.00
1	1050	85	12.0	84	12.1	---	---	0	2.29	0.08	1	0.430	1.52	0.017	0.982	263	0.68?	0.08	0.07
91	1100	241	12.0	241	12.0	---	---	0	1.71	0.08	0	0.500	1.65	0.007	1.000	117	1.00?	0.00	0.00
53	2800	248	12.1	246	12.2	---	---	0	0.21	0.08	1	1.50	1.60	0.080	0.991	172	0.88?	0.08	0.05
57	1500	876	12.1	876	12.1	---	---	0	3.72	0.08	0	1.50	1.60	0.001	1.000	57	1.00?	0.00	0.00
3	500	367	12.1	367	12.1	394	12.1	0	2.43	0.08	0	0.190	1.70	0.003	1.000	69	1.00?	0.00	0.00
47	800	394	12.1	394	12.1	---	---	0	2.38	0.08	0	0.430	1.56	0.007	1.000	103	1.00?	0.00	0.00
63	1350	724	12.1	724	12.1	---	---	0	3.79	0.08	0	1.50	1.60	0.001	1.000	55	1.00?	0.00	0.00
ALTERNATE 1 STORM 4																			
13	2640	170	12.2	169	12.3	---	---	0	3.65	0.08	1	1.50	1.60	0.006	0.996	187	0.84?	0.08	0.05
15	2900	335	12.2	334	12.3	---	---	0	2.78	0.08	1	1.50	1.60	0.007	0.999	159	0.92?	0.08	0.04
21	2640	394	12.1	394	12.2	---	---	0	3.11	0.08	1	1.50	1.60	0.005	1.000	136	1.00?	0.08	0.04
23	1150	217	12.1	217	12.1	---	---	0	3.34	0.08	0	1.50	1.60	0.002	1.000	74	1.00?	0.00	0.00
27	2000	1544	12.1	1544	12.1	---	---	0	2.87	0.08	0	1.50	1.60	0.002	1.000	62	1.00?	0.00	0.00
39	800	150	12.0	150	12.0	---	---	0	4.28	0.08	0	1.50	1.60	0.001	1.000	59	1.00?	0.00	0.00
45	1300	229	12.0	229	12.0	273	12.0	0	3.84	0.08	0	1.50	1.60	0.002	1.000	82	1.00?	0.00	0.00
2	1300	157	12.0	157	12.1	---	---	0	4.18	0.08	1	1.60	1.38	0.012	0.998	166	0.90?	0.08	0.05
43	1500	194	12.0	194	12.0	238	12.0	0	1.90	0.08	0	1.50	1.60	0.013	1.000	101	1.00?	0.00	0.00
1	1050	116	12.0	115	12.1	---	---	0	3.15	0.08	1	0.430	1.52	0.014	0.990	237	0.73?	0.08	0.07
91	1100	350	12.0	350	12.0	---	---	0	2.53	0.08	0	0.500	1.65	0.006	1.000	101	1.00?	0.00	0.00
53	2800	385	12.1	385	12.2	---	---	0	0.48	0.08	1	1.50	1.60	0.034	0.999	146	0.96?	0.08	0.04

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION							TRAVEL TIME
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE		1	STORM	4															
57	1500	1264	12.1	1264	12.1	---	---	0	5.24	0.08	0	1.50	1.60	0.001	1.000	50	1.00?	0.00	0.00
3	500	550	12.1	550	12.1	587	12.1	0	3.87	0.08	0	0.190	1.70	0.002	1.000	58	1.00?	0.00	0.00
47	800	587	12.1	587	12.1	---	---	0	3.75	0.08	0	0.430	1.56	0.005	1.000	89	1.00?	0.00	0.00
63	1350	1016	12.1	1016	12.1	---	---	0	5.18	0.08	0	1.50	1.60	0.001	1.000	49	1.00?	0.00	0.00

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 1	0.63				
ALTERNATE 1		255.40	578.52	727.44	1027.04
XSECTION 2	0.24				
ALTERNATE 1		64.84	271.79	371.20	558.65
XSECTION 3	0.27				
ALTERNATE 1		68.98	292.28	399.86	600.48
XSECTION 4	0.39				
ALTERNATE 1		36.00	36.00	36.00	36.00
XSECTION 5	0.39				
ALTERNATE 1		244.82	724.00	944.85	1389.14
XSECTION 6	0.19				
ALTERNATE 1		43.41	199.48	271.40	416.10
XSECTION 10	0.44				
ALTERNATE 1		93.78	257.50	353.46	506.65
XSECTION 13	0.15				
ALTERNATE 1		34.85	87.77	119.17	169.38
XSECTION 15	0.29				
ALTERNATE 1		55.54	166.55	231.43	335.07
XSECTION 16	0.34				
ALTERNATE 1		88.30	246.12	338.96	487.37
XSECTION 17	0.49				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 21	0.33				
ALTERNATE 1		72.85	205.70	277.91	393.96
XSECTION 23	0.16				
ALTERNATE 1		35.89	100.81	145.61	217.53
XSECTION 25	0.45				
ALTERNATE 1		85.95	240.86	342.95	508.22

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 26	0.79				
ALTERNATE 1		177.74	534.30	750.58	1100.77
XSECTION 27	1.24				
ALTERNATE 1		240.13	747.19	1056.67	1556.24
XSECTION 28	0.07				
ALTERNATE 1		16.27	48.54	68.09	99.70
XSECTION 29	1.31				
ALTERNATE 1		255.88	795.04	1123.74	1654.35
XSECTION 30	0.01				
ALTERNATE 1		2.62	7.64	10.62	15.41
XSECTION 31	1.32				
ALTERNATE 1		257.93	801.41	1132.71	1667.51
XSECTION 32	0.17				
ALTERNATE 1		26.16	83.91	119.26	176.88
XSECTION 33	0.50				
ALTERNATE 1		98.62	288.19	395.23	568.03
XSECTION 34	0.03				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 35	0.53				
ALTERNATE 1		103.70	304.98	419.09	603.38
XSECTION 36	0.21				
ALTERNATE 1		73.18	186.91	251.82	354.15
XSECTION 39	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 40	0.05				
ALTERNATE 1		15.57	42.38	57.96	82.70
XSECTION 41	0.16				
ALTERNATE 1		66.28	136.95	175.92	236.21

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 43	0.13				
ALTERNATE 1		28.04	114.03	164.22	245.01
XSECTION 45	0.19				
ALTERNATE 1		73.48	158.61	206.27	280.55
XSECTION 46	0.03				
ALTERNATE 1		9.99	25.86	34.96	49.35
XSECTION 47	0.50				
ALTERNATE 1		118.36	455.36	630.11	937.07
XSECTION 48	0.15				
ALTERNATE 1		33.45	101.46	141.22	207.09
XSECTION 49	0.53				
ALTERNATE 1		122.61	480.86	664.68	985.84
XSECTION 51	0.68				
ALTERNATE 1		130.05	390.70	541.13	784.67
XSECTION 53	0.66				
ALTERNATE 1		0.00	103.42	247.34	387.93
XSECTION 55	1.34				
ALTERNATE 1		130.05	492.84	787.23	1168.41
XSECTION 57	0.66				
ALTERNATE 1		257.93	689.42	881.37	1278.81
XSECTION 58	0.11				
ALTERNATE 1		22.90	70.59	99.48	146.32
XSECTION 59	0.77				
ALTERNATE 1		280.82	760.00	980.85	1425.14
XSECTION 63	0.63				
ALTERNATE 1		255.40	578.52	727.44	1027.04
XSECTION 64	0.06				
ALTERNATE 1		15.11	44.62	62.23	90.56

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 65	0.69				
ALTERNATE 1		268.76	619.47	784.86	1106.57
XSECTION 66	0.03				
ALTERNATE 1		7.44	22.04	30.78	44.85
XSECTION 67	0.72				
ALTERNATE 1		275.65	640.45	811.49	1149.45
XSECTION 72	0.14				
ALTERNATE 1		27.42	85.19	120.33	177.39
XSECTION 73	0.67				
ALTERNATE 1		147.21	561.11	778.71	1155.40
XSECTION 75	0.09				
ALTERNATE 1		32.29	66.87	87.17	118.96
XSECTION 76	0.05				
ALTERNATE 1		18.00	18.00	18.00	18.00
XSECTION 77	0.05				
ALTERNATE 1		21.53	72.35	99.82	142.55
XSECTION 80	0.15				
ALTERNATE 1		36.05	89.14	120.49	170.55
XSECTION 81	0.29				
ALTERNATE 1		57.73	168.36	232.97	336.11
XSECTION 82	0.33				
ALTERNATE 1		75.61	207.29	278.97	394.05
XSECTION 83	0.16				
ALTERNATE 1		35.98	100.81	145.61	217.53
XSECTION 84	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 85	0.10				
ALTERNATE 1		22.45	92.34	133.85	200.64

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 86	0.66				
ALTERNATE 1		0.00	111.99	251.35	388.75
XSECTION 88	0.58				
ALTERNATE 1		237.40	560.52	709.44	1009.04
XSECTION 89	0.09				
ALTERNATE 1		41.19	91.75	119.10	161.59
XSECTION 90	0.23				
ALTERNATE 1		57.76	173.43	243.05	354.79
XSECTION 91	0.23				
ALTERNATE 1		55.97	173.43	243.05	354.79
XSECTION 95	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 96	0.03				
ALTERNATE 1		7.56	22.31	31.12	45.28
XSECTION 97	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 99	0.66				
ALTERNATE 1		257.93	689.42	881.37	1278.81

MAIN - UNEXPECTED RECORD FOUND(IGNORED) >>> <<<

LINCOLN TO CHENEY DRAINAGE STUDY - ALTERNATIVE B (25 YR) (EA 1053.2)

TR-20 COMPUTATIONS
PERFORMED BY:

ERIE AND ASSOCIATES, INC.
Consulting Engineers
3120 North 24th Street
Phoenix, Arizona, 1986

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:::::::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::::::
::::                                          ::::
::::                HAESTAD METHODS           ::::
::::               37 Brookside Road          ::::
::::         Waterbury, Connecticut  06708    ::::
::::               (203) 753-9800             ::::
::::                                          ::::
::::    full micro-computer implementation of ::::
::::                                          ::::
::::      USDA - Soil Conservation Service    ::::
::::                   TR-20                  ::::
::::                September 1983            ::::
::::        PROJECT FORMULATION HYDROLOGY     ::::
::::                                          ::::
:::::::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::::::
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RUN DATE: Fri 10-OCT-1986 TIME: 15:03:09.10

DATA FILE: LSALT3B

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*******************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY******************

JU8                     NOPRINT
TITLE       MAY 85      DRAINAGE STUDY-ALT.B(25YR) (LSALT3B:Q=660)EA 1053.2
 5 RAINFL 2              0.0208
 8          .0000       .0030       .0110       .0160       .0220
 8          .0280       .0350       .0410       .0480       .0560
 8          .0630       .0710       .0800       .0890       .0980
 8          .1090       .1200       .1330       .1470       .1630
 8          .1810       .2040       .2350       .2830       .6630
 8          .7350       .7720       .7990       .8200       .8380
 8          .9120       .8210       .9290       .9370       .9450
 8          .9520       .9590       .9650       .9720       .9783
 8          .9840       .9890       .9950       1.000       1.000
 9 ENDTBL
 2 XSECTN    5          1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN    6          1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN   75          1.0
 8                      0.0         0.0         0.0
 8                      .25         7.1         3.9
 8                      .75         45.9        12.9
 8                      1.0         75.6        18.0
 8                      1.5         155.        29.3
 8                      2.0         261.        42.
 9 ENDTBL
 2 XSECTN   77          1.0
 8                      0.0         0.0         0.0
 8                      .25         13.         11.
 8                      .50         41.         22.5
 8                      1.0         142.        53.
 8                      1.5         300.        90.3
 8                      2.0         480.        141.
 9 ENDTBL
 2 XSECTN   82          1.0
 8                      0.2         0.0         0.0
 8                      0.3         5.0         2.3
 8                      0.4         11.0        4.0
 8                      0.56        27.0        7.8
```

**********80-80 LIST OF INPUT DATA (CONTINUED)**********

```
8                   0.6         31.0        9.2
8                   0.8         78.0        16.2
8                   1.0         142.0       23.2
9 ENDTBL
2 XSECTN    83      1.0
8                   0.1         0.0         0.0
8                   0.24        2.0         1.4
8                   0.5         13.0        4.6
8                   0.6         18.0        6.2
8                   0.7         27.0        7.8
8                   0.8         37.0        9.4
8                   0.9         40.0        11.0
8                   1.0         60.0        12.6
9 ENDTBL
2 XSECTN    81      1.0
8                   0.2         0.0         0.0
8                   0.3         5.0         2.3
8                   0.4         12.0        4.0
8                   0.53        25.0        7.1
8                   0.6         33.0        9.4
8                   0.8         84.0        16.5
8                   1.0         152.0       23.4
9 ENDTBL
2 XSECTN    80      1.0
8                   0.1         0.0         0.0
8                   0.24        2.7         1.4
8                   0.5         18.1        4.6
8                   0.6         24.8        6.2
8                   0.7         36.4        7.7
8                   0.8         49.8        9.4
8                   0.9         64.7        11.0
8                   1.0         81.2        12.6
9 ENDTBL
2 XSECTN    84      1.0
8                   0.0         0.0         0.0
8                   .25         10.0        6.3
8                   .50         31.2        12.5
8                   .75         60.6        18.8
8                   1.0         96.7        25.0
8                   1.5         185.4       37.5
8                   2.0         292.6       50.0
9 ENDTBL
2 XSECTN    85      1.0
8                   .5          0.0         0.0
8                   .75         33.8        25.0
8                   1.0         96.0        50.0
```

```
8                    1.25        175.0       75.0
8                    1.5         270.0       100.0
9 ENDTBL
2 XSECTN    86       1.0
8                    1301.2      0.0         0.0
8                    1301.7      371.0       173.
8                    1302.       821.0       416.
8                    1302.5      2440.       1003.
9 ENDTBL
2 XSECTN    88       1.0
8                    .50         0.0         0.0
8                    1.0         28.0        21.0
8                    1.5         185.0       73.5
8                    2.0         414.0       126.0
9 ENDTBL
2 XSECTN    89       1.0
8                    0.0         0.0         0.0
8                    0.25        9.9         5.2
8                    0.50        31.8        10.8
8                    0.75        63.3        16.7
8                    1.0         103.6       23.0
8                    1.5         209.8       36.8
8                    2.0         349.5       52.0
9 ENDTBL
2 XSECTN    99       1.0
8                    1299.       0.0         0.0
8                    1300.       32.2        15.0
8                    1301.       330.8       140.3
8                    1301.6      944.        323.
8                    1302.       2115.       523.7
9 ENDTBL
3 STRUCT     08
8                    0.          0.          0.
8                    2.          132.        7.6
8                    4.          360.        15.7
8                    6.          540.        24.1
8                    8.          660.        33.1
8                    10.         780.        42.4
8                    12.         900.        52.3
8                    14.         960.        62.5
8                    18.         1140.       84.3
9 ENDTBL
6 RUNOFF 1  10       5  .44      88.         .65         1 0 0 1   1
6 DIVERT 6  81   5 1 2  0.0      .67         80.         1     1   1
6 REACH  3  13   2   5  2640.    1.5         1.6         1     1   1
6 REACH  3  15   1   2  2900.    1.5         1.6         1     1   1
```

**********80-80 LIST OF INPUT DATA (CONTINUED)**********

```
6 RUNOFF 1  16      6  0.34       87.        .35       1     1   1
6 ADDHYD 4  17   5 6 7                                  1     1   1
6 DIVERT 6  82   7 3 5  0.0001     .33        83.0      1     1   1
6 REACH  3  21   3   1  2640.      1.5        1.6       1     1   1
6 REACH  3  23   5   3  1150.      1.5        1.6       1     1   1
6 ADDHYD 4  25   3 2 7                                  1     1   1
6 RUNOFF 1  26      5  0.79       85.        .30       1     1   1
6 ADDHYD 4  27   5 7 6                                  1 1   1   1
6 RESVOR 2    08 6   7  0.001                           1     1   1
6 REACH  3  27   7   5  2000.      1.5        1.6       1     1   1
6 RUNOFF 1  28      6  .07        85.        .27       1     1   1
6 ADDHYD 4  29   5 6 4                                  1     1   1
6 RUNOFF 1  34      5  .03        85.        .37       1     1   1
6 ADDHYD 4  33   5 1 7                                  1     1   1
6 DIVERT 6 100   7 6 1  .0001      50.        102.      1     1   1
6 REACH  3 103   6   5  850.       1.0        1.38      1     1   1
6 ADDHYD 4 104   5 4 6                                  1     1   1
6 REACH  3 104   6   4  1900.      0.5        1.57      1     1   1
6 RUNOFF 1  58      5  0.11       85.        .36       1     1   1
6 ADDHYD 4 106   5 4 7                                  1     1   1
6 REACH  3 105   7   4  2000.      0.4        1.58      1     1   1
6 SAVMOV 5 107   1   7                                  1         1
6 RUNOFF 1  32      5  .17        85.        .65       1     1   1
6 ADDHYD 4  35   5 7 1                                  1 1   1   1
6 RUNOFF 1  36      5  .21        88.        .16       1     1   1
6 DIVERT 6  84   5 6 3            .50        85.0      1     1   1
6 REACH  3  39   6   5  800.       1.5        1.6       1     1   1
6 RUNOFF 1  40      7  .05        86.        0.12      1     1   1
6 ADDHYD 4  41   5 7 6                                  1     1   1
6 REACH  3  45   6   5  1300.      1.5        1.6       1     1   1
6 RUNOFF 1  97      6  .03        85.        .22       1     1   1
6 ADDHYD 4  45   5 6 7                                  1     1   1
6 DIVERT 6  89   7 5 6            .50        75.       1     1   1
6 REACH  3   2   5   2  1300.      1.6        1.38      1     1   1
6 REACH  3  43   3   7  1500.      1.5        1.6       1     1   1
6 RUNOFF 1  95      5  .03        85.        .22       1     1   1
6 ADDHYD 4  43   7 5 3                                  1     1   1
6 REACH  3   1   6   5  1050.      .43        1.52      1     1   1
6 ADDHYD 4  90   3 5 6                                  1     1   1
6 REACH  3  91   6   7  1100.      .50        1.65      1     1   1
6 RUNOFF 1  48      5  .15        85.       0.31       1     1   1
6 ADDHYD 4  51   1 5 6                                  1     1   1
6 RUNOFF 1  30      5  .01        85.        .17       1     1   1
6 DIVERT 6  86   5 1 3            .50       99.0       1     1   1
6 REACH  3  53   1   5  2800.      1.5        1.6       1 1   1   1
6 ADDHYD 4  55   6 5 1                                  1 1   1   1
```

```
**********************80-80 LIST OF INPUT DATA (CONTINUED)*********************

 6 REACH  3  57   3   5  1500.       1.5        1.6        1     1   1
 6 SAVMOV 5 111   5   3                                     1         1
 6 DIVERT 6   4   3 1 6   36.       0.50        5.0        1     1   1
 6 SAVMOV 5   4   6   3                                     1         1
 6 DIVERT 6  88   3 5 6             0.50        6.0        1     1   1
 6 ADDHYD 4  88   5 1 3                                     1     1   1
 6 SAVMOV 5  88   6   1                                     1         1
 6 DIVERT 6  76   2 6 5   18.       .50         77.        1     1   1
 6 SAVMOV 5 112   1   2                                     1         1
 6 SAVMOV 5   2   6   1                                     1         1
 6 ADDHYD 4   2   5 2 6                                     1     1   1
 6 SAVMOV 5   3   6   5                                     1         1
 6 ADDHYD 4   1   1 3 6                                     1     1   1
 6 SAVMOV 5   1   6   1                                     1         1
 6 REACH  3   3   5   6  500.       .19         1.7        1     1   1
 6 RUNOFF 1  96       3  .03        85.         .20        1     1   1
 6 ADDHYD 4   3   3 6 5                                     1     1   1
 6 REACH  3  47   5   6  800.       .43         1.56       1     1   1
 6 ADDHYD 4  47   7 6 3                                     1     1   1
 6 SAVMOV 5  47   3   6                                     1         1
 6 RUNOFF 1  46       5  .03        88.         0.20       1     1   1
 6 ADDHYD 4  49   5 6 3                                     1     1   1
 6 REACH  3  63   1   7  1350.      1.5         1.6        1     1   1
 6 RUNOFF 1  64       5  0.06       85.         .20        1     1   1
 6 ADDHYD 4  65   5 7 2                                     1     1   1
 6 RUNOFF 1  66       5  0.03       85.         0.21       1     1   1
 6 ADDHYD 4  67   5 2 7                                     1 1   1   1
 6 RUNOFF 1  72       5  0.14       85.         0.42       1     1   1
 6 ADDHYD 4  73   5 3 2                                     1     1   1
 6 ADDHYD 4 115   7 4 5                                     1 1   1   1
   ENDATA
 7 INCREM 6             0.075
 7 COMPUT 7  10   115   0.0        1.44        24.        2 2  01  01
   ENDCMP 1
 7 COMPUT 7  10   115   0.0        2.53        24.        2 2  01  02
   ENDCMP 1
 7 COMPUT 7  10   115   0.0        3.12        24.        2 2  01  03
   ENDCMP 1
 7 COMPUT 7  10   115   0.0        4.04        24.0       2 2  01  04
   ENDCMP 1
   ENDJOB 2

*******************************END OF 80-80 LIST*******************************
```

COMPUTER PROGRAM FOR PROJECT FORMULATION - HYDROLOGY USER NOTES

THE USERS MANUAL FOR THIS PROGRAM IS THE MAY 1982 DRAFT OF TR-20. CHANGES FROM THE 2/14/74 VERSION INCLUDE:

REACH ROUTING - THE MODIFIED ATT-KIN ROUTING PROCEDURE REPLACES THE CONVEX METHOD. INPUT DATA PREPARED FOR PREVIOUS PROGRAM VERSIONS USING CONVEX ROUTING COEFFICIENTS WILL NOT RUN ON THIS VERSION.

THE PREFERRED TYPE OF DATA ENTRY IS CROSS SECTION DATA REPRESENTATIVE OF A REACH. IT IS RECOMMENDED THAT THE OPTIONAL CROSS SECTION DISCHARGE-AREA PLOTS BE OBTAINED WHENEVER NEW CROSS SECTION DATA IS ENTERED. THE PLOTS SHOULD BE CHECKED FOR REASONABLENESS AND ADEQUACY OF INPUT DATA FOR THE COMPUTATION OF "M" VALUES USED IN THE ROUTING PROCEDURE.

GUIDELINES FOR DETERMINING OR ANALYZING REACH LENGTHS AND COEFFICIENTS (X,M) ARE AVAILABLE IN THE USERS MANUAL. SUMMARY TABLE 2 DISPLAYS REACH ROUTING RESULTS AND ROUTING PARAMETERS FOR COMPARISON AND CHECKING.

HYDROGRAPH GENERATION - THE PROCEDURE TO CALCULATE THE INTERNAL TIME INCREMENT AND PEAK TIME OF THE UNIT HYDROGRAPH HAVE BEEN IMPROVED. PEAK DISCHARGES AND TIMES MAY DIFFER FROM THE PREVIOUS VERSION. OUTPUT HYDROGRAPHS ARE STILL INTERPOLATED, PRINTED, AND ROUTED AT THE USER SELECTED MAIN TIME INCREMENT.

INTERMEDIATE PEAKS - METHOD ADDED TO PROVIDE DISCHARGES AT INTERMEDIATE POINTS WITHIN REACHES WITHOUT ROUTING.

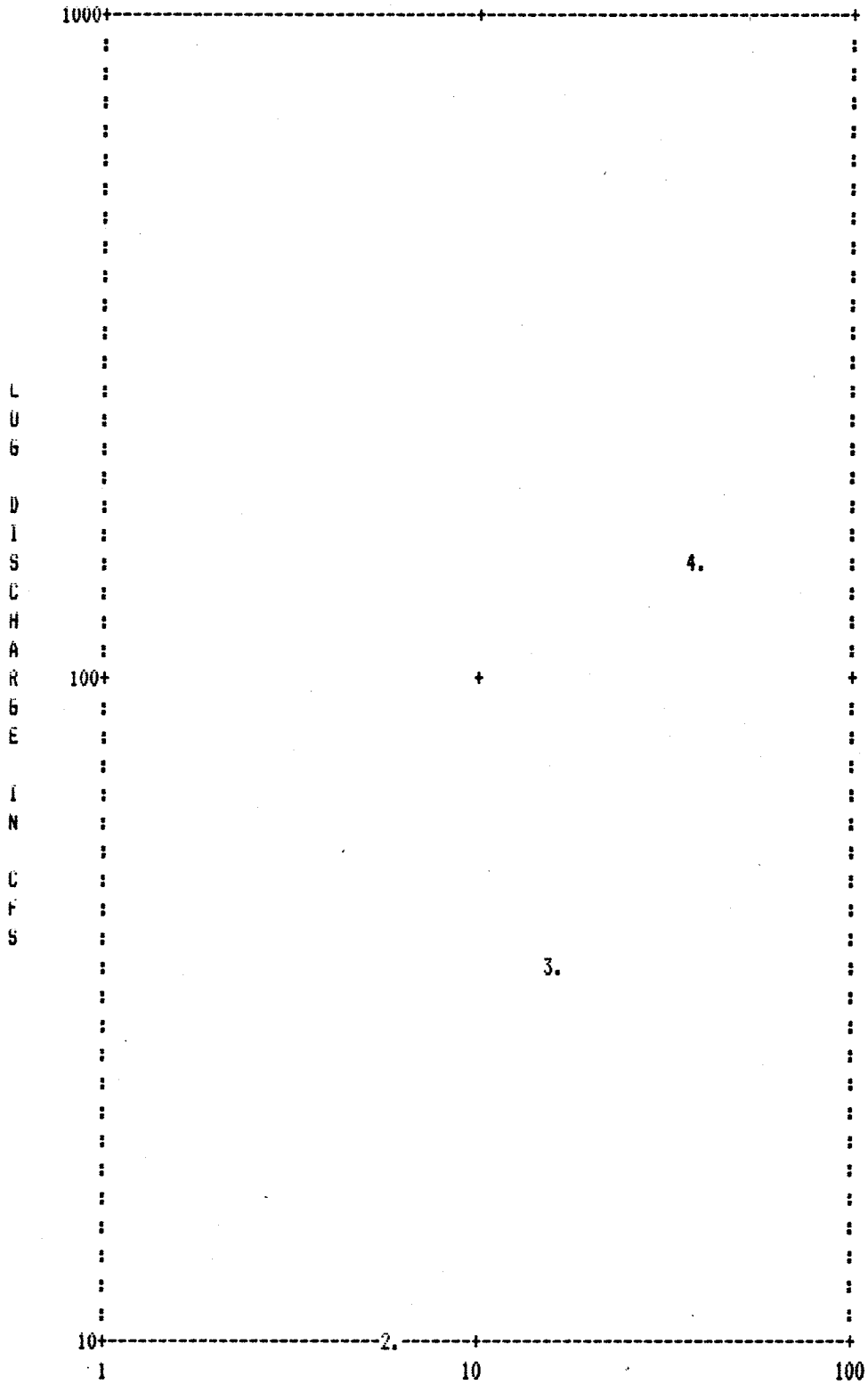
OTHER - THIS VERSION CONTAINS SOME ADDITIONS TO THE INPUT AND NUMEROUS MODIFICATIONS TO THE OUTPUT. USER OPTIONS HAVE BEEN MODIFIED AND AUGMENTED ON THE JOB RECORD, RAINTABLES ADDED, ERROR AND WARNING MESSAGES EXPANDED, AND THE SUMMARY TABLES COMPLETELY REVISED. THE HOLDOUT OPTION IS NOT OPERATIONAL AT THIS TIME.

PROGRAM QUESTIONS OR PROBLEMS SHOULD BE DIRECTED TO HYDRAULIC ENGINEERS AT THE SCS NATIONAL TECHNICAL CENTERS:

CHESTER, PA (NORTHEAST) -- 215-499-3933, FORT WORTH, TX (SOUTH) -- 334-5242 (FTS)
LINCOLN, NB (MIDWEST) -- 541-5318 (FTS), PORTLAND, OR (WEST) -- 423-4099 (FTS)
OR HYDROLOGY UNIT, ENGINEERING DIVISION, LANHAM, MD -- 436-7383 (FTS).

PROGRAM CHANGES SINCE MAY 1982:

12/17/82 - CORRECT PEAK RATE FACTOR FOR USER ENTERED DIMHYD
CORRECT REACH ROUTING PEAK TRAVEL TIME PRINTED WITH FULLPRINT OPTION
5/02/83 - CORRECT COMPUTATIONS FOR ---
1. DIVISION OF BASEFLOW IN DIVERT OPERATION
2. HYDROGRAPH VOLUME SPLIT BETWEEN BASEFLOW AND ABOVE BASEFLOW
3. CROSS SECTION DATA PLOTTING POSITION
4. INTERMEDIATE PEAK WHEN "FROM" AREA IS LARGER THAN "THRU" AREA
5. STORAGE ROUTED REACH TRAVEL TIME FOR MULTIPEAK HYDROGRAPH
6. ORDERING "FLOW-FREQ" FILE FROM SUMMARY TABLE #3 DATA
7. BASEFLOW ENTERED WITH READHYD
8. LOW FLOW SPLIT DURING DIVERT PROCEDURE #2 WHEN SECTION RATINGS START AT DIFFERENT ELEVATIONS
ENHANCEMENTS ---
1. REPLACE USER MANUAL ERROR CODES (PAGE 4-9 TO 4-11) WITH MESSAGES
2. LABEL OUTPUT HYDROGRAPH FILES WITH CROSS SECTION/STRUCTURE, ALTERNATE AND STORM NO'S
09/01/83 - CORRECT INPUT AND OUTPUT ERRORS FOR INTERMEDIATE PEAKS
CORRECT COMBINATION OF RATING TABLES FOR DIVERT
CHECK REACH ROUTING PARAMETERS FOR ACCEPTABLE LIMITS
ELIMINATE MINIMUM REACH TRAVEL TIME WHEN ATT-KIN COEFFICIENT EQUALS ONE

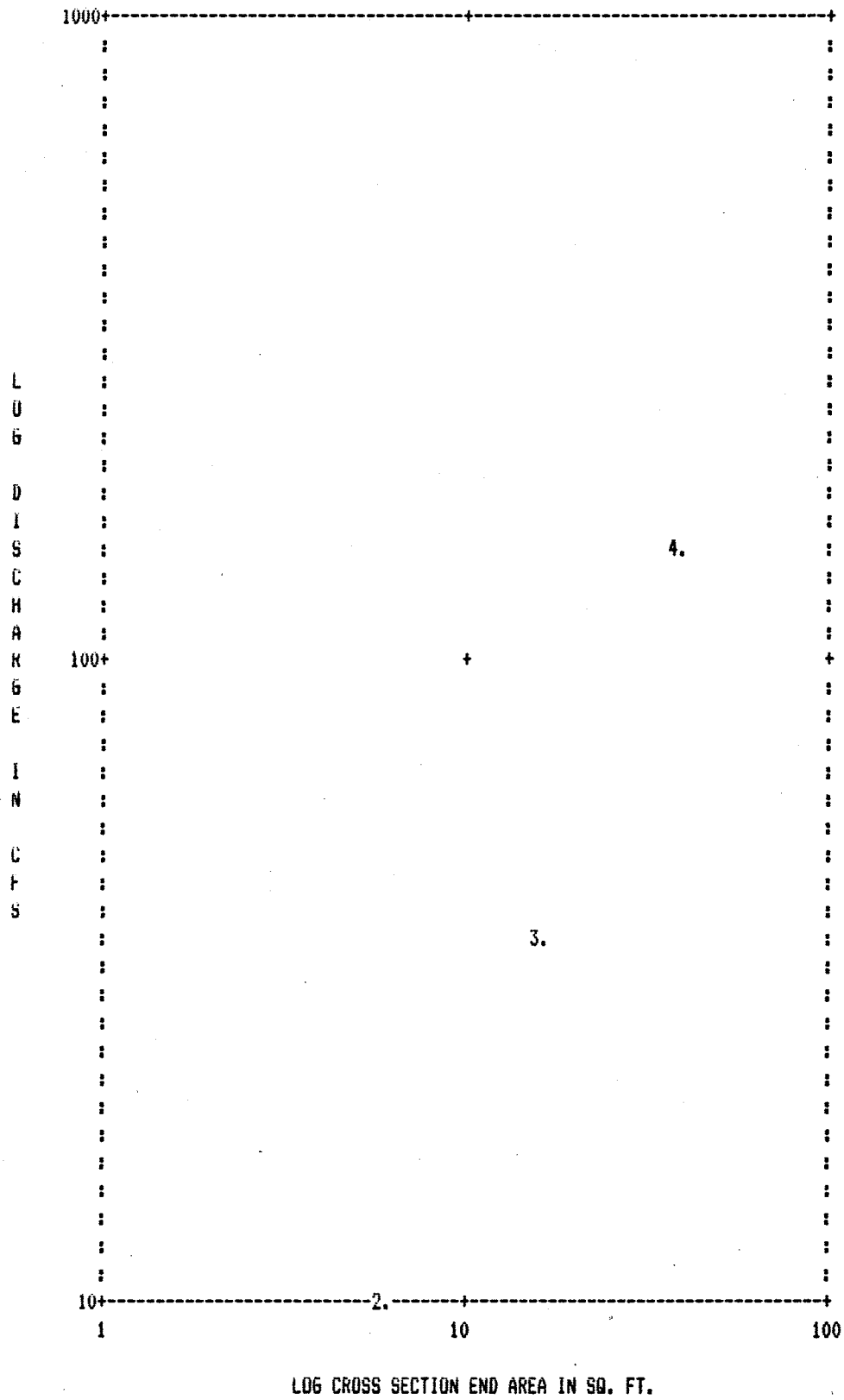


CROSS SECTION 5 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

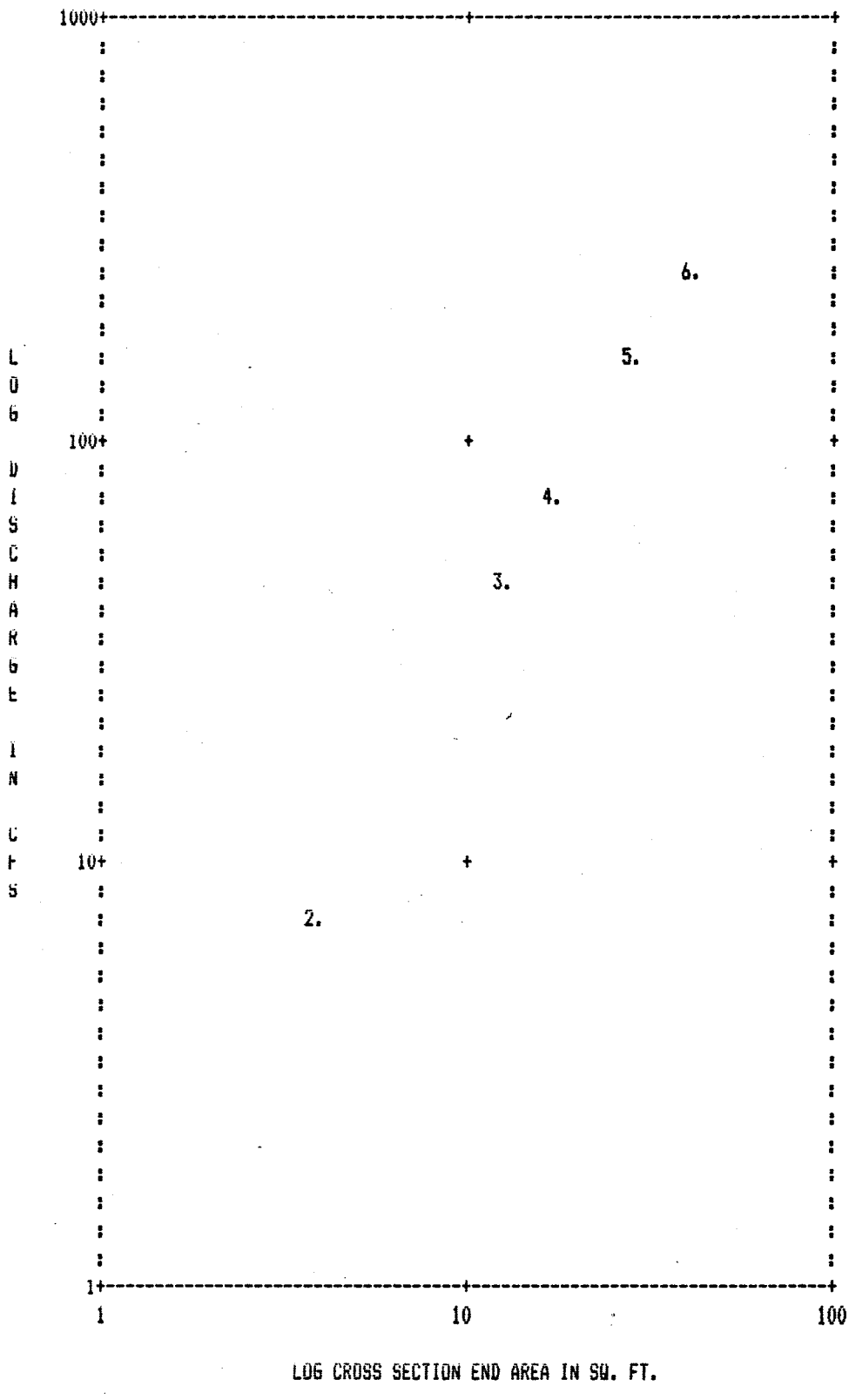


CROSS SECTION 6 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

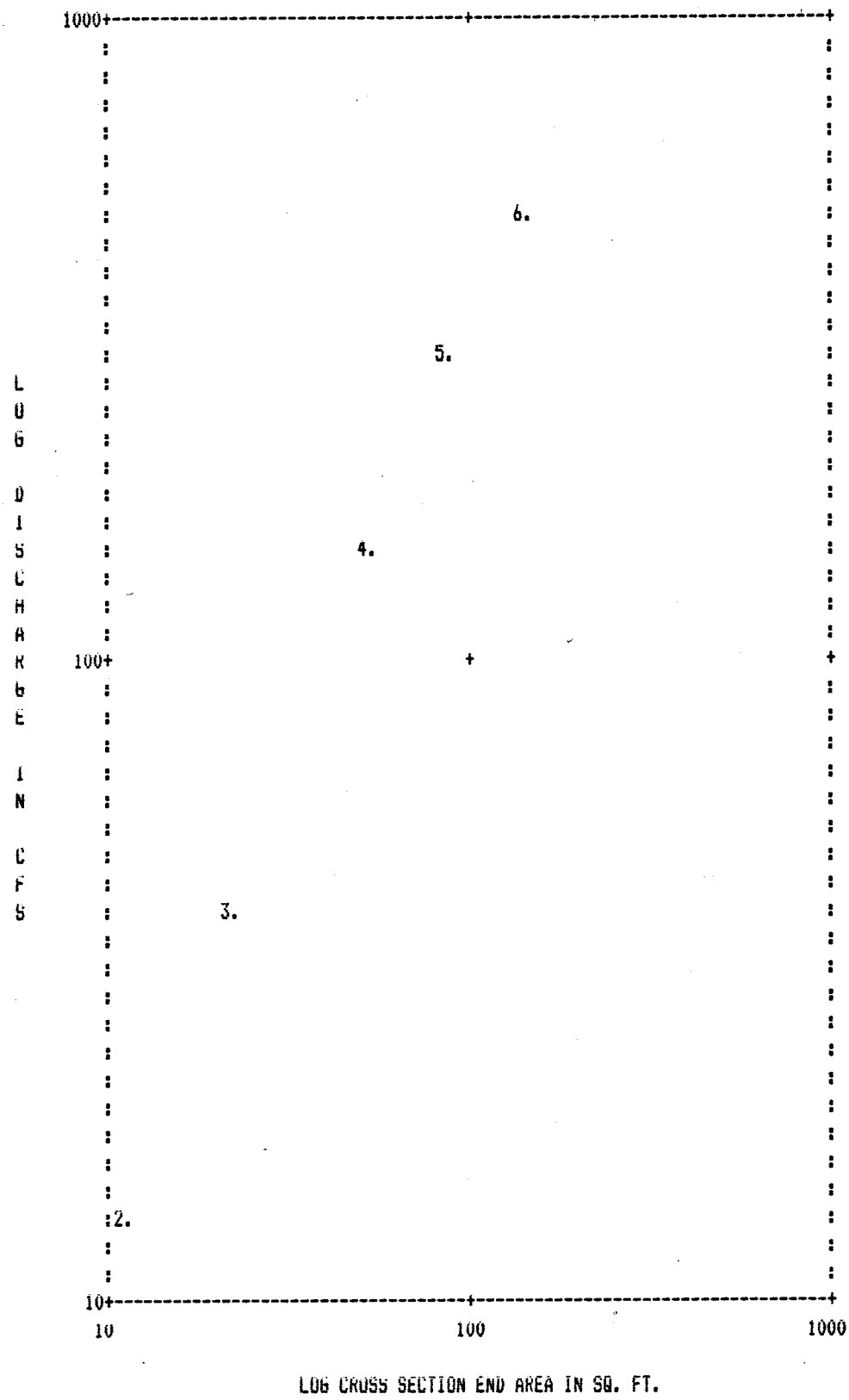


CROSS SECTION 75 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.56
2	7.10	3.90	1.56
3	45.90	12.90	1.56
4	75.60	18.00	1.54
5	155.00	29.30	1.50
6	261.00	42.00	1.48

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

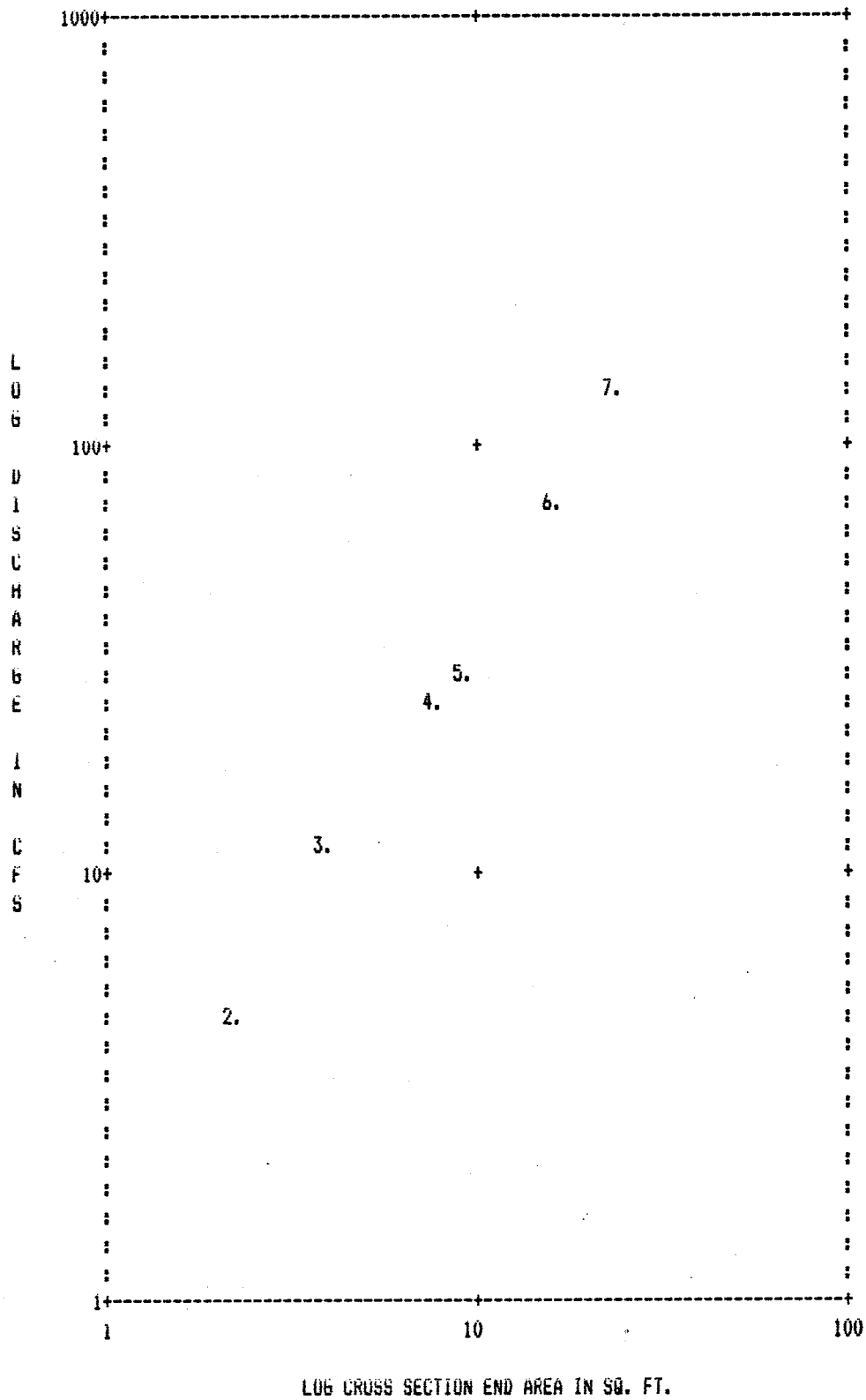


CROSS SECTION 77 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.61
2	13.00	11.00	1.61
3	41.00	22.50	1.61
4	142.00	53.00	1.49
5	300.00	90.30	1.45
6	480.00	141.00	1.30

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

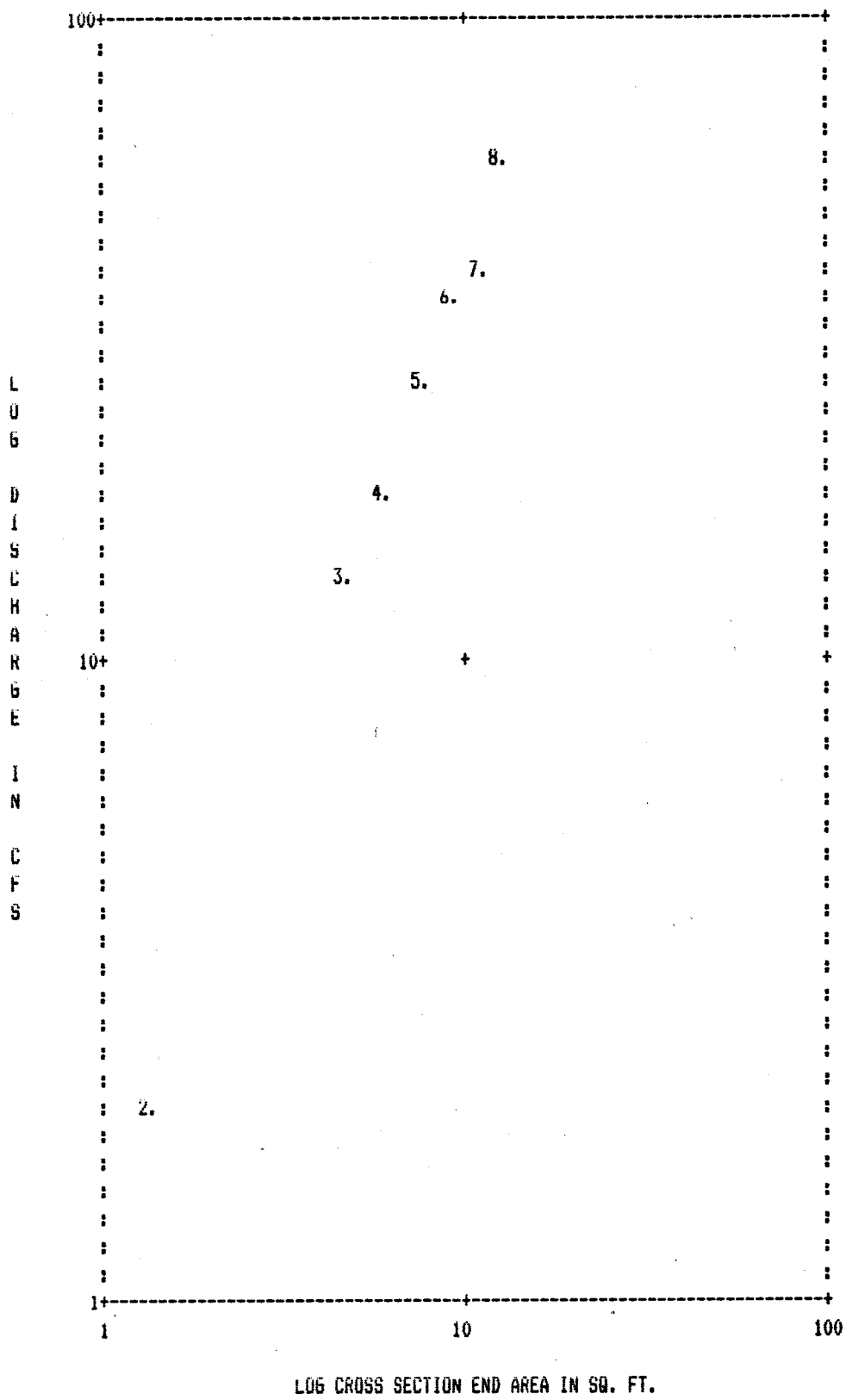


CROSS SECTION 82 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.42
2	5.00	2.30	1.42
3	11.00	4.00	1.42
4	27.00	7.80	1.38
5	31.00	9.20	1.31
6	78.00	16.20	1.50
7	142.00	23.20	1.58

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

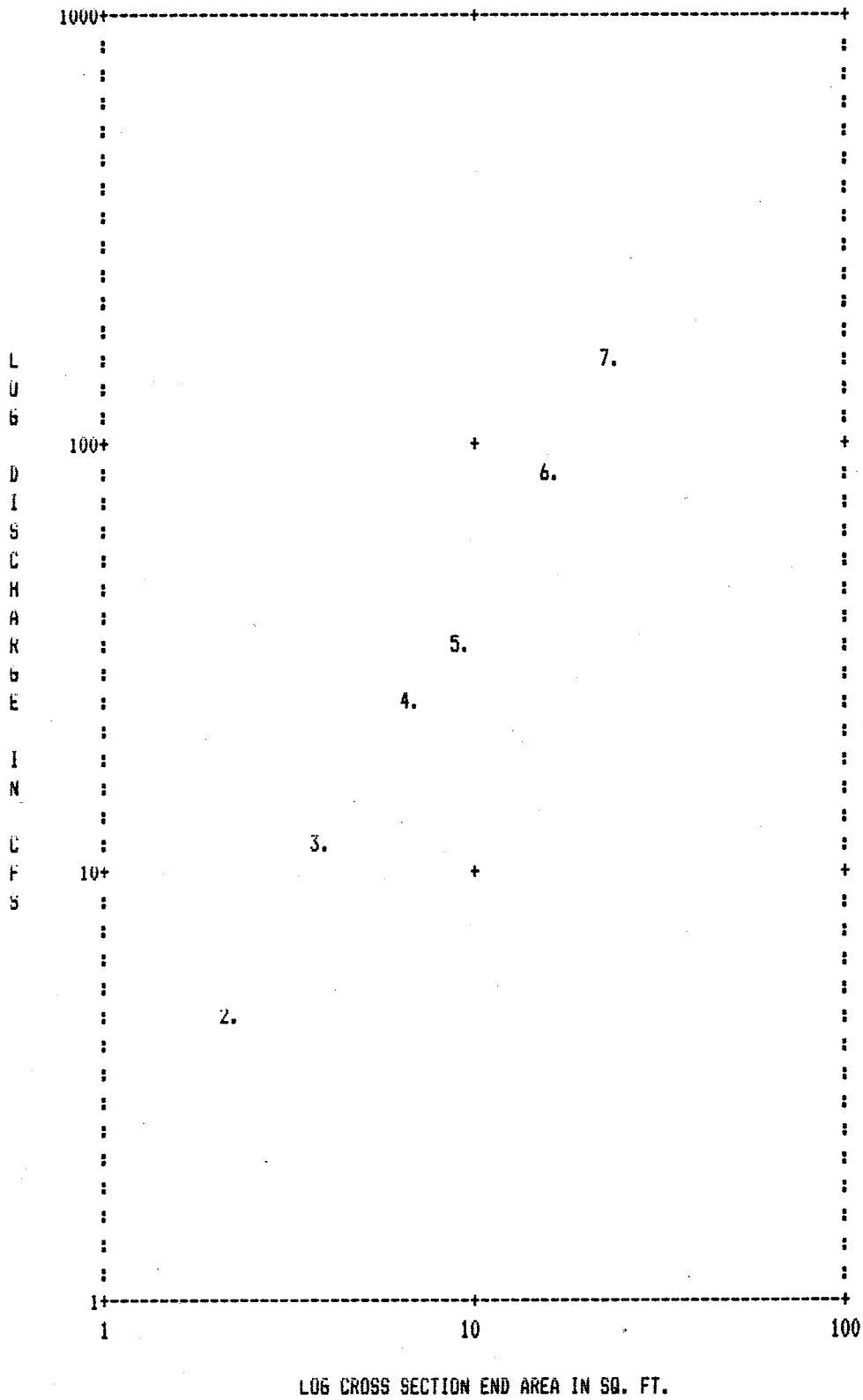


CROSS SECTION 83 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.57
2	2.00	1.40	1.57
3	13.00	4.60	1.57
4	18.00	6.20	1.44
5	27.00	7.80	1.55
6	37.00	9.40	1.59
7	40.00	11.00	1.50
8	60.00	12.60	2.00

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

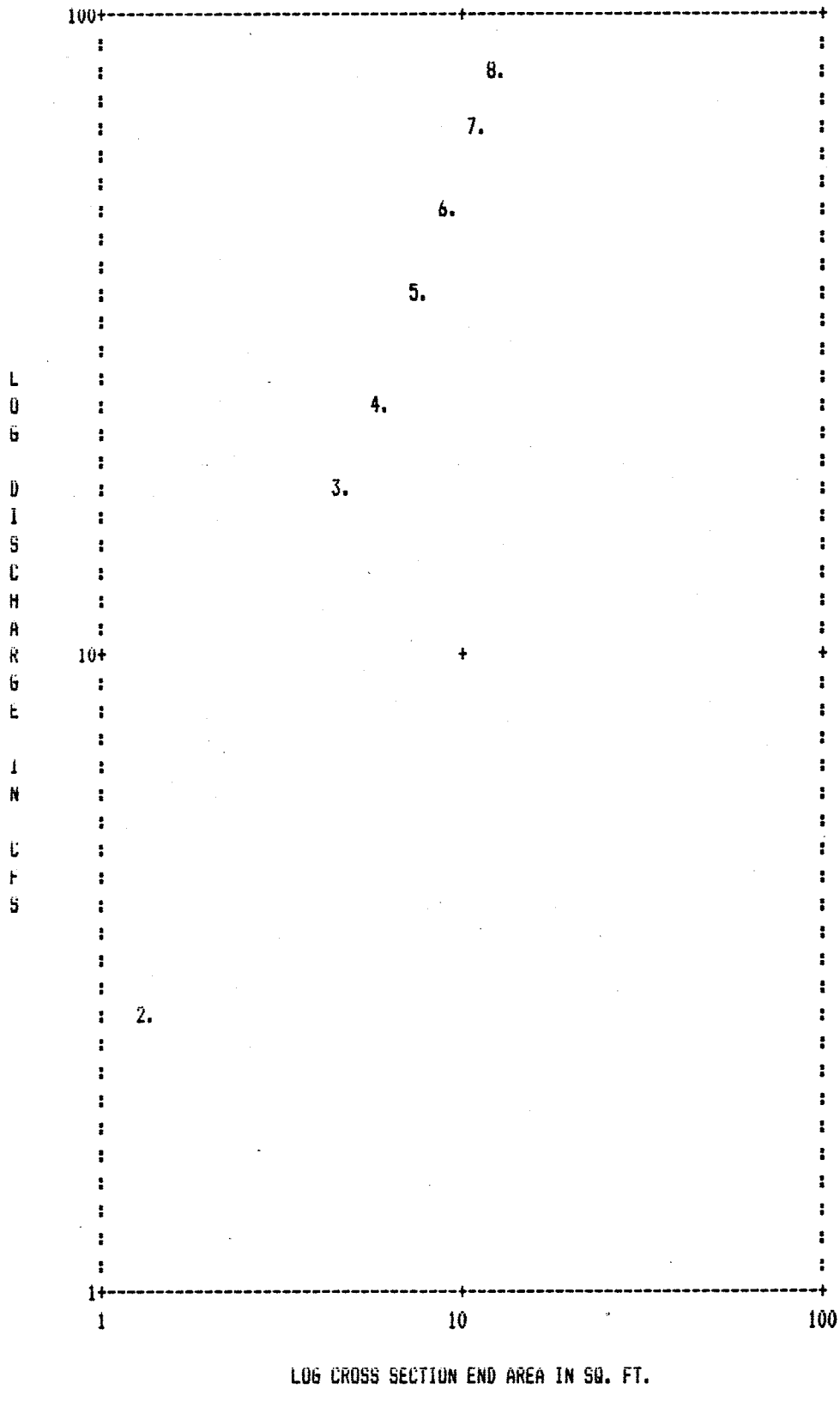


CROSS SECTION 81 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.58
2	5.00	2.30	1.58
3	12.00	4.00	1.58
4	25.00	7.10	1.42
5	33.00	9.40	1.32
6	84.00	16.50	1.53
7	152.00	23.40	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

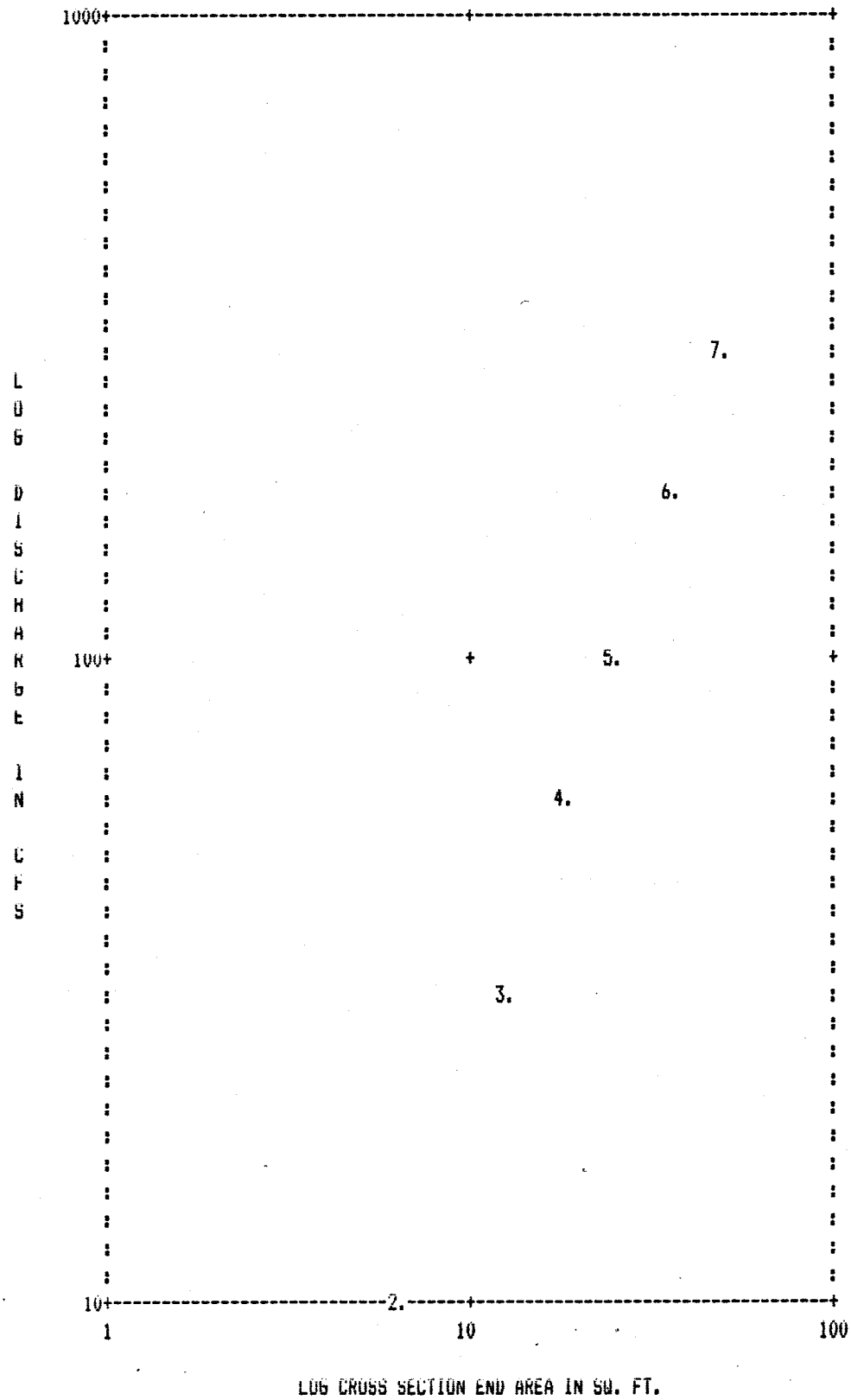


CROSS SECTION 80 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	2.70	1.40	1.60
3	18.10	4.60	1.60
4	24.80	6.20	1.45
5	36.40	7.70	1.55
6	49.80	9.40	1.56
7	64.70	11.00	1.58
8	81.20	12.60	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

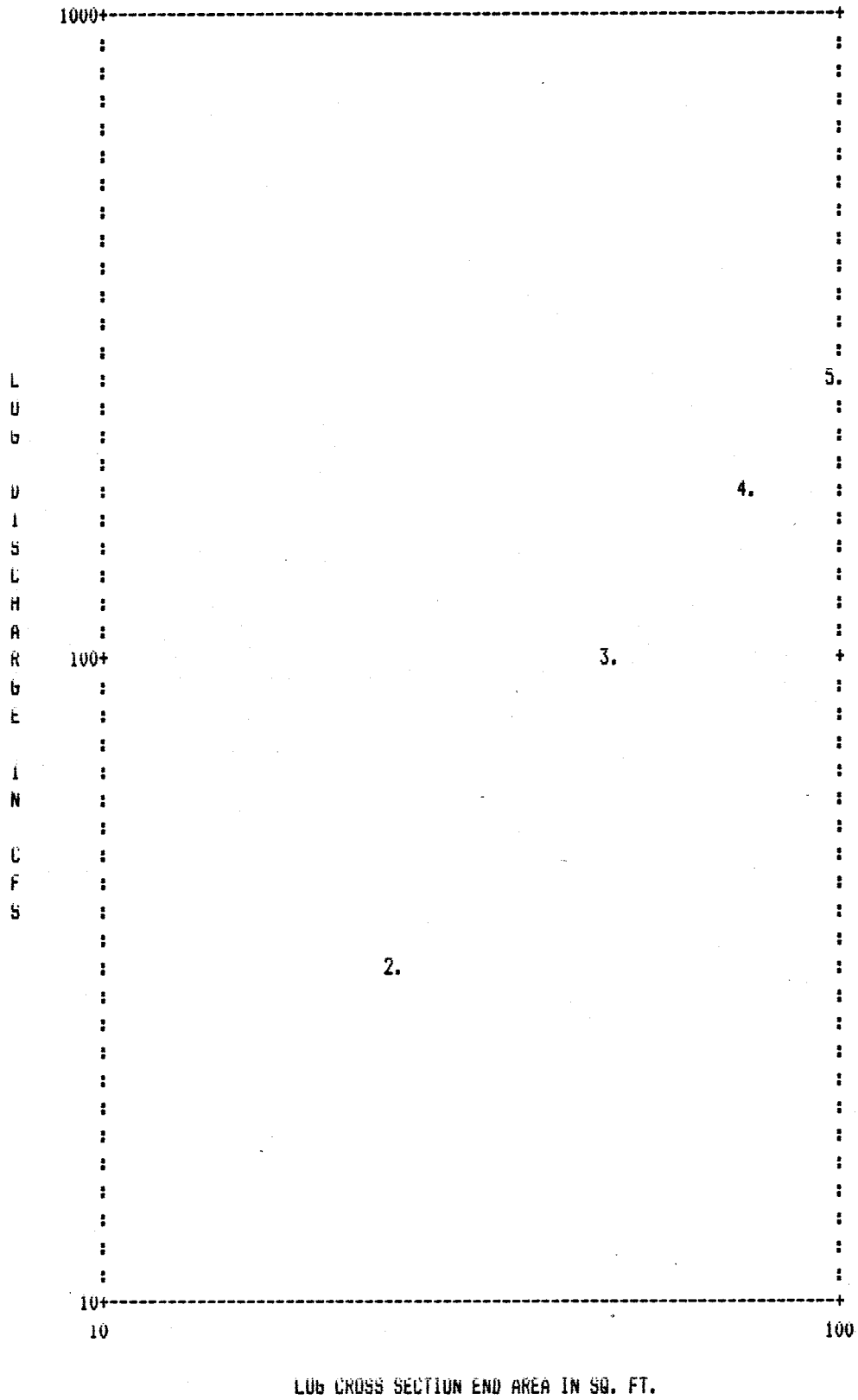


CROSS SECTION 84 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.66
2	10.00	6.30	1.66
3	31.20	12.50	1.66
4	60.60	18.80	1.64
5	96.70	25.00	1.64
6	185.40	37.50	1.62
7	292.60	50.00	1.61

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

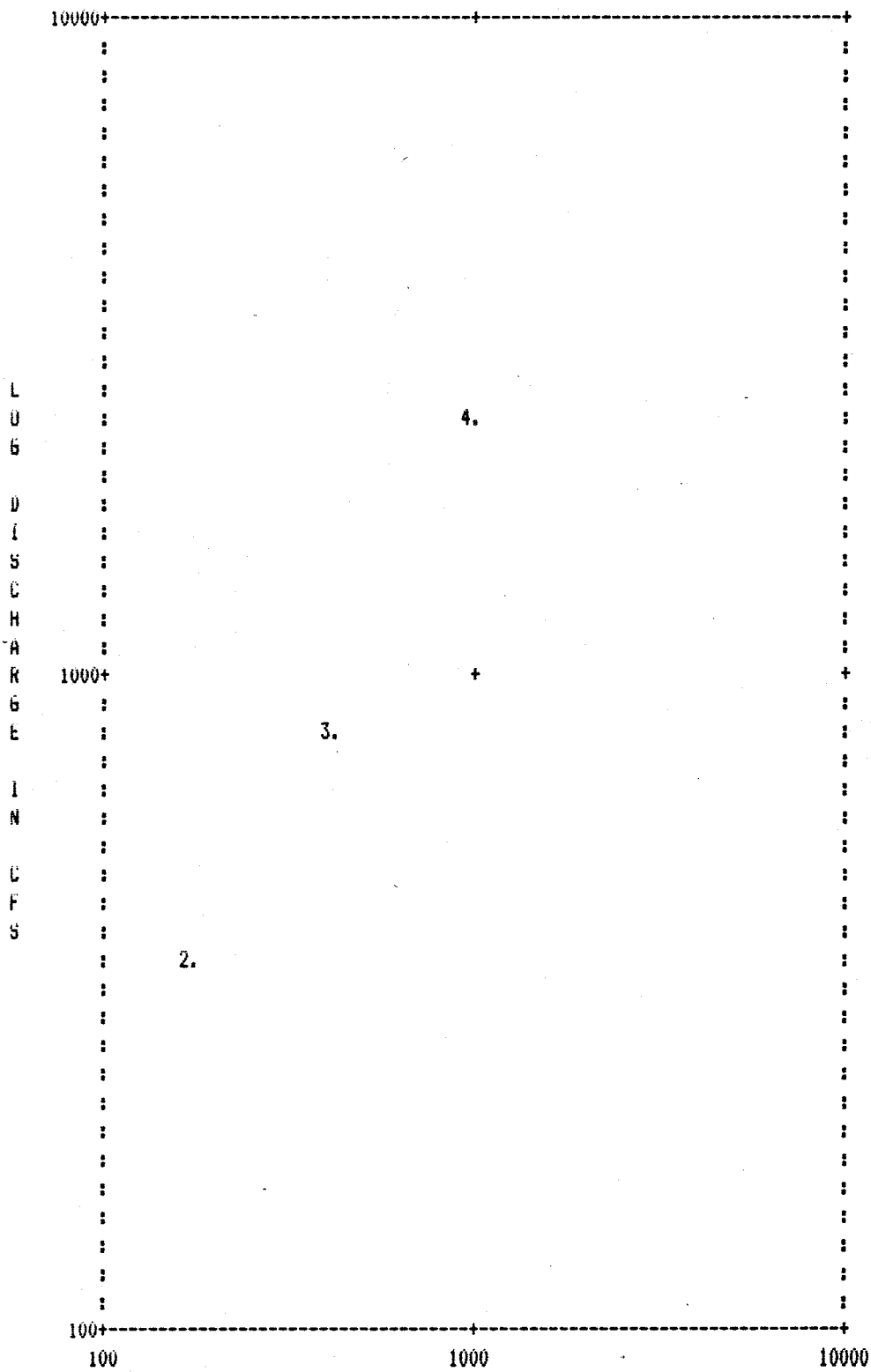


CROSS SECTION 85 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	33.80	25.00	1.51
3	96.00	50.00	1.51
4	175.00	75.00	1.49
5	270.00	100.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



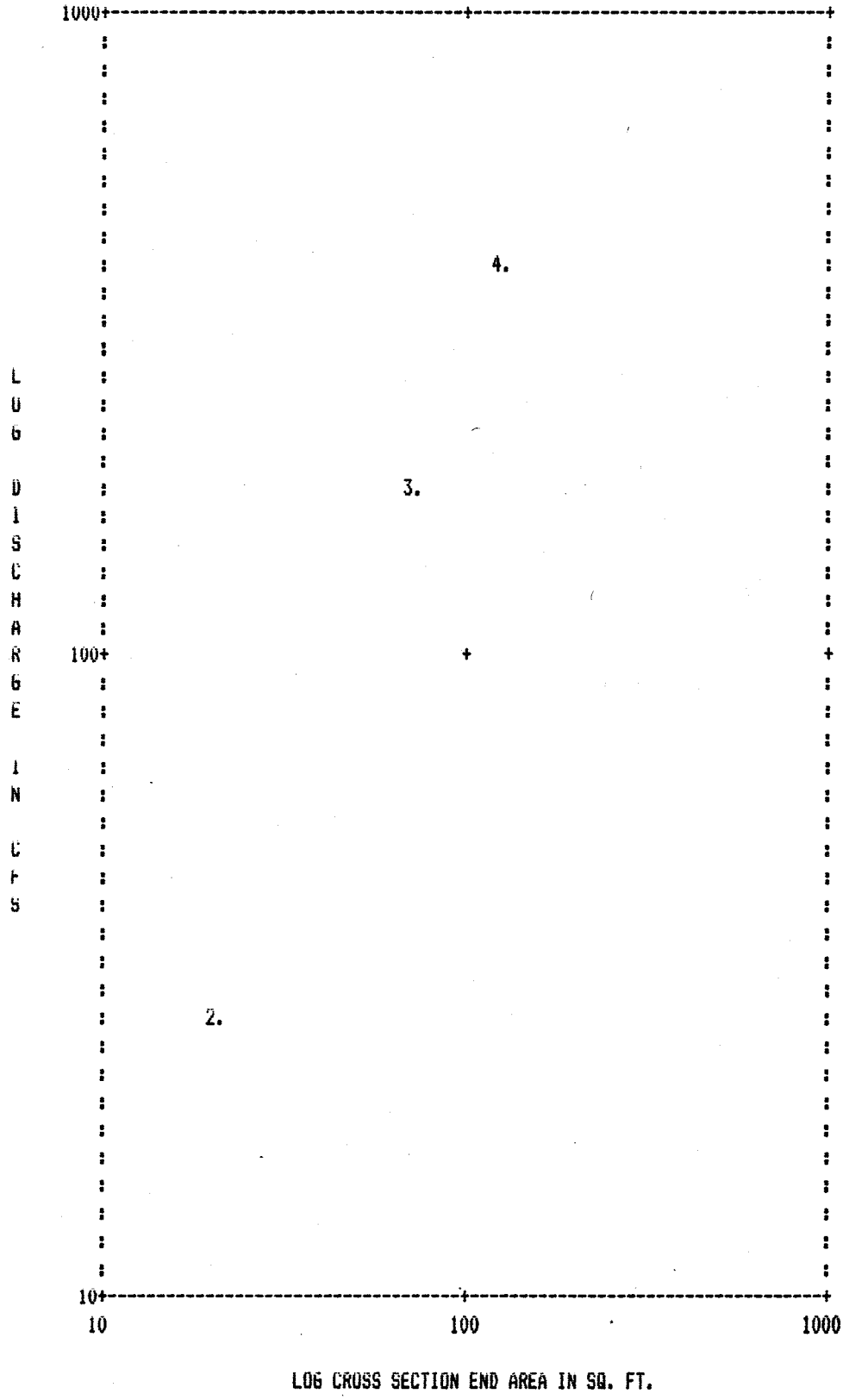
CROSS SECTION 86 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	0.91 *
2	371.00	173.00	0.91 *
3	821.00	416.00	0.91 *
4	2440.00	1003.00	1.13

A STAR (*) INDICATES A COMPUTED M VALUE IS OUTSIDE THE 1.00 - 2.00 RANGE. IN ROUTING THIS REACH THE M VALUE WILL BE SET TO THE CLOSEST LIMIT VALUE.

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

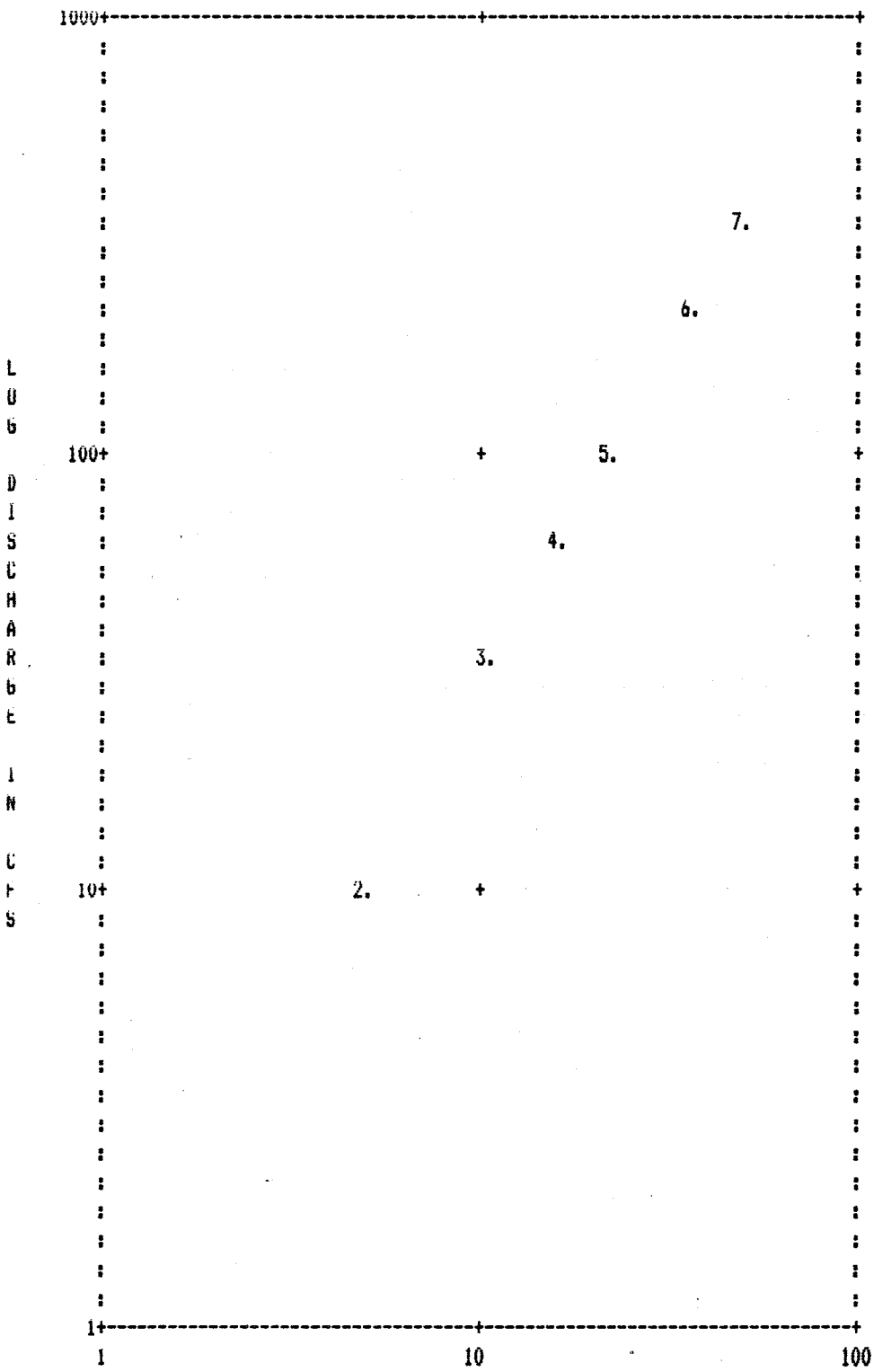


CROSS SECTION 88 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	28.00	21.00	1.51
3	185.00	73.50	1.51
4	414.00	126.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

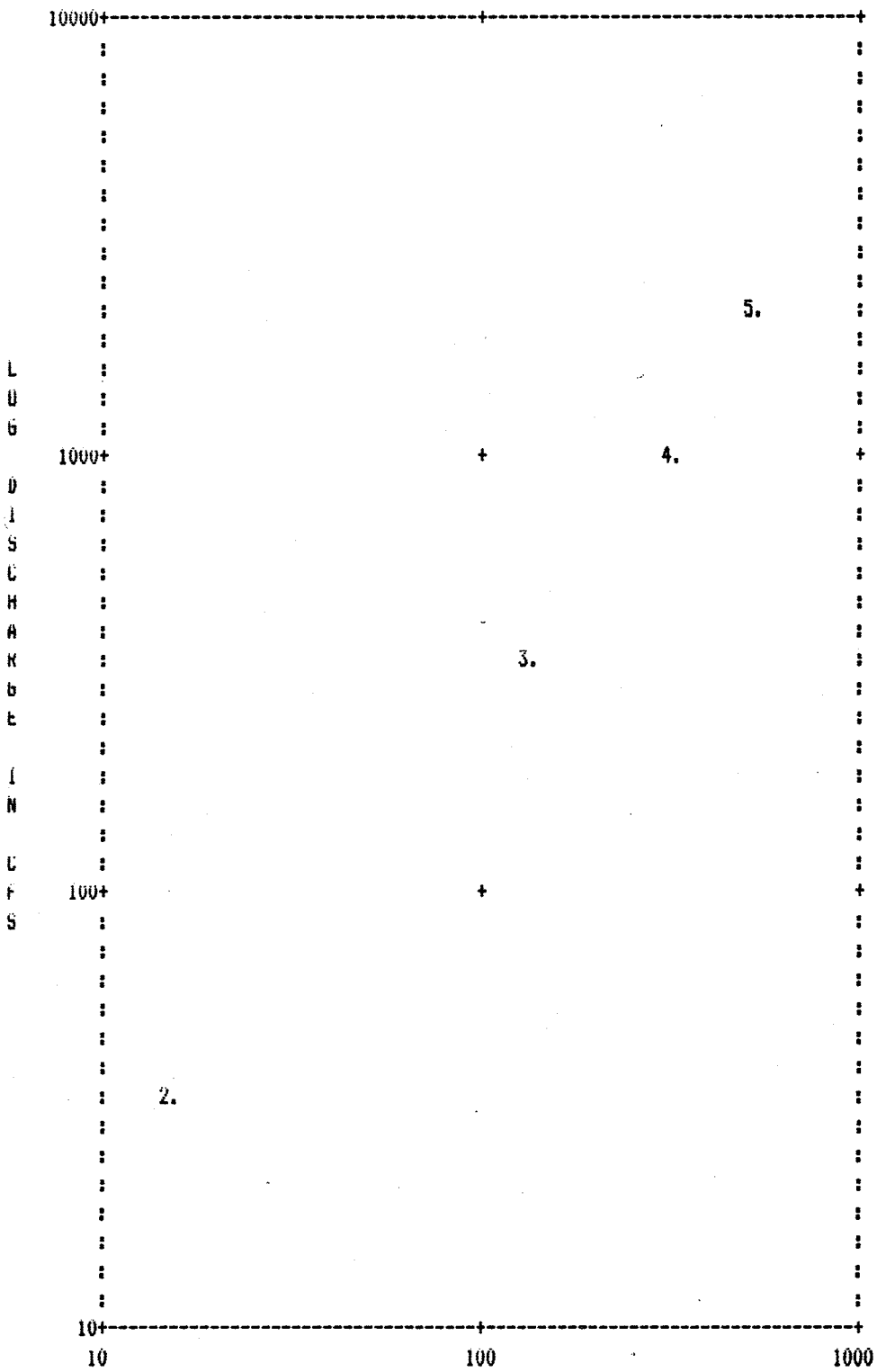


CROSS SECTION 89 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	9.90	5.20	1.60
3	31.80	10.80	1.60
4	63.30	16.70	1.59
5	103.60	23.00	1.57
6	209.80	36.80	1.53
7	349.50	52.00	1.51

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



CROSS SECTION 99 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.04
2	32.20	15.00	1.04
3	330.80	140.30	1.04
4	944.00	323.00	1.18
5	2115.00	523.70	1.45

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

STARTING TIME = 0.00 RAIN DEPTH = 1.44 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	93.78	(RUNOFF)
15.13	29.67	(RUNOFF)
16.17	41.52	(RUNOFF)
21.15	3.31	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 175.06 CFS-HRS, 14.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	57.73	0.70
15.13	15.45	0.43
16.17	22.86	0.51

RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.85 CFS-HRS, 7.43 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	36.05	0.70
15.13	14.22	0.43
16.17	18.67	0.51
21.15	2.31	0.22

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.21 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	34.85	(NULL)
15.25	13.80	(NULL)
16.29	18.04	(NULL)
21.27	2.31	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.16 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	55.54	(NULL)
15.24	14.89	(NULL)
16.29	22.01	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.83 CFS-HRS, 7.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	88.30	(RUNOFF)
15.00	27.51	(RUNOFF)
16.02	39.59	(RUNOFF)
20.99	2.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.57 WATERSHED INCHES, 125.44 CFS-HRS, 10.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	(NULL)
15.04	38.86	(NULL)
16.05	52.49	(NULL)
21.02	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.67 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	1.26
15.04	38.86	0.86
16.05	52.49	0.96
21.02	4.80	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 1.00 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	(NULL)
15.04	38.86	(NULL)
16.05	52.49	(NULL)
21.02	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.00 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	149.25	(NULL)
15.07	50.87	(NULL)
16.10	68.18	(NULL)
19.12	6.67	(NULL)
21.08	5.72	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.75 WATERSHED INCHES, 300.43 CFS-HRS, 24.83 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	177.74	(RUNOFF)
14.97	59.39	(RUNOFF)
15.99	85.22	(RUNOFF)
18.99	6.18	(RUNOFF)
20.98	5.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 247.12 CFS-HRS, 20.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	318.72	(NULL)
15.00	107.56	(NULL)
16.03	150.80	(NULL)
19.03	12.82	(NULL)
21.01	11.06	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

10.50	DISCHG	0.01	0.03	0.08	0.17	0.33	0.55	0.82	1.14	1.54	2.10
11.25	DISCHG	2.89	3.96	5.29	6.77	11.90	30.93	69.19	120.26	176.81	234.47
12.00	DISCHG	289.48	318.46	299.45	257.37	220.65	196.78	179.86	165.19	148.53	128.89
12.75	DISCHG	111.30	98.25	89.01	82.10	76.28	70.21	64.11	59.13	55.56	53.01
13.50	DISCHG	51.02	48.96	46.27	43.56	41.44	39.99	38.91	37.99	36.88	35.53
14.25	DISCHG	34.30	33.40	32.79	32.44	35.53	47.93	65.80	81.89	93.42	101.95
15.00	DISCHG	107.56	102.62	84.21	63.64	47.79	36.96	28.71	24.35	34.55	62.65
15.75	DISCHG	92.93	116.22	132.86	145.77	150.09	135.35	109.10	85.37	69.22	57.57
16.50	DISCHG	48.37	40.71	34.42	29.43	25.65	22.86	20.81	19.27	17.96	16.81
17.25	DISCHG	15.87	15.17	14.66	14.28	13.98	13.75	13.57	13.43	13.32	13.25
18.00	DISCHG	13.18	13.00	12.68	12.32	12.05	11.87	11.74	11.67	11.78	12.05
18.75	DISCHG	12.33	12.53	12.67	12.78	12.82	12.71	12.53	12.37	12.27	12.19
19.50	DISCHG	12.12	11.99	11.77	11.53	11.35	11.22	11.13	11.03	10.83	10.55
20.25	DISCHG	10.28	10.09	9.96	9.87	9.88	10.08	10.39	10.65	10.84	10.97
21.00	DISCHG	11.06	11.00	10.76	10.47	10.25	10.10	9.98	9.65	8.53	6.71
21.75	DISCHG	5.01	3.80	2.95	2.30	1.78	1.35	1.02	0.76	0.56	0.42

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 547.55 CFS-HRS, 45.25 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.52	165.76	2.30
15.20	71.61	1.09
16.25	93.52	1.42
21.06	10.99	0.17

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 544.25 CFS-HRS, 44.98 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.60	165.72	(NULL)
15.28	71.58	(NULL)
16.33	93.48	(NULL)
21.14	10.99	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 543.97 CFS-HRS, 44.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	16.27	(RUNOFF)
14.97	5.37	(RUNOFF)
15.97	7.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 21.97 CFS-HRS, 1.82 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.59	169.97	(NULL)
15.24	72.84	(NULL)
16.31	95.12	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 565.93 CFS-HRS, 46.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(RUNOFF)
14.99	2.13	(RUNOFF)
16.02	3.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(NULL)
14.99	2.13	(NULL)
16.02	3.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.08 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(DIVERT)
14.99	2.13	(DIVERT)
16.02	3.07	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.08 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.59	169.97	(NULL)
15.24	72.84	(NULL)
16.31	95.12	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 565.93 CFS-HRS, 46.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.71	168.43	(NULL)
15.36	72.16	(NULL)
16.43	94.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 565.17 CFS-HRS, 46.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	22.90	(RUNOFF)
15.01	7.95	(RUNOFF)
16.02	11.34	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 34.39 CFS-HRS, 2.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.69	174.67	(NULL)
15.27	74.52	(NULL)
16.38	96.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.58 WATERSHED INCHES, 599.56 CFS-HRS, 49.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.83	172.36	(NULL)
15.41	73.88	(NULL)
16.51	96.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.58 WATERSHED INCHES, 598.69 CFS-HRS, 49.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	26.16	(RUNOFF)
15.13	9.72	(RUNOFF)
16.17	13.64	(RUNOFF)
21.15	1.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 52.74 CFS-HRS, 4.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	30.88	(NULL)
15.09	11.54	(NULL)
16.13	16.21	(NULL)
21.11	1.31	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

11.25	DISCHG	0.01	0.04	0.08	0.16	0.42	1.21	2.97	6.03	10.32	15.59
12.00	DISCHG	21.41	26.64	29.98	30.87	29.70	27.40	24.71	21.96	19.39	17.15
12.75	DISCHG	15.25	13.57	12.13	10.92	9.91	9.07	8.36	7.74	7.21	6.76
13.50	DISCHG	6.39	6.07	5.78	5.51	5.25	5.01	4.81	4.64	4.49	4.36
14.25	DISCHG	4.23	4.11	4.01	3.95	4.06	4.56	5.52	6.84	8.32	9.76
15.00	DISCHG	10.95	11.53	11.26	10.18	8.65	7.03	5.49	4.26	3.77	4.46
15.75	DISCHG	6.18	8.55	11.10	13.52	15.38	16.19	15.72	14.23	12.28	10.24
16.50	DISCHG	8.35	6.70	5.43	4.50	3.81	3.30	2.91	2.62	2.40	2.23
17.25	DISCHG	2.08	1.97	1.87	1.80	1.74	1.69	1.65	1.62	1.60	1.58
18.00	DISCHG	1.57	1.56	1.54	1.52	1.49	1.47	1.44	1.42	1.41	1.41

18.75	DISCHG	1.43	1.45	1.47	1.49	1.51	1.52	1.52	1.51	1.49	1.48
19.50	DISCHG	1.47	1.45	1.43	1.42	1.39	1.37	1.36	1.34	1.32	1.30
20.25	DISCHG	1.28	1.25	1.23	1.21	1.20	1.19	1.21	1.23	1.25	1.27
21.00	DISCHG	1.29	1.31	1.31	1.29	1.27	1.25	1.23	1.20	1.13	1.03
21.75	DISCHG	0.89	0.74	0.59	0.46	0.35	0.26	0.19	0.14	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.27 WATERSHED INCHES, 62.06 CFS-HRS, 5.13 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.18	(RUNOFF)
12.94	8.89	(RUNOFF)
13.41	6.60	(RUNOFF)
14.92	19.28	(RUNOFF)
15.94	29.02	(RUNOFF)
20.90	1.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 84.35 CFS-HRS, 6.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	0.67
12.94	8.89	0.22
13.41	6.60	0.16
14.92	19.28	0.36
15.94	29.02	0.47
20.90	1.66	0.04

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	22.45	0.67

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.20 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	(NULL)
12.94	8.89	(NULL)
13.41	6.60	(NULL)
14.92	19.28	(NULL)
15.94	29.02	(NULL)
20.90	1.66	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.57	(RUNOFF)
12.43	3.45	(RUNOFF)
14.90	4.16	(RUNOFF)
15.94	6.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.53 WATERSHED INCHES, 17.03 CFS-HRS, 1.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.48	(NULL)
12.94	11.83	(NULL)
13.40	8.78	(NULL)
14.92	25.73	(NULL)
15.94	38.80	(NULL)
20.90	2.22	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.88 WATERSHED INCHES, 104.53 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	41.19	0.57
12.94	6.89	0.17
13.40	5.11	0.13
14.92	14.53	0.30
15.94	21.46	0.38
20.90	1.29	0.03

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.20 CFS-HRS, 4.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	32.29	0.57
12.94	4.94	0.17
14.92	11.20	0.30
15.94	17.34	0.38

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.33 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	39.53	(NULL)
15.02	14.43	(NULL)
16.02	21.09	(NULL)
20.99	1.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.32 CFS-HRS, 4.90 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	20.98	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.17 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	28.04	(NULL)
14.94	2.30	(NULL)
15.95	3.41	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.18 WATERSHED INCHES, 15.52 CFS-HRS, 1.28 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	29.87	(NULL)
15.04	11.19	(NULL)
16.03	16.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.37 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	57.76	(NULL)
15.00	13.08	(NULL)
16.02	19.72	(NULL)
20.99	1.13	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.89 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	55.97	(NULL)
15.09	12.95	(NULL)
16.10	19.44	(NULL)
21.08	1.12	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.88 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	33.45	(RUNOFF)
14.98	11.20	(RUNOFF)
16.00	15.98	(RUNOFF)
20.98	1.02	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 46.79 CFS-HRS, 3.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	60.56	(NULL)
15.02	22.12	(NULL)
16.05	31.03	(NULL)
21.03	2.32	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 108.85 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	2.62	(RUNOFF)
15.94	1.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 3.13 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	2.62	1299.08
15.94	1.17	1299.04

RUNOFF VOLUME ABOVE BASEFLOW = 0.97 WATERSHED INCHES, 3.13 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	60.56	(NULL)
15.02	22.12	(NULL)
16.05	31.03	(NULL)
21.03	2.32	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

10.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
11.25	DISCHG	0.04	0.13	0.28	0.50	1.31	4.24	10.38	19.38	29.99	41.42
12.00	DISCHG	52.68	59.98	58.90	52.65	45.88	40.53	36.22	32.54	28.93	25.28
12.75	DISCHG	22.12	19.64	17.77	16.35	15.19	14.04	12.94	12.01	11.31	10.78
13.50	DISCHG	10.36	9.95	9.46	8.96	8.54	8.22	7.98	7.78	7.56	7.32
14.25	DISCHG	7.09	6.90	6.77	6.71	7.24	9.39	12.62	15.85	18.50	20.63
15.00	DISCHG	22.08	21.50	18.44	14.48	10.98	8.32	6.21	4.94	6.14	10.69
15.75	DISCHG	16.57	21.85	26.05	29.45	31.03	29.19	24.69	19.88	15.99	12.89
16.50	DISCHG	10.39	8.41	6.96	5.93	5.19	4.64	4.24	3.94	3.70	3.48
17.25	DISCHG	3.30	3.16	3.05	2.97	2.91	2.86	2.82	2.79	2.77	2.75
18.00	DISCHG	2.74	2.71	2.66	2.59	2.54	2.49	2.46	2.44	2.45	2.50
18.75	DISCHG	2.55	2.60	2.64	2.67	2.68	2.67	2.64	2.60	2.58	2.56
19.50	DISCHG	2.54	2.51	2.47	2.42	2.38	2.36	2.33	2.31	2.27	2.22

20.25	DISCHG	2.17	2.12	2.09	2.07	2.06	2.10	2.15	2.21	2.25	2.29
21.00	DISCHG	2.31	2.31	2.27	2.22	2.17	2.13	2.10	2.03	1.82	1.50
21.75	DISCHG	1.16	0.89	0.67	0.50	0.37	0.27	0.19	0.14	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 108.85 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.97 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 1.93 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	0.54

RUNOFF VOLUME ABOVE BASEFLOW = 1.29 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.78	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.02	14.43	(DIVERT)	
15.83	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
20.99	1.29	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 52.13 CFS-HRS, 4.31 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	21.53	0.33
16.02	3.05	0.06

RUNOFF VOLUME ABOVE BASEFLOW = 0.24 WATERSHED INCHES, 7.22 CFS-HRS, 0.60 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	21.53	(NULL)
16.02	3.05	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.24 WATERSHED INCHES, 7.22 CFS-HRS, 0.60 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	20.16	(NULL)
15.03	15.12	(NULL)
16.03	19.01	(NULL)
21.00	1.36	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 55.25 CFS-HRS, 4.57 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	20.31	(NULL)
16.10	2.77	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.23 WATERSHED INCHES, 7.16 CFS-HRS, 0.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	7.56	(RUNOFF)
14.93	2.32	(RUNOFF)
15.95	3.46	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.38 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	24.87	(NULL)
14.93	2.32	(NULL)
16.04	5.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 16.54 CFS-HRS, 1.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	23.39	(NULL)
15.04	2.33	(NULL)
16.14	4.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 16.54 CFS-HRS, 1.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	77.40	(NULL)
15.07	15.21	(NULL)
16.11	24.22	(NULL)
21.07	1.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.39 WATERSHED INCHES, 77.42 CFS-HRS, 6.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	9.99	(RUNOFF)
14.92	2.73	(RUNOFF)
15.95	4.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 12.02 CFS-HRS, 0.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	82.58	(NULL)
15.02	17.40	(NULL)
16.08	26.66	(NULL)
21.03	1.56	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 89.45 CFS-HRS, 7.39 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 MIT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.27	20.12	(NULL)
15.11	15.38	(NULL)
16.12	18.95	(NULL)
21.10	1.36	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 55.20 CFS-HRS, 4.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	15.11	(RUNOFF)
14.93	4.64	(RUNOFF)
15.95	6.92	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 18.76 CFS-HRS, 1.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	33.97	(NULL)
15.00	19.00	(NULL)
15.99	25.33	(NULL)
21.00	1.76	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.04 WATERSHED INCHES, 73.96 CFS-HRS, 6.11 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.44	(RUNOFF)
14.95	2.32	(RUNOFF)
15.95	3.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 9.40 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	41.40	(NULL)
14.99	21.31	(NULL)
15.98	28.71	(NULL)
20.99	1.96	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

10.50	DISCHG	0.02	0.05	0.08	0.13	0.19	0.26	0.33	0.40	0.46	0.55
11.25	DISCHG	0.78	1.09	1.39	1.69	2.53	5.49	11.96	23.56	32.76	37.76
12.00	DISCHG	41.33	39.50	32.69	28.56	26.87	25.81	22.60	20.49	18.67	17.07
12.75	DISCHG	14.86	12.75	11.45	10.80	10.42	10.00	9.50	8.81	8.26	7.96
13.50	DISCHG	7.82	7.65	7.43	7.07	6.66	6.38	6.24	6.16	6.06	5.93
14.25	DISCHG	5.73	5.54	5.42	5.38	6.04	8.02	11.00	15.22	18.52	20.47
15.00	DISCHG	21.29	19.88	17.31	12.86	7.43	3.70	1.70	1.17	3.73	8.09
15.75	DISCHG	15.59	22.78	27.37	28.69	27.86	24.32	21.43	14.64	8.93	5.58
16.50	DISCHG	3.92	3.15	2.81	2.67	2.61	2.59	2.57	2.56	2.53	2.48
17.25	DISCHG	2.40	2.33	2.29	2.27	2.26	2.26	2.25	2.26	2.26	2.26
18.00	DISCHG	2.26	2.23	2.19	2.12	2.04	1.99	1.97	1.96	1.99	2.04
18.75	DISCHG	2.12	2.19	2.23	2.26	2.26	2.23	2.20	2.14	2.10	2.08
19.50	DISCHG	2.06	2.04	2.02	1.97	1.93	1.90	1.88	1.87	1.84	1.80
20.25	DISCHG	1.75	1.70	1.67	1.65	1.67	1.70	1.77	1.85	1.91	1.95
21.00	DISCHG	1.96	1.94	1.90	1.83	1.75	1.70	1.67	1.62	1.43	1.17
21.75	DISCHG	0.76	0.40	0.19	0.08	0.03	0.01	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 0.92 WATERSHED INCHES, 83.35 CFS-HRS, 6.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	27.42	(RUNOFF)
15.01	9.58	(RUNOFF)
16.05	13.67	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 43.50 CFS-HRS, 3.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	109.75	(NULL)
15.02	26.97	(NULL)
16.07	40.27	(NULL)
21.03	2.49	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.43 WATERSHED INCHES, 132.94 CFS-HRS, 10.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.78	185.86	(NULL)
15.14	85.36	(NULL)
16.20	107.39	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.00	0.02	0.04	0.05	0.05	0.05	0.04	0.04
0.75	DISCHG	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01
1.50	DISCHG	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.50	DISCHG	0.02	0.05	0.08	0.13	0.19	0.26	0.34	0.42	0.51	0.63
11.25	DISCHG	0.92	1.32	1.76	2.27	3.42	6.91	14.63	29.10	43.56	56.73
12.00	DISCHG	71.79	85.03	96.01	110.44	126.20	141.19	152.66	165.11	175.60	182.84
12.75	DISCHG	185.67	185.11	182.38	177.85	171.69	164.18	156.19	148.57	141.64	135.31
13.50	DISCHG	129.38	123.64	118.02	112.46	107.02	101.94	97.23	92.84	88.65	84.68
14.25	DISCHG	80.85	77.25	73.93	70.90	68.79	68.34	69.58	73.13	76.79	80.01
15.00	DISCHG	82.98	84.52	85.33	83.79	80.30	77.48	75.45	73.90	74.59	76.81
15.75	DISCHG	83.11	90.44	96.47	100.48	103.66	105.16	107.39	104.78	102.14	100.81
16.50	DISCHG	99.98	98.72	96.69	93.87	90.41	86.46	82.20	77.78	73.29	68.86
17.25	DISCHG	64.55	60.43	56.57	52.98	49.65	46.58	43.76	41.17	38.81	36.65
18.00	DISCHG	34.69	32.89	31.23	29.68	28.25	26.95	25.79	24.74	23.82	23.00
18.75	DISCHG	22.30	21.68	21.11	20.59	20.12	19.69	19.28	18.90	18.56	18.27
19.50	DISCHG	18.01	17.76	17.51	17.25	17.00	16.76	16.55	16.34	16.12	15.90
20.25	DISCHG	15.64	15.40	15.17	14.96	14.78	14.63	14.52	14.46	14.40	14.34
21.00	DISCHG	14.28	14.21	14.13	14.02	13.91	13.81	13.74	13.62	13.36	12.97
21.75	DISCHG	12.35	11.69	11.10	10.55	10.00	9.42	8.83	8.22	7.62	7.02

RUNOFF VOLUME ABOVE BASEFLOW = 0.61 WATERSHED INCHES, 682.05 CFS-HRS, 56.36 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 1 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 2.53 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 2 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	257.50	(RUNOFF)
15.12	65.31	(RUNOFF)
16.17	91.13	(RUNOFF)
19.18	8.27	(RUNOFF)
21.14	7.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.58 WATERSHED INCHES, 448.40 CFS-HRS, 37.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	168.36	1.05
15.12	38.16	0.62
16.17	55.91	0.69
21.14	3.08	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.39 CFS-HRS, 21.44 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	89.14	1.05
15.12	27.15	0.62
16.17	35.22	0.69
21.14	3.97	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 189.02 CFS-HRS, 15.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 MT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	87.77	(NULL)
15.22	26.80	(NULL)
16.27	34.72	(NULL)
21.24	3.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 188.95 CFS-HRS, 15.61 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	166.55	(NULL)
15.22	37.69	(NULL)
16.26	55.20	(NULL)
21.24	3.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.36 CFS-HRS, 21.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	246.12	(RUNOFF)
14.99	61.98	(RUNOFF)
16.02	88.99	(RUNOFF)
19.01	6.40	(RUNOFF)
20.99	5.51	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 331.60 CFS-HRS, 27.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	(NULL)
15.03	84.07	(NULL)
16.04	114.96	(NULL)
19.07	10.91	(NULL)
21.04	9.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.66 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	2.24
15.03	84.07	1.12
16.04	114.96	1.27
19.07	10.91	0.45
21.04	9.35	0.41

RUNOFF VOLUME ABOVE BASEFLOW = 2.48 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	(NULL)
15.03	84.07	(NULL)
16.04	114.96	(NULL)
19.07	10.91	(NULL)
21.04	9.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.48 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	436.26	(NULL)
15.07	116.21	(NULL)
16.09	156.48	(NULL)
19.11	14.48	(NULL)
21.07	12.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.95 WATERSHED INCHES, 779.91 CFS-HRS, 64.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	534.30	(RUNOFF)
14.97	141.05	(RUNOFF)
15.98	202.03	(RUNOFF)
17.90	14.23	(RUNOFF)
18.98	14.20	(RUNOFF)
20.98	12.27	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 698.58 CFS-HRS, 57.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	954.00	(NULL)
15.00	251.27	(NULL)
16.03	352.37	(NULL)
19.03	28.61	(NULL)
21.01	24.54	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.01	0.02	0.04	0.07	0.12	0.20	0.30
8.25	DISCHG	0.44	0.60	0.78	0.97	1.18	1.39	1.62	1.85	2.12	2.43
9.00	DISCHG	2.81	3.24	3.75	4.32	4.91	5.50	6.09	6.69	7.35	8.10
9.75	DISCHG	8.89	9.65	10.40	11.13	11.95	13.08	14.50	15.95	17.29	18.54
10.50	DISCHG	19.78	21.40	23.79	26.58	29.23	31.58	33.75	36.17	40.20	46.32
11.25	DISCHG	52.93	58.86	64.03	68.76	93.58	184.99	338.42	505.08	657.43	792.82
12.00	DISCHG	909.96	952.34	869.12	730.50	611.51	530.44	471.70	423.02	373.16	318.94
12.75	DISCHG	272.23	238.34	214.51	196.84	182.18	167.13	152.17	140.05	131.38	125.17
13.50	DISCHG	120.36	115.35	108.82	102.26	97.14	93.60	90.99	88.77	86.11	82.88
14.25	DISCHG	79.96	77.82	76.34	75.47	82.82	112.29	154.65	192.58	219.47	238.99
15.00	DISCHG	251.27	238.62	194.53	145.38	107.22	80.99	61.24	51.25	76.52	144.60
15.75	DISCHG	217.46	273.06	312.19	341.62	350.28	314.29	251.47	194.38	154.92	126.39
16.50	DISCHG	104.30	86.58	72.55	61.91	54.19	48.67	44.68	41.69	39.12	36.80
17.25	DISCHG	34.88	33.45	32.42	31.64	31.04	30.57	30.20	29.92	29.71	29.55
18.00	DISCHG	29.40	29.02	28.28	27.48	26.85	26.43	26.12	25.96	26.22	26.85
18.75	DISCHG	27.49	27.96	28.29	28.53	28.60	28.35	27.92	27.53	27.28	27.09
19.50	DISCHG	26.92	26.61	26.10	25.56	25.14	24.86	24.66	24.42	23.97	23.33
20.25	DISCHG	22.74	22.31	22.01	21.81	21.83	22.30	23.00	23.61	24.03	24.34
21.00	DISCHG	24.54	24.39	23.82	23.15	22.63	22.27	21.99	21.26	18.72	14.61
21.75	DISCHG	10.79	8.06	6.13	4.65	3.49	2.58	1.91	1.42	1.05	0.78

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1478.49 CFS-HRS, 122.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	545.22	6.09
15.18	176.31	2.39
16.21	243.90	2.98
21.07	24.32	0.37

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1471.20 CFS-HRS, 121.58 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	545.22	(NULL)
15.18	176.31	(NULL)
16.21	243.90	(NULL)
21.07	24.32	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1471.20 CFS-HRS, 121.58 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	48.54	(RUNOFF)
14.97	12.73	(RUNOFF)
15.97	18.29	(RUNOFF)
20.96	1.09	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 62.07 CFS-HRS, 5.13 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.33	561.93	(NULL)
15.15	183.05	(NULL)
16.18	252.03	(NULL)
21.01	25.39	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 1533.28 CFS-HRS, 126.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(RUNOFF)
14.99	5.07	(RUNOFF)
16.02	7.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(NULL)
14.99	5.07	(NULL)
16.02	7.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.22 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(DIVERT)
14.99	5.07	(DIVERT)
16.02	7.28	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.21 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.33	561.93	(NULL)
15.15	183.05	(NULL)
16.18	252.03	(NULL)
21.01	25.39	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 1533.28 CFS-HRS, 126.71 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.43	559.92	(NULL)
15.24	182.04	(NULL)
16.27	250.85	(NULL)
21.09	25.38	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.60 WATERSHED INCHES, 1532.58 CFS-HRS, 126.65 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	70.59	(RUNOFF)
15.00	18.88	(RUNOFF)
16.02	26.89	(RUNOFF)
21.00	1.69	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 97.21 CFS-HRS, 8.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.38	588.80	(NULL)
15.20	192.78	(NULL)
16.23	265.20	(NULL)
21.04	27.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 1629.79 CFS-HRS, 134.69 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.48	586.86	(NULL)
15.30	191.20	(NULL)
16.33	262.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 1628.38 CFS-HRS, 134.57 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	83.91	(RUNOFF)
15.12	23.19	(RUNOFF)
16.17	32.39	(RUNOFF)
21.15	2.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 149.26 CFS-HRS, 12.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.18	99.45	(NULL)
15.09	27.52	(NULL)
16.13	38.49	(NULL)
21.11	2.99	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

9.00	DISCHG	0.02	0.03	0.06	0.09	0.14	0.19	0.24	0.30	0.36	0.43
9.75	DISCHG	0.50	0.58	0.66	0.75	0.83	0.93	1.05	1.18	1.32	1.46
10.50	DISCHG	1.61	1.77	1.96	2.18	2.43	2.69	2.96	3.24	3.57	4.00
11.25	DISCHG	4.53	5.13	5.75	6.40	7.98	12.14	20.10	32.27	47.16	63.33
12.00	DISCHG	79.35	92.27	98.86	98.12	91.78	82.71	73.07	63.74	55.33	48.18
12.75	DISCHG	42.23	37.11	32.78	29.17	26.22	23.76	21.70	19.95	18.46	17.21
13.50	DISCHG	16.17	15.28	14.48	13.73	13.04	12.41	11.87	11.42	11.03	10.69
14.25	DISCHG	10.36	10.06	9.79	9.62	9.87	11.06	13.35	16.50	20.00	23.39
15.00	DISCHG	26.18	27.49	26.80	24.21	20.55	16.70	13.03	10.11	8.97	10.68
15.75	DISCHG	14.84	20.53	26.57	32.28	36.62	38.47	37.26	33.69	29.02	24.18
16.50	DISCHG	19.68	15.79	12.77	10.57	8.95	7.74	6.82	6.13	5.61	5.19
17.25	DISCHG	4.85	4.58	4.35	4.17	4.03	3.91	3.82	3.75	3.70	3.66
18.00	DISCHG	3.63	3.61	3.57	3.51	3.45	3.38	3.32	3.27	3.25	3.26
18.75	DISCHG	3.29	3.34	3.39	3.44	3.48	3.49	3.49	3.46	3.43	3.40
19.50	DISCHG	3.37	3.33	3.29	3.25	3.20	3.15	3.11	3.07	3.03	2.98
20.25	DISCHG	2.92	2.86	2.81	2.76	2.74	2.73	2.76	2.80	2.86	2.91
21.00	DISCHG	2.96	2.98	2.98	2.95	2.91	2.85	2.80	2.73	2.59	2.35
21.75	DISCHG	2.03	1.68	1.35	1.04	0.79	0.59	0.44	0.32	0.24	0.18

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 175.63 CFS-HRS, 14.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	186.91	(RUNOFF)
14.91	42.23	(RUNOFF)
15.94	63.36	(RUNOFF)
18.94	4.10	(RUNOFF)
20.90	3.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 215.83 CFS-HRS, 17.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	0.99
14.91	36.33	0.54
15.94	46.16	0.63
18.94	4.10	0.10
20.90	3.53	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	0.99
14.91	5.90	0.54
15.94	17.20	0.63

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	(NULL)
14.91	36.33	(NULL)
15.94	46.16	(NULL)
18.94	4.10	(NULL)
20.90	3.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	42.38	(RUNOFF)
12.42	8.60	(RUNOFF)
12.94	4.57	(RUNOFF)
14.90	9.58	(RUNOFF)
15.94	14.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.44 WATERSHED INCHES, 46.52 CFS-HRS, 3.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	158.61	(NULL)
14.91	51.37	(NULL)
15.94	68.85	(NULL)
18.94	5.58	(NULL)
20.90	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 241.56 CFS-HRS, 19.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	91.75	0.93
14.91	28.12	0.46
15.94	38.29	0.55
20.90	2.80	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.24 CFS-HRS, 11.34 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	66.87	0.93
14.91	23.24	0.46
15.94	30.55	0.55
20.90	2.00	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.31 CFS-HRS, 8.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	90.35	(NULL)
15.00	28.06	(NULL)
16.02	38.02	(NULL)
20.98	2.79	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.49 CFS-HRS, 11.36 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	(NULL)
14.91	5.90	(NULL)
15.94	17.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	114.03	(NULL)
14.92	11.36	(NULL)
15.94	25.26	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.85 WATERSHED INCHES, 73.71 CFS-HRS, 6.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	64.15	(NULL)
15.03	23.01	(NULL)
16.02	29.97	(NULL)
21.00	2.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.54 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	101.46	(RUNOFF)
14.97	26.60	(RUNOFF)
15.99	37.88	(RUNOFF)
20.98	2.33	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 132.33 CFS-HRS, 10.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	192.08	(NULL)
15.01	52.67	(NULL)
16.05	73.61	(NULL)
19.05	6.17	(NULL)
21.03	5.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.94 WATERSHED INCHES, 307.96 CFS-HRS, 25.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	7.64	(RUNOFF)
14.91	1.85	(RUNOFF)
15.94	2.77	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 8.85 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	7.64	1299.24
14.91	1.85	1299.06
15.94	2.77	1299.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 8.85 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	192.08	(NULL)
15.01	52.67	(NULL)
16.05	73.61	(NULL)
19.05	6.17	(NULL)
21.03	5.28	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
9.00	DISCHG	0.06	0.11	0.18	0.26	0.35	0.45	0.55	0.66	0.79	0.92
9.75	DISCHG	1.07	1.22	1.36	1.51	1.67	1.88	2.13	2.40	2.66	2.91
10.50	DISCHG	3.16	3.47	3.90	4.40	4.91	5.38	5.82	6.31	7.06	8.15
11.25	DISCHG	9.38	10.56	11.63	12.77	17.44	32.79	59.54	91.49	122.73	152.17
12.00	DISCHG	178.34	191.98	182.57	159.84	136.75	118.48	103.82	91.54	80.10	69.12
12.75	DISCHG	59.81	52.54	47.06	42.86	39.47	36.21	33.16	30.60	28.65	27.16
13.50	DISCHG	25.99	24.86	23.54	22.23	21.13	20.28	19.63	19.09	18.54	17.90
14.25	DISCHG	17.31	16.84	16.48	16.32	17.57	22.72	30.44	38.11	44.34	49.27
15.00	DISCHG	52.58	51.08	43.77	34.36	26.06	19.74	14.72	11.73	14.71	25.73
15.75	DISCHG	59.84	52.40	62.26	70.10	73.60	69.08	58.34	46.95	37.71	30.36
16.50	DISCHG	24.45	19.77	16.33	13.89	12.14	10.85	9.90	9.20	8.61	8.10
17.25	DISCHG	7.67	7.34	7.09	6.89	6.73	6.61	6.52	6.45	6.40	6.36
18.00	DISCHG	6.33	6.27	6.14	5.99	5.85	5.75	5.67	5.62	5.65	5.76
18.75	DISCHG	5.88	5.98	6.07	6.13	6.17	6.13	6.06	5.98	5.92	5.87
19.50	DISCHG	5.83	5.76	5.66	5.56	5.47	5.40	5.34	5.29	5.20	5.08
20.25	DISCHG	4.96	4.86	4.79	4.73	4.72	4.79	4.92	5.05	5.15	5.22
21.00	DISCHG	5.28	5.27	5.18	5.06	4.94	4.85	4.78	4.62	4.16	3.42
21.75	DISCHG	2.65	2.02	1.53	1.15	0.84	0.61	0.45	0.33	0.24	0.19

RUNOFF VOLUME ABOVE BASEFLOW = 0.93 WATERSHED INCHES, 307.96 CFS-HRS, 25.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	(NULL)
15.03	1.80	(NULL)
16.03	2.66	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	(DIVERT)
15.03	1.80	(DIVERT)
16.03	2.66	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 5.48 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	0.63
15.03	1.80	0.53
16.03	2.66	0.55

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.63	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
14.70	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
20.98	2.79	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 3.03 WATERSHED INCHES, 90.57 CFS-HRS, 7.49 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	0.66
15.00	10.06	0.19
16.02	20.02	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 1.57 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	(NULL)
15.00	10.06	(NULL)
16.02	20.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.53 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	25.11	(NULL)
15.03	19.80	(NULL)
16.03	20.66	(NULL)
20.98	2.95	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.08 WATERSHED INCHES, 99.41 CFS-HRS, 8.22 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	(NULL)
15.00	10.06	(NULL)
16.02	20.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.53 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.31	(RUNOFF)
14.92	5.51	(RUNOFF)
15.95	8.18	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.52 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	93.14	(NULL)
14.97	15.62	(NULL)
15.98	27.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.47 WATERSHED INCHES, 73.44 CFS-HRS, 6.07 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	92.23	(NULL)
15.05	15.53	(NULL)
16.07	27.03	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.47 WATERSHED INCHES, 73.40 CFS-HRS, 6.07 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	253.56	(NULL)
14.97	49.60	(NULL)
15.97	79.62	(NULL)
20.98	2.93	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.28 WATERSHED INCHES, 251.66 CFS-HRS, 20.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	25.86	(RUNOFF)
14.92	5.98	(RUNOFF)
15.95	8.87	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 30.77 CFS-HRS, 2.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	279.28	(NULL)
14.97	55.69	(NULL)
15.96	88.45	(NULL)
18.98	3.98	(NULL)
20.97	3.44	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 282.43 CFS-HRS, 23.34 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	24.97	(NULL)
15.12	19.82	(NULL)
16.11	20.63	(NULL)
21.07	2.94	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.08 WATERSHED INCHES, 99.24 CFS-HRS, 8.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	44.62	(RUNOFF)
14.92	11.01	(RUNOFF)
15.95	16.35	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 53.04 CFS-HRS, 4.38 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	68.01	(NULL)
14.95	30.57	(NULL)
15.76	36.55	(NULL)
19.01	4.49	(NULL)
20.99	3.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 152.29 CFS-HRS, 12.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.04	(RUNOFF)
14.94	5.49	(RUNOFF)
15.95	8.12	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.56 CFS-HRS, 2.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	90.05	(NULL)
14.95	36.06	(NULL)
15.95	44.66	(NULL)
19.00	5.03	(NULL)
20.98	4.34	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.01	0.03	0.05	0.07	0.10	0.12	0.15
8.25	DISCHG	0.19	0.23	0.27	0.31	0.34	0.38	0.43	0.48	0.53	0.61
9.00	DISCHG	0.67	0.75	0.83	0.94	1.07	1.19	1.30	1.40	1.51	1.62
9.75	DISCHG	1.79	1.95	2.09	2.22	2.35	2.52	2.77	3.13	3.45	3.70
10.50	DISCHG	3.90	4.15	4.50	5.06	5.73	6.26	6.65	7.02	7.66	8.55
11.25	DISCHG	10.14	11.69	12.80	13.63	18.09	32.77	54.56	67.36	76.88	84.46
12.00	DISCHG	89.98	81.65	61.06	47.69	41.00	37.56	35.89	34.79	32.17	29.46
12.75	DISCHG	28.06	27.35	25.63	24.69	24.05	23.13	21.89	20.16	18.97	18.40
13.50	DISCHG	18.16	17.80	17.26	16.35	15.35	14.75	14.48	14.35	14.10	13.79
14.25	DISCHG	13.23	12.77	12.52	12.44	14.04	18.83	26.28	33.29	35.27	36.01
15.00	DISCHG	35.85	31.41	25.18	21.64	12.47	5.58	2.23	1.85	8.53	19.66
15.75	DISCHG	37.00	41.88	43.72	44.54	41.82	33.22	26.67	23.39	15.12	9.78
16.50	DISCHG	7.31	6.28	5.90	5.78	5.74	5.72	5.72	5.71	5.63	5.52
17.25	DISCHG	5.32	5.16	5.08	5.04	5.03	5.02	5.02	5.02	5.03	5.03
18.00	DISCHG	5.02	4.96	4.87	4.69	4.50	4.40	4.35	4.35	4.42	4.54
18.75	DISCHG	4.74	4.90	4.99	5.02	5.01	4.96	4.85	4.71	4.62	4.58
19.50	DISCHG	4.56	4.52	4.45	4.34	4.23	4.17	4.14	4.12	4.06	3.97
20.25	DISCHG	3.83	3.72	3.66	3.64	3.67	3.76	3.92	4.12	4.25	4.31

21.00	DISCHG	4.33	4.28	4.18	3.99	3.81	3.71	3.66	3.55	3.12	2.49
21.75	DISCHG	1.46	0.67	0.28	0.10	0.03	0.00	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 1.98 WATERSHED INCHES, 178.85 CFS-HRS, 14.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	85.19	(RUNOFF)
15.01	22.79	(RUNOFF)
16.04	32.43	(RUNOFF)
21.02	2.14	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 123.08 CFS-HRS, 10.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	358.62	(NULL)
14.98	78.23	(NULL)
15.98	119.47	(NULL)
19.01	6.47	(NULL)
20.99	5.57	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.32 WATERSHED INCHES, 405.51 CFS-HRS, 33.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.48	622.25	(NULL)
15.23	209.18	(NULL)
16.28	283.82	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.03
0.75	DISCHG	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
1.50	DISCHG	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	DISCHG	0.00	0.00	0.00	0.01	0.03	0.05	0.07	0.10	0.13	0.16
8.25	DISCHG	0.21	0.27	0.34	0.42	0.50	0.61	0.73	0.87	1.03	1.21

9.00	DISCHG	1.42	1.65	1.92	2.26	2.65	3.06	3.50	3.97	4.47	5.01
9.75	DISCHG	5.63	6.29	6.96	7.64	8.36	9.15	10.05	11.14	12.27	13.39
10.50	DISCHG	14.52	15.75	17.12	18.82	20.80	22.80	24.78	26.82	29.22	32.03
11.25	DISCHG	35.90	40.20	44.46	48.70	56.79	76.41	108.43	143.83	190.98	249.37
12.00	DISCHG	324.50	407.62	484.99	547.67	590.40	613.55	621.69	620.13	611.91	597.93
12.75	DISCHG	578.97	555.46	527.44	498.74	470.25	442.17	414.76	384.27	353.91	325.82
13.50	DISCHG	300.55	277.83	257.46	238.84	221.83	206.68	193.29	181.46	170.86	161.38
14.25	DISCHG	153.89	147.92	142.80	138.23	135.72	137.14	143.47	153.46	162.50	172.94
15.00	DISCHG	183.88	191.93	201.02	209.12	203.66	192.50	179.59	166.63	159.51	159.18
15.75	DISCHG	174.02	185.33	200.01	219.83	241.46	258.47	274.06	283.71	277.68	266.10
16.50	DISCHG	251.90	235.97	219.05	201.79	184.71	168.25	152.79	140.89	131.47	123.19
17.25	DISCHG	115.48	108.33	101.74	95.70	90.16	85.10	80.48	76.28	72.46	68.99
18.00	DISCHG	65.85	62.94	60.25	57.68	55.26	53.07	51.09	49.31	47.77	46.44
18.75	DISCHG	45.39	44.49	43.68	42.95	42.27	41.64	41.01	40.36	39.76	39.24
19.50	DISCHG	38.77	38.30	37.84	37.32	36.79	36.29	35.83	35.40	34.94	34.46
20.25	DISCHG	33.90	33.35	32.84	32.37	31.97	31.66	31.49	31.45	31.44	31.43
21.00	DISCHG	31.41	31.35	31.25	31.02	30.73	30.48	30.25	29.94	29.29	28.29
21.75	DISCHG	26.54	24.68	22.97	21.37	19.85	18.36	16.93	15.54	14.21	12.96

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1807.23 CFS-HRS, 149.35 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 2 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 3.12 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 3 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	353.46	(RUNOFF)
15.12	84.74	(RUNOFF)
16.17	118.16	(RUNOFF)
19.18	10.66	(RUNOFF)
21.14	9.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 610.03 CFS-HRS, 50.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	232.97	1.24
15.12	51.52	0.67
16.17	73.75	0.76
19.18	4.73	0.29
21.14	4.00	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.70 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	120.49	1.24
15.12	33.22	0.67
16.17	44.41	0.76
19.18	5.93	0.29
21.14	5.07	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.32 CFS-HRS, 20.52 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.30	119.17	(NULL)
15.22	32.91	(NULL)
16.26	43.91	(NULL)
19.28	5.93	(NULL)
21.24	5.06	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.20 CFS-HRS, 20.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	231.43	(NULL)
15.21	51.13	(NULL)
16.26	73.20	(NULL)
19.27	4.73	(NULL)
21.23	4.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.72 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	338.96	(RUNOFF)
14.99	80.89	(RUNOFF)
16.02	116.07	(RUNOFF)
19.01	8.30	(RUNOFF)
20.99	7.13	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES, 454.81 CFS-HRS, 37.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	(NULL)
15.03	108.27	(NULL)
16.04	148.38	(NULL)
19.07	14.07	(NULL)
21.04	12.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.25 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	2.82
15.03	108.27	1.24
16.04	148.38	1.44
19.07	14.07	0.52
21.04	12.04	0.48

RUNOFF VOLUME ABOVE BASEFLOW = 3.35 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	(NULL)
15.03	108.27	(NULL)
16.04	148.38	(NULL)
19.07	14.07	(NULL)
21.04	12.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.35 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	606.97	(NULL)
15.07	152.20	(NULL)
16.09	205.10	(NULL)
19.11	18.72	(NULL)
21.07	15.95	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.66 WATERSHED INCHES, 1064.73 CFS-HRS, 87.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	750.58	(RUNOFF)
14.97	186.51	(RUNOFF)
15.98	267.02	(RUNOFF)
17.90	18.69	(RUNOFF)
18.98	18.62	(RUNOFF)
20.98	16.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 974.63 CFS-HRS, 80.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	1334.91	(NULL)
15.00	330.96	(NULL)
16.03	464.17	(NULL)
19.03	37.26	(NULL)
21.01	31.91	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6.75	DISCHG	0.02	0.04	0.07	0.11	0.18	0.28	0.42	0.58	0.77	0.97
7.50	DISCHG	1.19	1.41	1.64	1.86	2.11	2.40	2.74	3.12	3.57	4.10

8.25	DISCHG	4.69	5.29	5.89	6.49	7.10	7.76	8.46	9.16	9.85	10.51
9.00	DISCHG	11.16	11.89	12.79	13.78	14.74	15.65	16.51	17.37	18.39	19.61
9.75	DISCHG	20.86	22.03	23.12	24.15	25.36	27.21	29.63	32.01	34.09	35.95
10.50	DISCHG	37.75	40.22	44.09	48.60	52.74	56.25	59.36	62.85	69.03	78.64
11.25	DISCHG	88.88	97.76	105.21	111.81	149.45	288.10	514.69	751.86	959.24	1136.54
12.00	DISCHG	1285.13	1330.25	1205.54	1007.60	838.29	722.11	637.91	568.93	499.75	425.78
12.75	DISCHG	362.53	316.77	284.67	260.97	241.36	221.26	201.29	185.14	173.59	165.32
13.50	DISCHG	158.91	152.26	143.59	134.87	128.06	123.37	119.89	116.94	113.42	109.15
14.25	DISCHG	105.28	102.43	100.47	99.30	109.02	148.02	204.02	254.09	289.48	315.04
15.00	DISCHG	330.95	313.87	255.38	190.24	139.61	104.77	78.65	65.67	99.53	190.04
15.75	DISCHG	286.76	360.37	411.93	450.44	461.21	413.16	329.83	254.09	201.59	163.71
16.50	DISCHG	134.53	111.30	93.10	79.49	69.72	62.74	57.70	53.93	50.69	47.73
17.25	DISCHG	45.28	43.46	42.14	41.14	40.38	39.78	39.31	38.95	38.68	38.48
18.00	DISCHG	38.29	37.80	36.82	35.77	34.96	34.40	33.99	33.79	34.12	34.95
18.75	DISCHG	35.79	36.41	36.84	37.15	37.24	36.91	36.34	35.83	35.48	35.24
19.50	DISCHG	35.01	34.61	33.94	33.23	32.69	32.32	32.05	31.74	31.15	30.32
20.25	DISCHG	29.54	28.99	28.60	28.32	28.36	28.98	29.89	30.69	31.25	31.64
21.00	DISCHG	31.91	31.72	30.96	30.08	29.39	28.92	28.55	27.59	24.28	18.91
21.75	DISCHG	13.92	10.35	7.84	5.92	4.42	3.25	2.37	1.76	1.30	0.97

RUNOFF VOLUME ABOVE BASEFLOW = 2.24 WATERSHED INCHES, 2039.36 CFS-HRS, 168.53 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.40	699.67	8.66
15.17	239.83	2.95
16.21	322.55	3.67
21.08	31.57	0.48

RUNOFF VOLUME ABOVE BASEFLOW = 2.23 WATERSHED INCHES, 2030.04 CFS-HRS, 167.76 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 MT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.40	699.67	(NULL)
15.17	239.83	(NULL)
16.21	322.55	(NULL)
21.08	31.57	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.23 WATERSHED INCHES, 2030.04 CFS-HRS, 167.76 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	68.09	(RUNOFF)
14.97	16.83	(RUNOFF)
15.97	24.17	(RUNOFF)
20.96	1.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.92 WATERSHED INCHES, 86.59 CFS-HRS, 7.16 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	719.49	(NULL)
15.14	249.38	(NULL)
16.18	333.47	(NULL)
21.02	32.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2116.63 CFS-HRS, 174.92 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(RUNOFF)
14.99	6.71	(RUNOFF)
16.02	9.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(NULL)
14.99	6.71	(NULL)
16.02	9.63	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.30 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(DIVERT)
14.99	6.71	(DIVERT)
16.02	9.63	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.30 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	719.49	(NULL)
15.14	249.38	(NULL)
16.18	333.47	(NULL)
21.02	32.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2116.63 CFS-HRS, 174.92 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.45	718.97	(NULL)
15.22	248.50	(NULL)
16.27	332.43	(NULL)
21.10	32.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2115.60 CFS-HRS, 174.83 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.48	(RUNOFF)
15.00	24.97	(RUNOFF)
16.02	35.54	(RUNOFF)
21.00	2.22	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 135.62 CFS-HRS, 11.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.33	758.57	(NULL)
15.18	264.14	(NULL)
16.22	352.18	(NULL)
21.04	35.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.19 WATERSHED INCHES, 2251.22 CFS-HRS, 186.04 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 MIT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.44	756.97	(NULL)
15.28	262.28	(NULL)
16.32	349.58	(NULL)
21.12	35.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.19 WATERSHED INCHES, 2249.63 CFS-HRS, 185.91 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	119.26	(RUNOFF)
15.12	30.69	(RUNOFF)
16.17	42.83	(RUNOFF)
21.14	3.32	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 208.31 CFS-HRS, 17.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.17	141.44	(NULL)
15.09	36.42	(NULL)
16.13	50.89	(NULL)
19.14	4.58	(NULL)
21.11	3.91	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.05	0.08
8.25	DISCHG	0.12	0.17	0.22	0.28	0.34	0.41	0.47	0.55	0.62	0.69
9.00	DISCHG	0.77	0.85	0.94	1.03	1.13	1.23	1.33	1.44	1.54	1.66
9.75	DISCHG	1.78	1.91	2.04	2.17	2.31	2.47	2.66	2.87	3.10	3.34
10.50	DISCHG	3.57	3.82	4.13	4.49	4.89	5.31	5.73	6.16	6.68	7.35

11.25	DISCHG	8.19	9.12	10.08	11.06	13.48	19.81	31.76	49.66	71.09	93.76
12.00	DISCHG	115.68	132.85	140.99	138.89	129.15	115.80	101.84	88.46	76.49	66.38
12.75	DISCHG	57.99	50.80	44.75	39.72	35.61	32.19	29.34	26.93	24.87	23.15
13.50	DISCHG	21.72	20.50	19.40	18.38	17.43	16.57	15.84	15.23	14.71	14.25
14.25	DISCHG	13.81	13.40	13.03	12.80	13.12	14.70	17.73	21.90	26.53	31.00
15.00	DISCHG	34.67	36.39	35.46	32.02	27.18	22.08	17.23	13.37	11.87	14.15
15.75	DISCHG	19.67	27.21	35.21	42.75	48.45	50.87	49.25	44.50	38.33	31.92
16.50	DISCHG	25.97	20.84	16.85	13.94	11.81	10.20	8.99	8.08	7.38	6.83
17.25	DISCHG	6.38	6.02	5.73	5.49	5.29	5.14	5.02	4.93	4.86	4.81
18.00	DISCHG	4.77	4.74	4.69	4.61	4.53	4.44	4.36	4.30	4.26	4.27
18.75	DISCHG	4.32	4.38	4.45	4.51	4.56	4.58	4.58	4.54	4.50	4.46
19.50	DISCHG	4.42	4.37	4.32	4.26	4.19	4.13	4.08	4.02	3.97	3.90
20.25	DISCHG	3.83	3.75	3.68	3.62	3.58	3.58	3.61	3.67	3.74	3.81
21.00	DISCHG	3.87	3.91	3.90	3.87	3.80	3.73	3.67	3.57	3.38	3.07
21.75	DISCHG	2.66	2.20	1.76	1.37	1.03	0.77	0.57	0.43	0.32	0.24

RUNOFF VOLUME ABOVE BASEFLOW = 1.05 WATERSHED INCHES, 245.12 CFS-HRS, 20.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	251.82	(RUNOFF)
14.91	54.74	(RUNOFF)
15.94	82.06	(RUNOFF)
18.94	5.29	(RUNOFF)
20.90	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.17 WATERSHED INCHES, 293.53 CFS-HRS, 24.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	1.12
14.91	42.15	0.59
15.94	34.86	0.70
18.94	5.29	0.13
20.90	4.54	0.11

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	1.12
14.91	12.59	0.59
15.94	27.20	0.70

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667. CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	(NULL)
14.91	42.15	(NULL)
15.94	54.86	(NULL)
18.94	5.29	(NULL)
20.90	4.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	57.96	(RUNOFF)
12.42	11.51	(RUNOFF)
12.94	6.07	(RUNOFF)
14.89	12.58	(RUNOFF)
15.94	19.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.99 WATERSHED INCHES, 64.34 CFS-HRS, 5.32 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.93	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	206.27	(NULL)
14.91	61.94	(NULL)
15.94	84.68	(NULL)
16.91	8.19	(NULL)
17.89	7.18	(NULL)
18.94	7.22	(NULL)
20.90	6.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.66 WATERSHED INCHES, 317.26 CFS-HRS, 26.22 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	119.10	1.07
14.91	34.05	0.52
15.94	48.12	0.63
18.94	4.20	0.11
20.90	3.61	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.40 CFS-HRS, 14.91 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	87.17	1.07
14.91	27.89	0.52
15.94	36.55	0.63
20.90	2.59	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.29 WATERSHED INCHES, 136.86 CFS-HRS, 11.31 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	117.82	(NULL)
14.99	33.98	(NULL)
16.02	47.85	(NULL)
19.01	4.20	(NULL)
20.98	3.61	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.56 CFS-HRS, 14.92 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	(NULL)
14.91	12.59	(NULL)
15.94	27.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.93	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	164.22	(NULL)
14.92	19.81	(NULL)
15.94	37.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 114.46 CFS-HRS, 9.46 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	84.46	(NULL)
15.02	27.70	(NULL)
16.02	36.00	(NULL)
21.00	2.58	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.12 CFS-HRS, 11.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	141.22	(RUNOFF)
14.97	33.18	(RUNOFF)
15.99	50.07	(RUNOFF)
20.98	3.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 184.64 CFS-HRS, 15.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	272.11	(NULL)
15.01	69.68	(NULL)
16.04	97.31	(NULL)
19.05	8.09	(NULL)
21.03	6.92	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 429.76 CFS-HRS, 35.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	10.62	(RUNOFF)
14.91	2.45	(RUNOFF)
15.94	3.65	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 12.34 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	10.62	1299.33
14.91	2.45	1299.08
15.94	3.65	1299.11

RUNOFF VOLUME ABOVE BASEFLOW = 3.83 WATERSHED INCHES, 12.34 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	272.11	(NULL)
15.01	69.68	(NULL)
16.04	97.31	(NULL)
19.05	8.09	(NULL)
21.03	6.92	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.09	0.15	0.23
8.25	DISCHG	0.32	0.42	0.53	0.63	0.75	0.87	1.00	1.13	1.27	1.40
9.00	DISCHG	1.53	1.68	1.85	2.04	2.22	2.41	2.58	2.76	2.96	3.19
9.75	DISCHG	3.44	3.67	3.89	4.11	4.36	4.70	5.15	5.60	6.02	6.41
10.50	DISCHG	6.79	7.28	7.99	8.82	9.63	10.37	11.04	11.76	12.93	14.67
11.25	DISCHG	16.62	18.43	20.03	21.70	28.88	52.36	92.33	138.47	181.87	221.44
12.00	DISCHG	255.61	272.10	257.04	224.04	190.92	164.71	143.69	126.15	109.98	94.62
12.75	DISCHG	81.67	71.55	63.93	58.09	53.37	48.88	44.69	41.18	38.50	36.45
13.50	DISCHG	34.84	33.28	31.49	29.71	28.21	27.07	26.18	25.45	24.70	23.85
14.25	DISCHG	23.03	22.42	21.93	21.71	23.36	30.19	40.41	50.54	58.76	65.25
15.00	DISCHG	69.37	67.33	57.87	45.42	34.45	26.09	19.46	15.52	19.50	34.14
15.75	DISCHG	52.83	69.43	82.44	92.73	97.28	91.25	77.04	61.99	49.78	40.07
16.50	DISCHG	32.26	26.08	21.53	18.31	16.00	14.29	13.03	12.10	11.33	10.65
17.25	DISCHG	10.09	9.63	9.32	9.06	8.85	8.69	8.57	8.48	8.41	8.36
18.00	DISCHG	8.31	8.23	8.06	7.86	7.68	7.55	7.44	7.38	7.41	7.55
18.75	DISCHG	7.72	7.85	7.96	8.05	8.09	8.04	7.95	7.84	7.76	7.70
19.50	DISCHG	7.64	7.55	7.43	7.29	7.17	7.08	7.00	6.93	6.81	6.65
20.25	DISCHG	6.50	6.37	6.27	6.20	6.19	6.28	6.45	6.61	6.74	6.84
21.00	DISCHG	6.91	6.90	6.78	6.62	6.47	6.35	6.26	6.05	5.44	4.47
21.75	DISCHG	3.46	2.64	2.00	1.50	1.10	0.80	0.59	0.44	0.32	0.24

RUNOFF VOLUME ABOVE BASEFLOW = 1.29 WATERSHED INCHES, 429.76 CFS-HRS, 35.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	(NULL)
15.02	2.40	(NULL)
16.03	3.55	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.82 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	(DIVERT)
15.02	2.40	(DIVERT)
16.03	3.55	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 7.64 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	0.68
15.02	2.40	0.54
16.03	3.55	0.56

RUNOFF VOLUME ABOVE BASEFLOW = 5.10 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.63	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
14.70	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
19.01	4.20	(DIVERT)	
20.98	3.61	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 3.64 WATERSHED INCHES, 108.62 CFS-HRS, 8.98 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	0.79
14.99	15.98	0.28
16.02	29.85	0.40

RUNOFF VOLUME ABOVE BASEFLOW = 2.41 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	(NULL)
14.99	15.98	(NULL)
16.02	29.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.35 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	28.10	(NULL)
15.02	20.40	(NULL)
16.03	21.55	(NULL)
19.01	4.44	(NULL)
20.98	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.75 WATERSHED INCHES, 120.95 CFS-HRS, 10.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	(NULL)
14.99	15.98	(NULL)
16.02	29.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.35 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	31.12	(RUNOFF)
14.92	7.28	(RUNOFF)
15.95	10.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.00 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	125.88	(NULL)
14.97	23.34	(NULL)
15.98	39.27	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES. 108.94 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.11	125.47	(NULL)
15.04	23.28	(NULL)
16.06	39.18	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES, 109.07 CFS-HRS, 9.01 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	357.64	(NULL)
14.97	71.01	(NULL)
15.96	110.10	(NULL)
19.00	4.42	(NULL)
20.98	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.83 WATERSHED INCHES, 360.65 CFS-HRS, 29.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	34.96	(RUNOFF)
14.92	7.76	(RUNOFF)
15.94	11.50	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES. 41.86 CFS-HRS, 3.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	392.48	(NULL)
14.96	78.91	(NULL)
15.96	121.55	(NULL)
18.98	5.17	(NULL)
20.97	4.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.86 WATERSHED INCHES, 402.50 CFS-HRS, 33.26 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	27.95	(NULL)
15.11	20.39	(NULL)
16.11	21.52	(NULL)
19.09	4.43	(NULL)
21.07	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.74 WATERSHED INCHES, 120.68 CFS-HRS, 9.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	62.23	(RUNOFF)
14.92	14.56	(RUNOFF)
15.95	21.60	(RUNOFF)
20.92	1.23	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 74.01 CFS-HRS, 6.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	88.29	(NULL)
14.94	34.69	(NULL)
15.96	42.64	(NULL)
19.00	5.83	(NULL)
20.99	5.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 194.69 CFS-HRS, 16.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	30.78	(RUNOFF)
14.94	7.26	(RUNOFF)
15.95	10.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.06 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	119.06	(NULL)
14.94	41.95	(NULL)
15.95	53.36	(NULL)
18.99	6.54	(NULL)
20.98	5.63	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.02	0.04	0.07	0.09	0.12	0.15	0.18	0.23	0.27	0.31
7.50	DISCHG	0.35	0.40	0.44	0.48	0.53	0.59	0.65	0.72	0.79	0.88
8.25	DISCHG	1.01	1.15	1.27	1.38	1.48	1.58	1.70	1.84	1.97	2.09
9.00	DISCHG	2.20	2.31	2.45	2.64	2.87	3.06	3.21	3.34	3.50	3.68
9.75	DISCHG	3.95	4.21	4.41	4.58	4.77	5.05	5.46	6.09	6.59	6.93
10.50	DISCHG	7.20	7.59	8.13	9.05	10.14	10.91	11.44	11.93	12.92	14.31
11.25	DISCHG	16.74	18.95	20.38	21.41	28.18	50.52	75.21	91.42	103.42	112.57
12.00	DISCHG	118.80	106.29	77.47	58.68	49.11	44.25	41.97	40.51	37.00	33.38
12.75	DISCHG	31.47	30.50	30.04	29.82	29.39	28.30	27.44	26.04	24.64	23.97
13.50	DISCHG	23.68	23.21	22.48	21.22	19.89	19.15	18.84	18.69	18.37	17.95
14.25	DISCHG	17.24	16.67	16.39	16.29	18.43	24.78	34.75	39.43	41.14	41.92
15.00	DISCHG	41.64	33.74	27.50	22.76	14.34	6.33	2.45	2.23	11.24	26.25
15.75	DISCHG	44.68	50.07	52.21	53.15	49.48	38.10	29.42	25.00	17.89	11.95
16.50	DISCHG	9.16	8.03	7.63	7.50	7.47	7.45	7.45	7.43	7.33	7.18
17.25	DISCHG	6.91	6.70	6.60	6.56	6.54	6.54	6.54	6.54	6.54	6.54
18.00	DISCHG	6.54	6.46	6.33	6.08	5.84	5.71	5.65	5.65	5.75	5.91
18.75	DISCHG	6.18	6.39	6.50	6.54	6.52	6.44	6.30	6.11	6.00	5.95
19.50	DISCHG	5.92	5.87	5.79	5.63	5.49	5.41	5.38	5.35	5.27	5.16
20.25	DISCHG	4.96	4.82	4.75	4.72	4.76	4.88	5.10	5.37	5.53	5.61
21.00	DISCHG	5.63	5.56	5.42	5.17	4.93	4.80	4.75	4.60	4.04	3.20
21.75	DISCHG	1.81	0.79	0.31	0.10	0.03	0.00	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 2.56 WATERSHED INCHES, 231.74 CFS-HRS, 19.15 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	120.33	(RUNOFF)
15.01	30.16	(RUNOFF)
16.04	42.87	(RUNOFF)
21.02	2.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 171.77 CFS-HRS, 14.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	505.27	(NULL)
14.97	108.67	(NULL)
15.98	162.46	(NULL)
19.01	8.43	(NULL)
20.99	7.25	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.87 WATERSHED INCHES, 574.27 CFS-HRS, 47.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.41	800.10	(NULL)
15.23	282.53	(NULL)
16.28	372.97	(NULL)
20.83	40.80	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.03
0.75	DISCHG	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
1.50	DISCHG	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.02	0.04	0.07	0.09	0.13	0.16	0.20	0.27	0.34	0.42
7.50	DISCHG	0.51	0.62	0.74	0.88	1.03	1.21	1.41	1.64	1.90	2.20
8.25	DISCHG	2.58	3.00	3.44	3.90	4.38	4.90	5.46	6.07	6.71	7.35
9.00	DISCHG	8.01	8.70	9.42	10.24	11.12	12.01	12.90	13.79	14.73	15.71
9.75	DISCHG	16.82	17.98	19.13	20.26	21.44	22.74	24.23	26.06	27.92	29.72
10.50	DISCHG	31.51	33.46	35.64	38.40	41.60	44.76	47.84	50.98	54.71	59.08
11.25	DISCHG	65.11	71.68	78.08	84.40	96.73	126.68	167.60	219.83	290.27	391.27
12.00	DISCHG	516.42	627.18	709.53	766.33	792.18	799.35	798.92	794.88	784.97	770.85
12.75	DISCHG	753.16	731.39	706.49	680.37	653.62	626.27	599.28	562.39	523.58	487.06

13.50	DISCHG	453.62	422.86	391.80	360.00	330.42	304.27	281.38	261.39	243.74	228.16
14.25	DISCHG	214.02	201.43	190.41	180.80	174.64	174.36	182.04	191.47	205.18	224.00
15.00	DISCHG	244.93	261.27	273.72	282.48	276.13	259.58	240.67	222.01	211.44	209.32
15.75	DISCHG	221.17	234.97	258.73	289.40	319.51	342.12	361.91	372.82	366.43	350.17
16.50	DISCHG	330.30	308.32	285.28	262.03	239.22	217.41	197.08	178.51	161.74	147.46
17.25	DISCHG	137.41	129.06	121.60	114.79	108.55	102.84	97.63	92.88	88.55	84.62
18.00	DISCHG	81.05	77.75	74.67	71.69	68.87	66.32	64.02	61.96	60.18	58.65
18.75	DISCHG	57.49	56.50	55.59	54.77	54.02	53.30	52.57	51.80	51.10	50.48
19.50	DISCHG	49.93	49.37	48.81	48.17	47.50	46.88	46.31	45.77	45.20	44.60
20.25	DISCHG	43.87	43.16	42.51	41.91	41.41	41.02	40.82	40.80	40.80	40.80
21.00	DISCHG	40.79	40.72	40.59	40.28	39.90	39.57	39.28	38.88	38.01	36.67
21.75	DISCHG	34.30	31.82	29.58	27.49	25.50	23.57	21.70	19.90	18.17	16.55

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2481.38 CFS-HRS, 205.06 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 3 -RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 4.04 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 4 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	506.65	(RUNOFF)
15.12	114.87	(RUNOFF)
16.17	160.07	(RUNOFF)
19.18	14.36	(RUNOFF)
21.14	12.21	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.07 WATERSHED INCHES, 871.28 CFS-HRS, 72.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	336.11	1.54
15.12	71.59	0.75
16.17	102.27	0.85
19.18	6.68	0.32
21.14	3.52	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.90 CFS-HRS, 43.71 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	170.55	1.54
15.12	43.28	0.75
16.17	57.80	0.85
19.18	7.68	0.32
21.14	6.69	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.39 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	169.38	(NULL)
15.21	42.99	(NULL)
16.26	57.42	(NULL)
19.27	7.67	(NULL)
21.23	6.68	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.31 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	335.07	(NULL)
15.20	71.35	(NULL)
16.25	101.89	(NULL)
19.26	6.68	(NULL)
21.23	5.51	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.85 CFS-HRS, 43.70 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	487.37	(RUNOFF)
14.99	110.26	(RUNOFF)
16.02	158.12	(RUNOFF)
19.01	11.23	(RUNOFF)
20.99	9.64	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.98 WATERSHED INCHES, 654.93 CFS-HRS, 54.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	(NULL)
15.03	145.49	(NULL)
16.04	201.05	(NULL)
19.06	18.74	(NULL)
21.04	16.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 997.24 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	3.76
15.03	145.49	1.43
16.04	201.05	1.71
19.06	18.74	0.61
21.04	16.14	0.56

RUNOFF VOLUME ABOVE BASEFLOW = 4.75 WATERSHED INCHES, 997.23 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	(NULL)
15.03	145.49	(NULL)
16.04	201.05	(NULL)
19.06	18.74	(NULL)
21.04	16.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.75 WATERSHED INCHES, 997.23 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	881.32	(NULL)
15.07	208.12	(NULL)
16.09	280.78	(NULL)
19.10	25.29	(NULL)
21.07	21.52	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.81 WATERSHED INCHES, 1526.08 CFS-HRS, 126.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	1100.77	(RUNOFF)
14.97	257.44	(RUNOFF)
15.98	368.43	(RUNOFF)
17.89	25.63	(RUNOFF)
18.98	25.51	(RUNOFF)
20.97	21.96	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 1427.77 CFS-HRS, 117.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	1949.23	(NULL)
15.00	455.15	(NULL)
16.03	638.38	(NULL)
19.03	50.69	(NULL)
21.01	43.35	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.11	0.20	0.34
6.00	DISCHG	0.52	0.72	0.95	1.19	1.43	1.68	1.93	2.20	2.52	2.91
6.75	DISCHG	3.33	3.77	4.23	4.69	5.17	5.77	6.48	7.24	7.99	8.72
7.50	DISCHG	9.44	10.14	10.83	11.50	12.15	12.79	13.40	14.04	14.86	15.94
8.25	DISCHG	17.10	18.19	19.20	20.16	21.12	22.21	23.40	24.57	25.64	26.64
9.00	DISCHG	27.61	28.75	30.29	32.01	33.62	35.06	36.37	37.67	39.27	41.31
9.75	DISCHG	43.38	45.22	46.86	48.38	50.23	53.33	57.49	61.49	64.84	67.69
10.50	DISCHG	70.39	74.28	80.71	88.19	94.87	100.30	104.94	110.17	119.98	135.55
11.25	DISCHG	151.94	165.74	176.87	186.41	245.52	463.55	811.55	1162.91	1456.76	1697.54
12.00	DISCHG	1892.12	1937.75	1743.87	1449.26	1198.17	1024.94	899.55	798.04	698.16	593.01
12.75	DISCHG	503.83	439.57	394.47	361.12	333.68	305.70	278.00	255.57	239.51	228.00
13.50	DISCHG	219.09	209.84	197.80	185.69	176.25	169.72	164.90	160.84	155.97	150.07

14.25	DISCHG	144.73	140.79	138.07	136.44	149.85	203.72	281.03	350.07	398.76	433.73
15.00	DISCHG	455.13	431.02	350.00	259.90	189.78	141.54	105.52	87.84	135.17	260.88
15.75	DISCHG	394.92	496.69	567.73	620.14	634.04	567.14	451.77	346.77	273.79	221.24
16.50	DISCHG	181.16	149.49	124.85	106.61	93.71	84.54	77.89	72.92	68.61	64.68
17.25	DISCHG	61.42	58.99	57.22	55.89	54.87	54.07	53.44	52.96	52.61	52.34
18.00	DISCHG	52.09	51.41	50.08	48.65	47.53	46.76	46.20	45.93	46.39	47.53
18.75	DISCHG	48.68	49.52	50.11	50.54	50.66	50.20	49.41	48.70	48.22	47.87
19.50	DISCHG	47.56	47.01	46.09	45.13	44.39	43.88	43.51	43.10	42.29	41.15
20.25	DISCHG	40.10	39.34	38.81	38.43	38.49	39.33	40.59	41.68	42.44	42.99
21.00	DISCHG	43.34	43.08	42.04	40.83	39.88	39.23	38.72	37.40	32.89	25.57
21.75	DISCHG	18.77	13.88	10.45	7.86	5.86	4.28	3.10	2.27	1.69	1.26

RUNOFF VOLUME ABOVE BASEFLOW = 3.25 WATERSHED INCHES, 2953.85 CFS-HRS, 244.11 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.44	926.67	12.89
15.16	334.68	3.78
16.22	428.11	4.76
21.08	42.82	0.65

RUNOFF VOLUME ABOVE BASEFLOW = 3.23 WATERSHED INCHES, 2941.76 CFS-HRS, 243.11 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.44	926.67	(NULL)
15.16	334.68	(NULL)
16.22	428.11	(NULL)
21.08	42.82	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.23 WATERSHED INCHES, 2941.76 CFS-HRS, 243.11 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	99.70	(RUNOFF)
14.97	23.22	(RUNOFF)
15.97	33.35	(RUNOFF)
20.96	1.95	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.81 WATERSHED INCHES, 126.83 CFS-HRS, 10.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.34	954.15	(NULL)
15.13	348.31	(NULL)
16.18	442.76	(NULL)
21.04	44.73	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.21 WATERSHED INCHES, 3068.59 CFS-HRS, 253.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(RUNOFF)
14.99	9.27	(RUNOFF)
16.02	13.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 53.95 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(NULL)
14.99	9.27	(NULL)
16.02	13.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.44 WATERSHED INCHES, 53.95 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(DIVERT)
14.99	9.27	(DIVERT)
16.02	13.28	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.44 WATERSHED INCHES, 53.94 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.34	954.15	(NULL)
15.13	348.31	(NULL)
16.18	442.76	(NULL)
21.04	44.73	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.21 WATERSHED INCHES, 3068.59 CFS-HRS, 253.59 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.43	954.04	(NULL)
15.21	347.68	(NULL)
16.26	442.20	(NULL)
21.11	44.73	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.21 WATERSHED INCHES, 3066.34 CFS-HRS, 253.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	146.32	(RUNOFF)
15.00	34.47	(RUNOFF)
16.02	49.03	(RUNOFF)
21.00	3.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 198.67 CFS-HRS, 16.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	1028.09	(NULL)
15.17	370.38	(NULL)
16.21	471.18	(NULL)
21.03	47.73	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 3265.01 CFS-HRS, 269.82 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	1026.08	(NULL)
15.26	368.78	(NULL)
16.29	469.71	(NULL)
21.13	47.73	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 3263.80 CFS-HRS, 269.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	176.88	(RUNOFF)
15.12	42.40	(RUNOFF)
16.17	59.12	(RUNOFF)
19.18	5.33	(RUNOFF)
21.14	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 305.27 CFS-HRS, 25.23 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	209.86	(NULL)
15.09	50.32	(NULL)
16.13	70.24	(NULL)
19.14	6.28	(NULL)
21.11	5.35	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
6.75	DISCHG	0.03	0.06	0.09	0.13	0.17	0.22	0.28	0.34	0.41	0.49
7.50	DISCHG	0.56	0.64	0.72	0.80	0.87	0.95	1.03	1.10	1.19	1.28
8.25	DISCHG	1.39	1.50	1.62	1.73	1.85	1.97	2.09	2.22	2.35	2.47
9.00	DISCHG	2.60	2.73	2.87	3.03	3.20	3.37	3.54	3.71	3.89	4.07
9.75	DISCHG	4.28	4.49	4.70	4.91	5.13	5.38	5.70	6.07	6.46	6.85
10.50	DISCHG	7.23	7.65	8.15	8.75	9.42	10.11	10.78	11.47	12.30	13.39
11.25	DISCHG	14.74	16.24	17.76	19.31	23.13	33.12	51.73	79.13	111.22	144.32
12.00	DISCHG	175.56	199.28	209.59	204.97	189.52	169.11	148.06	128.09	110.35	95.42
12.75	DISCHG	83.10	72.58	63.75	56.44	50.47	45.52	41.40	37.92	34.97	32.50
13.50	DISCHG	30.45	28.70	27.12	25.67	24.32	23.10	22.07	21.21	20.47	19.82
14.25	DISCHG	19.20	18.62	18.10	17.78	18.22	20.39	24.59	30.33	36.73	42.89
15.00	DISCHG	47.93	50.28	48.98	44.21	37.52	30.47	23.78	18.46	16.40	19.57
15.75	DISCHG	27.22	37.65	48.70	59.08	66.93	70.22	67.95	61.38	52.84	44.00

16.50	DISCHG	35.79	28.71	23.21	19.19	16.25	14.03	12.36	11.11	10.15	9.38
17.25	DISCHG	8.77	8.27	7.86	7.53	7.27	7.05	6.89	6.76	6.67	6.60
18.00	DISCHG	6.54	6.49	6.42	6.33	6.21	6.09	5.98	5.89	5.84	5.86
18.75	DISCHG	5.92	6.00	6.10	6.18	6.25	6.28	6.27	6.22	6.17	6.11
19.50	DISCHG	6.05	5.98	5.91	5.83	5.74	5.66	5.58	5.51	5.43	5.34
20.25	DISCHG	5.24	5.13	5.04	4.96	4.90	4.89	4.94	5.02	5.12	5.21
21.00	DISCHG	5.29	5.34	5.34	5.28	5.20	5.10	5.01	4.88	4.63	4.20
21.75	DISCHG	3.63	3.01	2.41	1.87	1.41	1.05	0.78	0.59	0.44	0.33

RUNOFF VOLUME ABOVE BASEFLOW = 1.55 WATERSHED INCHES, 359.21 CFS-HRS, 29.69 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.15	(RUNOFF)
14.91	74.12	(RUNOFF)
15.94	111.03	(RUNOFF)
16.91	8.10	(RUNOFF)
17.89	7.09	(RUNOFF)
18.94	7.10	(RUNOFF)
20.90	6.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES, 419.11 CFS-HRS, 34.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	1.32
14.91	51.17	0.67
15.94	66.82	0.79
16.91	8.10	0.20
17.89	7.09	0.18
18.94	7.10	0.18
20.90	6.11	0.15

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES, 290.27 CFS-HRS, 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	1.32
14.91	22.95	0.67
15.94	44.21	0.79

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	(NULL)
14.91	51.17	(NULL)
15.94	66.82	(NULL)
16.91	8.10	(NULL)
17.89	7.09	(NULL)
18.94	7.10	(NULL)
20.90	6.11	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES, 290.27 CFS-HRS, 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(82.70) AT XSECTION 40 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 5 %.

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.96	82.70	(RUNOFF)
12.42	16.07	(RUNOFF)
12.94	8.42	(RUNOFF)
13.40	6.13	(RUNOFF)
14.89	17.24	(RUNOFF)
15.93	25.09	(RUNOFF)
21.41	1.22	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.05 SQ.MI.

6.00	DISCHG	0.00	0.00	0.01	0.02	0.04	0.05	0.07	0.08	0.10	0.11
6.75	DISCHG	0.13	0.14	0.16	0.17	0.20	0.24	0.26	0.28	0.30	0.32
7.50	DISCHG	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.56	0.60
8.25	DISCHG	0.63	0.66	0.68	0.70	0.74	0.80	0.83	0.86	0.88	0.91
9.00	DISCHG	0.94	1.03	1.11	1.15	1.19	1.22	1.25	1.29	1.43	1.50
9.75	DISCHG	1.54	1.57	1.61	1.64	1.83	2.11	2.22	2.29	2.34	2.39
10.50	DISCHG	2.45	2.97	3.35	3.49	3.58	3.66	3.74	4.09	5.48	6.07
11.25	DISCHG	6.33	6.50	6.65	6.85	24.20	52.93	64.41	70.45	74.59	77.74
12.00	DISCHG	78.68	43.81	21.76	17.02	16.05	15.90	15.96	14.91	10.22	8.69
12.75	DISCHG	8.37	8.31	8.31	8.33	7.52	6.43	6.17	6.12	6.12	6.12
13.50	DISCHG	6.08	5.33	4.90	4.80	4.79	4.79	4.79	4.68	4.28	4.15
14.25	DISCHG	4.13	4.12	4.12	4.15	9.08	15.21	16.67	17.02	17.13	17.18
15.00	DISCHG	16.54	6.67	1.41	0.29	0.05	0.00	0.00	3.99	18.76	23.53
15.75	DISCHG	24.65	24.96	25.08	25.07	15.69	5.03	2.54	1.99	1.88	1.87
16.50	DISCHG	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.83	1.69	1.65
17.25	DISCHG	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.65
18.00	DISCHG	1.63	1.49	1.43	1.41	1.41	1.41	1.41	1.46	1.60	1.64
18.75	DISCHG	1.65	1.65	1.65	1.65	1.57	1.50	1.49	1.49	1.49	1.49

19.50	DISCHG	1.48	1.39	1.35	1.35	1.35	1.35	1.35	1.31	1.21	1.19
20.25	DISCHG	1.18	1.18	1.18	1.18	1.29	1.39	1.41	1.42	1.42	1.42
21.00	DISCHG	1.40	1.26	1.20	1.19	1.18	1.18	1.18	0.87	0.22	0.05
21.75	DISCHG	0.01	0.00								

RUNOFF VOLUME ABOVE BASEFLOW = 2.90 WATERSHED INCHES, 93.44 CFS-HRS, 7.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	236.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	236.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.93	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	280.55	(NULL)
14.91	78.35	(NULL)
15.94	107.75	(NULL)
16.91	11.09	(NULL)
17.89	9.71	(NULL)
18.94	9.75	(NULL)
20.90	8.37	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.67 WATERSHED INCHES, 437.82 CFS-HRS, 36.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	161.59	1.27
14.91	44.21	0.60
15.94	62.40	0.74
18.94	5.68	0.14
20.90	4.87	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 4.18 WATERSHED INCHES, 249.58 CFS-HRS, 20.63 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	118.96	1.27
14.91	34.14	0.60
15.94	45.35	0.74
18.94	4.07	0.14
20.90	3.49	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 3.15 WATERSHED INCHES, 188.23 CFS-HRS, 15.56 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	160.55	(NULL)
14.99	44.15	(NULL)
16.01	62.17	(NULL)
19.01	5.68	(NULL)
20.98	4.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.19 WATERSHED INCHES, 249.91 CFS-HRS, 20.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	(NULL)
14.91	22.95	(NULL)
15.94	44.21	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.95	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	245.01	(NULL)
14.91	32.92	(NULL)
15.94	58.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.10 WATERSHED INCHES, 182.93 CFS-HRS, 15.12 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	116.41	(NULL)
15.01	33.97	(NULL)
16.02	44.84	(NULL)
19.02	4.07	(NULL)
20.99	3.49	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.16 WATERSHED INCHES, 188.49 CFS-HRS, 15.58 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	207.09	(RUNOFF)
14.97	48.56	(RUNOFF)
15.99	69.08	(RUNOFF)
18.99	4.84	(RUNOFF)
20.98	4.16	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 270.52 CFS-HRS, 22.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	402.13	(NULL)
15.01	96.23	(NULL)
16.04	134.27	(NULL)
19.05	11.08	(NULL)
21.03	9.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 629.73 CFS-HRS, 52.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.41	(RUNOFF)
14.90	3.37	(RUNOFF)
15.94	5.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 18.09 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.41	1299.48
14.90	3.37	1299.10
15.94	5.03	1299.16

RUNOFF VOLUME ABOVE BASEFLOW = 5.60 WATERSHED INCHES, 18.09 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	402.13	(NULL)
15.01	96.23	(NULL)
16.04	134.27	(NULL)
19.05	11.08	(NULL)
21.03	9.46	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06
6.75	DISCHG	0.11	0.17	0.24	0.31	0.40	0.51	0.63	0.76	0.90	1.04
7.50	DISCHG	1.17	1.31	1.45	1.58	1.72	1.85	1.98	2.11	2.28	2.48
8.25	DISCHG	2.70	2.92	3.12	3.32	3.52	3.73	3.97	4.20	4.42	4.63
9.00	DISCHG	4.84	5.07	5.37	5.70	6.03	6.33	6.61	6.89	7.21	7.60

9.75	DISCHG	8.01	8.40	8.75	9.08	9.47	10.06	10.83	11.61	12.31	12.94
10.50	DISCHG	13.53	14.32	15.51	16.92	18.27	19.44	20.48	21.61	23.49	26.35
11.25	DISCHG	29.52	32.41	34.88	37.42	48.84	86.04	148.04	217.37	280.14	335.44
12.00	DISCHG	381.73	402.08	377.39	327.53	278.04	238.87	207.49	181.40	157.58	135.18
12.75	DISCHG	116.36	101.69	90.64	82.16	75.32	68.85	62.84	57.82	53.98	51.05
13.50	DISCHG	48.73	46.51	43.96	41.44	39.33	37.71	36.45	35.42	34.35	33.16
14.25	DISCHG	32.04	31.14	30.46	30.14	32.41	41.85	55.98	69.97	81.29	90.19
15.00	DISCHG	96.10	93.26	79.87	62.69	47.54	36.01	26.85	21.42	26.97	47.27
15.75	DISCHG	73.16	96.09	113.96	128.07	134.23	125.85	106.22	85.44	68.60	55.21
16.50	DISCHG	44.44	35.91	29.64	25.19	22.01	19.65	17.91	16.63	15.57	14.63
17.25	DISCHG	13.86	13.25	12.79	12.43	12.15	11.92	11.75	11.63	11.53	11.46
18.00	DISCHG	11.40	11.28	11.05	10.77	10.53	10.34	10.20	10.11	10.16	10.35
18.75	DISCHG	10.57	10.76	10.91	11.02	11.08	11.02	10.88	10.74	10.63	10.54
19.50	DISCHG	10.46	10.34	10.16	9.97	9.81	9.68	9.59	9.49	9.32	9.10
20.25	DISCHG	8.89	8.71	8.58	8.48	8.46	8.59	8.82	9.04	9.21	9.36
21.00	DISCHG	9.43	9.44	9.27	9.05	8.85	8.69	8.56	8.27	7.44	6.11
21.75	DISCHG	4.73	3.81	2.74	2.05	1.51	1.10	0.81	0.60	0.44	0.33

RUNOFF VOLUME ABOVE BASEFLOW = 1.89 WATERSHED INCHES, 629.73 CFS-HRS, 52.04 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	(NULL)
15.01	3.33	(NULL)
16.02	4.94	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 5.60 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	(DIVERT)
15.01	3.33	(DIVERT)
16.02	4.94	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 11.20 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	0.77
15.01	3.33	0.56
16.02	4.94	0.59

RUNOFF VOLUME ABOVE BASEFLOW = 7.47 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.25	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
14.63	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
19.01	5.68	(DIVERT)
20.98	4.87	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 4.50 WATERSHED INCHES, 134.35 CFS-HRS, 11.10 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	1.00
14.99	26.15	0.37
16.01	44.17	0.52

RUNOFF VOLUME ABOVE BASEFLOW = 3.88 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	(NULL)
14.99	26.15	(NULL)
16.01	44.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.77 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	32.92	(NULL)
15.01	21.33	(NULL)
16.02	22.94	(NULL)
19.01	6.00	(NULL)
20.98	5.15	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.72 WATERSHED INCHES, 152.42 CFS-HRS, 12.60 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	(NULL)
14.99	26.15	(NULL)
16.01	44.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.77 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	45.28	(RUNOFF)
14.92	10.04	(RUNOFF)
15.94	14.89	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.21 CFS-HRS, 4.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	181.02	(NULL)
14.96	36.33	(NULL)
15.97	57.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.39 WATERSHED INCHES, 169.78 CFS-HRS, 14.03 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	180.99	(NULL)
15.04	36.32	(NULL)
16.04	57.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.39 WATERSHED INCHES, 169.77 CFS-HRS, 14.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	524.28	(NULL)
14.96	103.73	(NULL)
15.96	157.79	(NULL)
18.99	6.00	(NULL)
20.97	5.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.75 WATERSHED INCHES, 541.19 CFS-HRS, 44.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	49.35	(RUNOFF)
14.91	10.51	(RUNOFF)
15.94	15.56	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES, 59.77 CFS-HRS, 4.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	573.53	(NULL)
14.96	114.43	(NULL)
15.95	173.33	(NULL)
18.97	7.01	(NULL)
20.97	6.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 600.96 CFS-HRS, 49.66 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	32.76	(NULL)
15.09	21.32	(NULL)
16.10	22.90	(NULL)
19.09	6.00	(NULL)
21.06	5.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.71 WATERSHED INCHES, 152.11 CFS-HRS, 12.57 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	90.56	(RUNOFF)
14.92	20.09	(RUNOFF)
15.94	29.78	(RUNOFF)
20.92	1.68	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 108.42 CFS-HRS, 8.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	121.06	(NULL)
14.94	41.12	(NULL)
15.95	52.15	(NULL)
17.90	7.92	(NULL)
19.00	7.91	(NULL)
20.98	6.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.67 WATERSHED INCHES, 260.54 CFS-HRS, 21.53 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.85	(RUNOFF)
14.93	10.01	(RUNOFF)
15.95	14.79	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.28 CFS-HRS, 4.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	165.90	(NULL)
14.94	51.14	(NULL)
15.95	66.93	(NULL)
17.90	8.90	(NULL)
18.99	8.89	(NULL)
20.98	7.64	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.15	0.20
6.00	DISCHG	0.24	0.28	0.32	0.37	0.41	0.46	0.51	0.56	0.63	0.70
6.75	DISCHG	0.77	0.85	0.93	1.00	1.09	1.18	1.31	1.51	1.68	1.82
7.50	DISCHG	1.94	2.05	2.16	2.26	2.36	2.47	2.57	2.67	2.81	2.98
8.25	DISCHG	3.26	3.53	3.73	3.88	4.03	4.19	4.38	4.62	4.83	5.00
9.00	DISCHG	5.15	5.33	5.56	5.90	6.30	6.59	6.81	7.00	7.24	7.54
9.75	DISCHG	7.99	8.42	8.71	8.94	9.22	9.69	10.40	11.50	12.30	12.80
10.50	DISCHG	13.17	13.76	14.64	16.17	17.85	18.94	19.62	20.26	21.79	23.98
11.25	DISCHG	27.91	29.35	29.94	30.45	40.59	75.30	108.81	131.25	147.04	158.24
12.00	DISCHG	165.15	145.67	103.59	76.00	61.73	54.64	51.45	49.47	44.60	39.53
12.75	DISCHG	36.82	35.43	34.79	34.50	33.91	32.38	31.17	30.56	30.25	30.11
13.50	DISCHG	30.02	29.47	28.54	27.96	26.79	25.92	25.55	25.36	24.93	24.33
14.25	DISCHG	23.29	22.51	22.15	22.03	25.00	33.79	44.22	48.25	50.18	51.12
15.00	DISCHG	50.65	42.48	31.09	24.47	16.98	7.33	2.73	2.82	15.48	36.70
15.75	DISCHG	56.62	62.88	65.48	66.61	61.44	45.71	33.67	27.44	21.91	15.21
16.50	DISCHG	12.01	10.75	10.31	10.19	10.15	10.14	10.14	10.11	9.98	9.76
17.25	DISCHG	9.37	9.09	8.96	8.91	8.90	8.89	8.89	8.89	8.89	8.89
18.00	DISCHG	8.89	8.78	8.60	8.24	7.91	7.74	7.67	7.68	7.81	8.03
18.75	DISCHG	8.43	8.71	8.84	8.89	8.86	8.75	8.55	8.28	8.13	8.07
19.50	DISCHG	8.04	7.96	7.85	7.63	7.43	7.33	7.29	7.26	7.15	6.99
20.25	DISCHG	6.71	6.52	6.43	6.40	6.46	6.63	6.93	7.31	7.52	7.61
21.00	DISCHG	7.64	7.54	7.35	6.98	6.66	6.49	6.43	6.23	5.47	4.29
21.75	DISCHG	2.30	0.95	0.35	0.12	0.03	0.00				

RUNOFF VOLUME ABOVE BASEFLOW = 3.48 WATERSHED INCHES, 314.82 CFS-HRS, 26.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	177.39	(RUNOFF)
15.01	41.65	(RUNOFF)
16.04	59.16	(RUNOFF)
19.04	4.47	(RUNOFF)
21.02	3.83	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 251.70 CFS-HRS, 20.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	740.75	(NULL)
14.97	155.51	(NULL)
15.97	229.48	(NULL)
19.01	11.48	(NULL)
20.99	9.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 852.66 CFS-HRS, 70.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.35	1081.93	(NULL)
15.23	391.38	(NULL)
16.27	496.72	(NULL)
20.97	55.33	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.05	0.06	0.05	0.05	0.04	0.04	0.03	0.03
0.75	DISCHG	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
1.50	DISCHG	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.15	0.21
6.00	DISCHG	0.26	0.33	0.41	0.50	0.61	0.74	0.89	1.05	1.25	1.47
6.75	DISCHG	1.72	2.00	2.32	2.66	3.04	3.45	3.92	4.49	5.09	5.69
7.50	DISCHG	6.30	6.94	7.60	8.28	8.97	9.69	10.41	11.14	11.92	12.74
8.25	DISCHG	13.71	14.74	15.73	16.72	17.72	18.75	19.84	21.02	22.21	23.38
9.00	DISCHG	24.54	25.75	27.01	28.45	30.01	31.54	33.02	34.51	36.05	37.68
9.75	DISCHG	39.35	41.48	43.34	45.17	47.05	49.16	51.62	54.72	57.80	60.73
10.50	DISCHG	63.59	66.73	70.27	74.79	79.99	85.04	89.89	94.82	100.73	107.70
11.25	DISCHG	117.48	126.08	134.74	143.73	162.65	209.55	269.88	358.44	492.04	659.44
12.00	DISCHG	819.16	937.28	1003.69	1055.69	1079.00	1080.69	1066.42	1054.56	1041.17	1026.54
12.75	DISCHG	1010.23	991.34	967.45	935.30	901.02	865.64	829.66	793.24	757.29	722.60
13.50	DISCHG	688.77	656.07	624.67	594.60	553.11	512.75	476.23	443.51	413.92	382.50
14.25	DISCHG	352.30	325.57	302.48	282.60	268.57	263.65	266.92	275.11	292.94	317.77
15.00	DISCHG	345.28	366.30	381.77	391.36	383.51	358.94	331.24	304.21	288.79	285.99
15.75	DISCHG	298.01	318.30	353.28	397.20	439.61	470.96	490.46	496.62	487.01	465.92
16.50	DISCHG	442.65	417.91	392.13	361.49	329.20	298.21	269.56	243.61	220.34	199.68
17.25	DISCHG	181.25	165.07	151.00	141.97	134.70	128.20	122.28	116.87	111.94	107.46
18.00	DISCHG	103.38	99.58	96.03	92.51	89.16	86.14	83.42	80.99	78.89	77.12
18.75	DISCHG	75.84	74.74	73.74	72.82	71.98	71.16	70.29	69.34	68.50	67.76

19.50	DISCH6	67.10	66.42	65.72	64.88	64.01	63.22	62.49	61.80	61.05	60.25
20.25	DISCH6	59.28	58.33	57.46	56.67	56.00	55.50	55.26	55.28	55.31	55.32
21.00	DISCH6	55.32	55.24	55.08	54.64	54.11	53.65	53.26	52.72	51.53	49.64
21.75	DISCH6	46.25	42.82	39.74	36.91	34.19	31.55	29.02	26.58	24.25	22.06

RUNOFF VOLUME ABOVE BASEFLOW = 3.21 WATERSHED INCHES, 3578.62 CFS-HRS, 295.74 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 4 RECORD ID

EXECUTIVE CONTROL OPERATION ENDJOB RECORD ID

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	1.44	24.00	0.62	---	12.24	93.78	213.1
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	1.44	24.00	0.47	0.70	12.24	57.73	195.8
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	1.44	24.00	0.91	0.70	12.24	36.05	248.3
XSECTION 13	REACH	0.15	2	2	0.08	0.0	1.44	24.00	0.91	---	12.37	34.85	240.0
XSECTION 15	REACH	0.29	2	2	0.08	0.0	1.44	24.00	0.47	---	12.36	55.54	188.4
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	1.44	24.00	0.57	---	12.07	88.30	259.7
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	1.44	24.00	0.67	---	12.10	111.59	230.0
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	1.44	24.00	1.00	1.26	12.10	111.59	343.3
XSECTION 21	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	1.44	24.00	1.00	---	12.10	111.59	343.3
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	1.44	24.00	0.75	---	12.16	149.25	240.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	177.74	225.0
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	1.44	24.00	0.60	---	12.08	318.72	226.1
STRUCTURE 6	RESVOR	1.41	2	2	0.08	0.0	1.44	24.00	0.60	2.30	12.52	165.76	117.6
XSECTION 27	REACH	1.41	2	2	0.08	0.0	1.44	24.00	0.60	---	12.60	165.72	117.5
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	1.44	24.00	0.49	---	12.04	16.27	232.4
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	1.44	24.00	0.59	---	12.59	169.97	114.9
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.09	6.21	206.9
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	1.44	24.00	0.08	---	12.09	6.21	32.7
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	1.44	24.00	0.08	---	12.09	6.21	32.7
XSECTION 103	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	1.44	24.00	0.59	---	12.59	169.97	114.9
XSECTION 104	REACH	1.48	2	2	0.08	0.0	1.44	24.00	0.59	---	12.71	168.43	113.8
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	1.44	24.00	0.48	---	12.08	22.90	208.1
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	1.44	24.00	0.58	---	12.69	174.67	109.9
XSECTION 105	REACH	1.59	2	2	0.08	0.0	1.44	24.00	0.58	---	12.83	172.36	108.4
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	1.44	24.00	0.48	---	12.26	26.16	153.9
XSECTION 35	ADDHYD	0.36	2	2	0.08	0.0	1.44	24.00	0.27	---	12.22	30.88	85.7
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	1.44	24.00	0.62	---	11.98	73.18	348.5
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	1.15	0.67	11.98	50.73	483.1

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	0.09	0.67	11.98	22.45	213.8
XSECTION 39	REACH	0.10	2	2	0.08	0.0	1.44	24.00	1.15	---	11.98	50.73	483.1
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	1.44	24.00	0.53	---	11.97	15.57	311.3
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 45	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	1.44	24.00	0.88	---	11.98	73.48	397.2
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.99	0.57	11.98	41.19	445.3
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.76	0.57	11.98	32.29	349.1
XSECTION 2	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.99	---	12.07	39.53	427.4
XSECTION 43	REACH	0.10	2	2	0.08	0.0	1.44	24.00	0.09	---	12.06	20.98	199.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	1.44	24.00	0.18	---	12.06	28.04	207.7
XSECTION 1	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.76	---	12.08	29.87	323.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.06	57.76	253.9
XSECTION 91	REACH	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.15	55.97	246.0
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	33.45	223.0
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	1.44	24.00	0.33	---	12.10	60.56	118.7
XSECTION 50	RUNOFF	0.01	2	2	0.08	0.0	1.44	24.00	0.48	---	11.99	2.62	261.9
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.97	1299.08	11.99	2.62	523.9
XSECTION 53	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	1.44	24.00	0.33	---	12.10	60.56	117.6
XSECTION 57	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.97	---	12.19	2.16	432.9
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	1.93	---	12.19	2.16	865.9
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	1.44	24.00	1.29	0.54	12.19	2.16	577.3
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	1.75	---	15.83*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	0.24	0.33	12.07	21.53	465.6
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	1.44	24.00	0.24	---	12.07	21.53	453.4
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	1.44	24.00	1.71	---	12.19	20.16	403.3
XSECTION 3	REACH	0.05	2	2	0.08	0.0	1.44	24.00	0.23	---	12.15	20.31	427.5
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	7.56	251.9
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	1.44	24.00	0.33	---	12.13	24.87	320.9

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 47	REACH	0.08	2	2	0.08	0.0	1.44	24.00	0.33	---	12.22	23.39	301.8
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	1.44	24.00	0.39	---	12.16	77.40	253.8
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.62	---	11.99	9.99	333.1
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	1.44	24.00	0.41	---	12.15	82.58	246.5
XSECTION 63	REACH	0.05	2	2	0.08	0.0	1.44	24.00	1.71	---	12.27	20.12	402.4
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	15.11	251.9
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	1.44	24.00	1.04	---	12.01	33.97	308.8
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.49	---	12.01	7.44	248.0
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	1.44	24.00	0.92	---	12.01	41.40	295.7
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	1.44	24.00	0.48	---	12.12	27.42	195.9
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	1.44	24.00	0.43	---	12.15	109.75	231.1
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	1.44	24.00	0.61	---	12.78	185.86	107.4
ALTERNATE 1 STORM 2													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	2.53	24.00	1.58	---	12.21	257.50	585.2
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	2.53	24.00	1.36	1.05	12.21	168.36	571.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	2.53	24.00	2.02	1.05	12.21	89.14	613.9
XSECTION 13	REACH	0.15	2	2	0.08	0.0	2.53	24.00	2.02	---	12.31	87.77	604.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	2.53	24.00	1.36	---	12.31	166.55	564.9
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	2.53	24.00	1.51	---	12.05	246.12	723.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	2.53	24.00	1.66	---	12.08	308.10	635.0
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	2.53	24.00	2.48	2.24	12.08	308.10	947.7
XSECTION 21	REACH	0.16	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	2.53	24.00	2.48	---	12.08	308.10	947.7
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	2.53	24.00	1.95	---	12.13	436.26	703.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	2.53	24.00	1.37	---	12.03	534.30	676.3
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	2.53	24.00	1.62	---	12.06	954.00	676.7
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	2.53	24.00	1.62	6.09	12.37	545.22	386.7
XSECTION 27	REACH	1.41	2	2	0.08	0.0	2.53	24.00	1.62	---	12.37	545.22	386.7
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	2.53	24.00	1.37	---	12.02	48.54	693.4
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	2.53	24.00	1.61	---	12.33	561.93	379.7
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.36	---	12.06	19.16	638.7
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	2.53	24.00	0.22	---	12.06	19.16	100.8
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	2.53	24.00	0.21	---	12.06	19.16	100.8
XSECTION 103	REACH	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	**********

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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	2.53	24.00	1.61	---	12.33	561.93	379.7
XSECTION 104	REACH	1.48	2	2	0.08	0.0	2.53	24.00	1.60	---	12.43	559.92	378.4
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	2.53	24.00	1.37	---	12.06	70.59	641.7
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	2.53	24.00	1.59	---	12.38	588.80	370.3
XSECTION 105	REACH	1.59	2	2	0.08	0.0	2.53	24.00	1.59	---	12.48	586.86	369.1
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	2.53	24.00	1.36	---	12.22	83.91	493.6
XSECTION 33	ADDHYD	0.36	2	2	0.08	0.0	2.53	24.00	0.76	---	12.18	99.45	276.2
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	2.53	24.00	1.59	---	11.97	186.91	890.0
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	2.49	0.99	11.97	94.57	900.7
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	0.70	0.99	11.97	92.34	879.4
XSECTION 39	REACH	0.10	2	2	0.08	0.0	2.53	24.00	2.49	---	11.97	94.57	900.7
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	2.53	24.00	1.44	---	11.97	42.38	847.6
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5
XSECTION 45	REACH	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	2.53	24.00	2.02	---	11.97	158.61	857.4
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	2.30	0.93	11.97	91.75	991.9
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	1.75	0.93	11.97	66.87	722.9
XSECTION 2	REACH	0.09	2	2	0.08	0.0	2.53	24.00	2.30	---	12.05	90.35	976.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	2.53	24.00	0.70	---	11.97	92.34	879.4
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	2.53	24.00	0.85	---	11.97	114.03	844.6
XSECTION 1	REACH	0.09	2	2	0.08	0.0	2.53	24.00	1.75	---	12.06	64.15	693.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 91	REACH	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	2.53	24.00	1.37	---	12.04	101.46	676.4
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	2.53	24.00	0.94	---	12.08	192.08	376.5
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	2.53	24.00	1.37	---	11.98	7.64	764.0
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	2.74	1299.24	11.98	7.64	1527.9
XSECTION 53	REACH	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	2.53	24.00	0.93	---	12.08	192.08	372.9
XSECTION 57	REACH	0.00	2	2	0.08	0.0	2.53	24.00	2.74	---	12.07	7.11	1421.7
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	5.48	---	12.07	7.11	2843.5
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0

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SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	2.53	24.00	3.65	0.63	12.07	7.11	1895.7
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	3.03	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	1.57	0.66	12.05	72.35	1564.2
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	2.53	24.00	1.53	---	12.05	72.35	1523.1
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	2.53	24.00	3.08	---	12.07	25.11	502.2
XSECTION 3	REACH	0.05	2	2	0.08	0.0	2.53	24.00	1.53	---	12.05	72.35	1523.1
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.31	743.6
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	2.53	24.00	1.47	---	12.04	93.14	1201.8
XSECTION 47	REACH	0.08	2	2	0.08	0.0	2.53	24.00	1.47	---	12.12	92.23	1190.0
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	2.53	24.00	1.28	---	12.00	253.56	831.3
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.59	---	11.98	25.86	861.9
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	2.53	24.00	1.31	---	12.00	279.28	833.7
XSECTION 63	REACH	0.05	2	2	0.08	0.0	2.53	24.00	3.08	---	12.16	24.97	499.4
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	44.62	743.6
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	2.53	24.00	2.15	---	11.99	68.01	618.3
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.04	734.8
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	2.53	24.00	1.98	---	11.99	90.05	643.2
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	2.53	24.00	1.36	---	12.09	85.19	608.5
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	2.53	24.00	1.32	---	12.01	358.62	755.0
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	2.53	24.00	1.62	---	12.48	622.25	359.7
ALTERNATE 1 STORM 3													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	3.12	24.00	2.15	---	12.20	353.46	803.3
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	3.12	24.00	1.90	1.24	12.20	232.97	790.2
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	3.12	24.00	2.65	1.24	12.20	120.49	829.8
XSECTION 13	REACH	0.15	2	2	0.08	0.0	3.12	24.00	2.65	---	12.30	119.17	820.7
XSECTION 15	REACH	0.29	2	2	0.08	0.0	3.12	24.00	1.90	---	12.29	231.43	785.0
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	3.12	24.00	2.07	---	12.04	338.96	996.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	3.12	24.00	2.25	---	12.07	424.58	875.1
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	3.12	24.00	3.35	2.82	12.07	424.58	1306.1
XSECTION 21	REACH	0.16	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	3.12	24.00	3.35	---	12.07	424.58	1306.1
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	3.12	24.00	2.66	---	12.13	606.97	979.2
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	3.12	24.00	1.91	---	12.02	750.58	950.1
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	3.12	24.00	2.24	---	12.06	1334.91	946.8

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	3.12	24.00	2.23	8.66	12.40	699.67	496.3
XSECTION 27	REACH	1.41	2	2	0.08	0.0	3.12	24.00	2.23	---	12.40	699.67	496.3
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	3.12	24.00	1.92	---	12.01	68.09	972.6
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.36	719.49	486.2
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.90	---	12.06	27.00	900.1
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	3.12	24.00	0.30	---	12.06	27.00	142.0
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	3.12	24.00	0.30	---	12.06	27.00	142.0
XSECTION 103	REACH	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.36	719.49	486.2
XSECTION 104	REACH	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.45	718.97	485.8
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	3.12	24.00	1.91	---	12.05	99.48	904.4
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	3.12	24.00	2.19	---	12.33	758.57	477.1
XSECTION 105	REACH	1.59	2	2	0.08	0.0	3.12	24.00	2.19	---	12.44	756.97	476.1
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	3.12	24.00	1.90	---	12.21	119.26	701.6
XSECTION 35	ADDHYD	0.36	2	2	0.08	0.0	3.12	24.00	1.05	---	12.17	141.44	392.8
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	3.12	24.00	2.17	---	11.97	251.82	1199.2
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	3.19	1.12	11.97	117.97	1123.5
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	1.15	1.12	11.97	133.85	1274.8
XSECTION 39	REACH	0.10	2	2	0.08	0.0	3.12	24.00	3.19	---	11.97	117.97	1123.5
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	3.12	24.00	1.99	---	11.97	57.96	1159.2
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 45	REACH	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 43	ADDHYD	0.19	2	2	0.08	0.0	3.12	24.00	2.66	---	11.97	206.27	1115.0
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	3.02	1.07	11.97	119.10	1287.6
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	2.29	1.07	11.97	87.17	942.4
XSECTION 2	REACH	0.09	2	2	0.08	0.0	3.12	24.00	3.02	---	12.05	117.82	1273.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	3.12	24.00	1.15	---	11.97	133.85	1274.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	3.12	24.00	1.31	---	11.97	164.22	1216.5
XSECTION 1	REACH	0.09	2	2	0.08	0.0	3.12	24.00	2.30	---	12.05	84.46	913.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 91	REACH	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	3.12	24.00	1.91	---	12.03	141.22	941.5
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	3.12	24.00	1.31	---	12.08	272.11	533.4

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	3.12	24.00	1.91	---	11.97	10.62	1062.2
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	3.83	1299.33	11.97	10.62	2124.4
XSECTION 53	REACH	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	3.12	24.00	1.29	---	12.08	272.11	528.3
XSECTION 57	REACH	0.00	2	2	0.08	0.0	3.12	24.00	3.82	---	12.06	10.10	2019.8
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	7.64	---	12.06	10.10	4039.5
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	3.12	24.00	5.10	0.68	12.06	10.10	2693.0
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	3.64	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	2.41	0.79	12.05	99.82	2158.2
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	3.12	24.00	2.35	---	12.05	99.82	2101.4
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	3.12	24.00	3.75	---	12.06	28.10	562.0
XSECTION 3	REACH	0.05	2	2	0.08	0.0	3.12	24.00	2.35	---	12.05	99.82	2101.4
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	31.12	1037.2
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	3.12	24.00	2.18	---	12.03	125.88	1624.2
XSECTION 47	REACH	0.08	2	2	0.08	0.0	3.12	24.00	2.18	---	12.11	125.47	1619.0
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	3.12	24.00	1.83	---	11.99	357.64	1172.6
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	2.16	---	11.98	34.96	1165.4
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	3.12	24.00	1.86	---	11.99	392.48	1171.6
XSECTION 63	REACH	0.05	2	2	0.08	0.0	3.12	24.00	3.74	---	12.14	27.95	558.9
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	62.23	1037.2
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	3.12	24.00	2.74	---	11.99	88.29	802.6
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	30.78	1026.0
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	3.12	24.00	2.56	---	11.99	119.06	850.4
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	3.12	24.00	1.90	---	12.08	120.33	859.5
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	3.12	24.00	1.87	---	12.00	505.27	1063.7
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	3.12	24.00	2.22	---	12.41	800.10	462.5
ALTERNATE 1 STORM 4													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	4.04	24.00	3.07	---	12.20	506.65	1151.5
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	4.04	24.00	2.78	1.54	12.20	336.11	1140.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	4.04	24.00	3.65	1.54	12.20	170.55	1174.6
XSECTION 13	REACH	0.15	2	2	0.08	0.0	4.04	24.00	3.65	---	12.29	169.38	1166.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	4.04	24.00	2.78	---	12.28	335.07	1136.6

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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	4.04	24.00	2.98	---	12.04	487.37	1433.4
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	4.04	24.00	3.18	---	12.07	611.58	1260.5
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	4.04	24.00	4.75	3.76	12.07	611.58	1881.3
XSECTION 21	REACH	0.16	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	4.04	24.00	4.75	---	12.07	611.58	1881.3
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	4.04	24.00	3.81	---	12.12	881.32	1421.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	4.04	24.00	2.80	---	12.02	1100.77	1393.4
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	4.04	24.00	3.25	---	12.05	1949.23	1382.5
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	4.04	24.00	3.23	12.89	12.44	926.67	657.3
XSECTION 27	REACH	1.41	2	2	0.08	0.0	4.04	24.00	3.23	---	12.44	926.67	657.3
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	4.04	24.00	2.81	---	12.00	99.70	1424.2
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	4.04	24.00	3.21	---	12.34	954.15	644.7
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	12.05	39.71	1323.8
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	4.04	24.00	0.44	---	12.05	39.71	208.9
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	4.04	24.00	0.44	---	12.05	39.71	208.9
XSECTION 103	REACH	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	4.04	24.00	3.21	---	12.34	954.15	644.7
XSECTION 104	REACH	1.48	2	2	0.08	0.0	4.04	24.00	3.21	---	12.43	954.04	644.7
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	4.04	24.00	2.80	---	12.04	146.32	1330.2
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	4.04	24.00	3.18	---	12.28	1028.09	646.6
XSECTION 105	REACH	1.59	2	2	0.08	0.0	4.04	24.00	3.18	---	12.37	1026.08	645.4
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	4.04	24.00	2.78	---	12.20	176.88	1040.5
XSECTION 35	ADDHYD	0.36	2	2	0.08	0.0	4.04	24.00	1.55	---	12.16	209.86	582.8
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	354.15	1686.4
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	4.28	1.32	11.97	153.51	1462.0
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	1.90	1.32	11.97	200.64	1910.9
XSECTION 39	REACH	0.10	2	2	0.08	0.0	4.04	24.00	4.28	---	11.97	153.51	1462.0
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	4.04	24.00	2.90	---	11.96	82.70	1654.0
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 45	REACH	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 47	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	4.04	24.00	3.67	---	11.97	280.55	1516.5
XSECTION 87	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	4.18	1.27	11.97	161.59	1746.9
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	3.15	1.27	11.97	118.96	1286.0

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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 2	REACH	0.09	2	2	0.08	0.0	4.04	24.00	4.19	---	12.04	160.55	1735.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	4.04	24.00	1.90	---	11.97	200.64	1910.9
XSECTION 93	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	4.04	24.00	2.10	---	11.97	245.01	1814.9
XSECTION 1	REACH	0.09	2	2	0.08	0.0	4.04	24.00	3.16	---	12.05	116.41	1258.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 91	REACH	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	4.04	24.00	2.79	---	12.02	207.09	1380.6
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	4.04	24.00	1.91	---	12.07	402.13	788.3
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	4.04	24.00	2.80	---	11.97	15.41	1540.8
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	5.60	1299.48	11.97	15.41	3081.6
XSECTION 53	REACH	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	4.04	24.00	1.89	---	12.07	402.13	780.7
XSECTION 57	REACH	0.00	2	2	0.08	0.0	4.04	24.00	5.60	---	12.05	14.92	2983.5
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	11.20	---	12.05	14.92	5966.9
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	4.04	24.00	7.47	0.77	12.05	14.92	3978.0
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	4.50	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	3.88	1.00	12.04	142.55	3082.1
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	4.04	24.00	3.77	---	12.04	142.55	3001.0
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	4.04	24.00	4.72	---	12.05	32.92	658.3
XSECTION 3	REACH	0.05	2	2	0.08	0.0	4.04	24.00	3.77	---	12.04	142.55	3001.0
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	45.28	1509.4
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	4.04	24.00	3.39	---	12.01	181.02	2335.8
XSECTION 47	REACH	0.08	2	2	0.08	0.0	4.04	24.00	3.39	---	12.09	180.99	2335.4
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	4.04	24.00	2.75	---	11.98	524.28	1718.9
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	49.35	1645.1
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	4.04	24.00	2.78	---	11.98	573.53	1712.0
XSECTION 63	REACH	0.05	2	2	0.08	0.0	4.04	24.00	4.71	---	12.13	32.76	655.2
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	90.56	1509.4
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	4.04	24.00	3.67	---	11.98	121.06	1100.6
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	44.85	1494.9
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	4.04	24.00	3.48	---	11.98	165.90	1185.0

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	4.04	24.00	2.79	---	12.07	177.39	1267.1
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	4.04	24.00	2.78	---	12.00	740.75	1559.5
XSECTION 113	ADDHYD	1.73	2	2	0.08	0.0	4.04	24.00	3.21	---	12.35	1081.93	625.4

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION							TRAVEL TIME	
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q QPEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE 1 STORM 1																				
13	2640	36	12.2	35	12.4	---	---	0	0.91	0.08	1	1.50	1.60	0.012	0.967	334	0.58	0.15	0.09
15	2900	58	12.2	55	12.4	---	---	0	0.47	0.08	1	1.50	1.60	0.020	0.962	308	0.61	0.15	0.09
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	111	12.1	111	12.1	---	---	0	1.00	0.08	0	1.50	1.60	0.002	1.000	95	1.00?	0.00	0.00
27	2000	166	12.5	166	12.6	---	---	0	0.60	0.08	1	1.50	1.60	0.002	1.000	143	0.97?	0.08	0.04
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	170	12.6	168	12.7	---	---	0	0.59	0.08	1	0.500	1.57	0.006	0.989	292	0.63	0.08	0.08
105	2000	175	12.7	172	12.8	---	---	0	0.58	0.08	1	0.400	1.58	0.007	0.987	340	0.57	0.15	0.09
39	800	50	12.0	50	12.0	---	---	0	1.15	0.08	0	1.50	1.60	0.003	1.000	89	1.00?	0.00	0.00
45	1300	66	12.0	66	12.0	73	12.0	0	0.95	0.08	0	1.50	1.60	0.006	1.000	131	1.00?	0.00	0.00
2	1300	41	12.0	39	12.1	---	---	0	0.99	0.08	1	1.60	1.38	0.022	0.967	241	0.72?	0.08	0.07
43	1500	22	12.0	21	12.1	28	12.1	0	0.09	0.08	1	1.50	1.60	0.195	0.948	228	0.74?	0.08	0.06
1	1050	32	12.0	30	12.1	---	---	0	0.76	0.08	1	0.430	1.52	0.035	0.932	368	0.54	0.08	0.10
91	1100	58	12.1	56	12.2	---	---	0	0.41	0.08	1	0.500	1.65	0.019	0.972	206	0.79?	0.08	0.06
53	2800	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
57	1500	3	12.0	2	12.2	---	---	0	0.97	0.08	1	1.50	1.60	0.069	0.813	508	0.42	0.08	0.15
3	500	21	12.1	20	12.2	25	12.2	0	0.23	0.08	1	0.190	1.70	0.138	0.946	221	0.76?	0.08	0.06
47	800	23	12.2	23	12.2	---	---	0	0.33	0.08	1	0.430	1.56	0.069	0.951	279	0.65	0.08	0.08
63	1350	20	12.2	20	12.3	---	---	0	1.71	0.08	1	1.50	1.60	0.005	0.999	212	0.78?	0.15	0.06
ALTERNATE 1 STORM 2																				
13	2640	89	12.2	88	12.3	---	---	0	2.02	0.08	1	1.50	1.60	0.008	0.985	238	0.72?	0.08	0.07
15	2900	168	12.2	167	12.3	---	---	0	1.36	0.08	1	1.50	1.60	0.011	0.990	206	0.79?	0.08	0.06
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	308	12.1	308	12.1	---	---	0	2.48	0.08	0	1.50	1.60	0.001	1.000	65	1.00?	0.00	0.00
27	2000	545	12.4	545	12.4	---	---	0	1.62	0.08	0	1.50	1.60	0.001	1.000	91	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	561	12.3	560	12.5	---	---	0	1.61	0.08	1	0.500	1.57	0.004	0.998	189	0.83?	0.15	0.05
105	2000	589	12.4	586	12.5	---	---	0	1.59	0.08	1	0.400	1.58	0.005	0.995	217	0.77?	0.08	0.06
39	800	93	12.0	93	12.0	---	---	0	2.49	0.08	0	1.50	1.60	0.002	1.000	71	1.00?	0.00	0.00
45	1300	134	12.0	134	12.0	156	12.0	0	2.15	0.08	0	1.50	1.60	0.003	1.000	101	1.00?	0.00	0.00
2	1300	90	12.0	89	12.1	---	---	0	2.30	0.08	1	1.60	1.38	0.015	0.991	194	0.82?	0.08	0.05
43	1500	90	12.0	90	12.0	112	12.0	0	0.70	0.08	0	1.50	1.60	0.031	1.000	135	1.00?	0.00	0.00

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK TRAVEL TIME	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION								
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE 1 STORM 2																				
1	1050	66	12.0	64	12.1	---	---	0	1.75	0.08	1	0.430	1.52	0.020	0.973	288	0.64	0.08	0.08
91	1100	172	12.0	172	12.0	---	---	0	1.21	0.08	0	0.500	1.65	0.009	1.000	133	1.00?	0.00	0.00
53	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.009	0.000	133	1.00?	0.00	0.00
57	1500	8	12.0	7	12.1	---	---	0	2.74	0.08	1	1.50	1.60	0.038	0.942	341	0.57	0.08	0.10
3	500	71	12.1	71	12.1	90	12.1	0	1.53	0.08	0	0.190	1.70	0.019	1.000	135	1.00?	0.00	0.00
47	800	90	12.1	90	12.2	---	---	0	1.47	0.08	1	0.430	1.56	0.025	0.998	175	0.87?	0.08	0.05
63	1550	25	12.1	25	12.2	---	---	0	3.08	0.08	1	1.50	1.60	0.002	0.994	196	0.82?	0.08	0.05
ALTERNATE 1 STORM 3																				
13	2640	120	12.2	119	12.3	---	---	0	2.65	0.08	1	1.50	1.60	0.007	0.991	213	0.78?	0.08	0.06
15	2900	232	12.2	231	12.3	---	---	0	1.90	0.08	1	1.50	1.60	0.009	0.996	182	0.85?	0.08	0.05
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	423	12.1	423	12.1	---	---	0	3.35	0.08	0	1.50	1.60	0.001	1.000	58	1.00?	0.00	0.00
27	2000	699	12.4	699	12.4	---	---	0	2.23	0.08	0	1.50	1.60	0.001	1.000	83	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	719	12.4	719	12.5	---	---	0	2.22	0.08	1	0.500	1.57	0.003	0.999	173	0.88?	0.08	0.05
105	2000	758	12.3	757	12.5	---	---	0	2.19	0.08	1	0.400	1.58	0.004	0.999	198	0.81?	0.15	0.06
39	800	116	12.0	116	12.0	---	---	0	3.19	0.08	0	1.50	1.60	0.001	1.000	65	1.00?	0.00	0.00
45	1300	171	12.0	171	12.0	202	12.0	0	2.80	0.08	0	1.50	1.60	0.003	1.000	92	1.00?	0.00	0.00
2	1300	116	12.0	116	12.1	---	---	0	3.02	0.08	1	1.60	1.38	0.014	0.995	181	0.85?	0.08	0.05
43	1300	130	12.0	130	12.0	160	12.0	0	1.14	0.08	0	1.50	1.60	0.020	1.000	117	1.00?	0.00	0.00
1	1050	85	12.0	84	12.1	---	---	0	2.29	0.08	1	0.430	1.52	0.017	0.982	263	0.68?	0.08	0.07
91	1100	241	12.0	241	12.0	---	---	0	1.71	0.08	0	0.500	1.65	0.007	1.000	117	1.00?	0.00	0.00
53	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.007	0.000	117	1.00?	0.00	0.00
57	1500	10	12.0	10	12.1	---	---	0	3.83	0.08	1	1.50	1.60	0.031	0.964	302	0.62	0.08	0.08
3	500	98	12.1	98	12.1	125	12.0	0	2.35	0.08	0	0.190	1.70	0.013	1.000	118	1.00?	0.00	0.00
47	800	125	12.0	125	12.1	---	---	0	2.18	0.08	1	0.430	1.56	0.019	0.995	156	0.93?	0.08	0.04
63	1550	28	12.1	28	12.2	---	---	0	3.75	0.08	1	1.50	1.60	0.002	0.995	188	0.84?	0.08	0.05
ALTERNATE 1 STORM 4																				
13	2640	170	12.2	169	12.3	---	---	0	3.65	0.08	1	1.50	1.60	0.006	0.996	187	0.84?	0.08	0.05
15	2900	335	12.2	334	12.3	---	---	0	2.78	0.08	1	1.50	1.60	0.007	0.999	159	0.92?	0.08	0.04
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	611	12.1	611	12.1	---	---	0	4.75	0.08	0	1.50	1.60	0.001	1.000	50	1.00?	0.00	0.00

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS									PEAK	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION						TRAVEL TIME	
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE		1	STORM	4															
27	2000	927	12.5	927	12.5	---	---	0	3.23	0.08	0	1.50	1.60	0.001	1.000	75	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	954	12.4	954	12.5	---	---	0	3.21	0.08	1	0.500	1.57	0.002	1.000	156	0.93?	0.08	0.04
105	2000	1027	12.3	1026	12.4	---	---	0	3.18	0.08	1	0.400	1.58	0.003	0.999	177	0.86?	0.08	0.05
39	800	150	12.0	150	12.0	---	---	0	4.28	0.08	0	1.50	1.60	0.001	1.000	59	1.00?	0.00	0.00
45	1500	229	12.0	229	12.0	273	12.0	0	3.84	0.08	0	1.50	1.60	0.002	1.000	82	1.00?	0.00	0.00
2	1500	157	12.0	157	12.1	---	---	0	4.18	0.08	1	1.60	1.38	0.012	0.998	166	0.90?	0.08	0.05
43	1500	194	12.0	194	12.0	238	12.0	0	1.90	0.08	0	1.50	1.60	0.013	1.000	101	1.00?	0.00	0.00
1	1050	116	12.0	115	12.1	---	---	0	3.15	0.08	1	0.430	1.52	0.014	0.990	237	0.73?	0.08	0.07
91	1100	350	12.0	350	12.0	---	---	0	2.53	0.08	0	0.500	1.65	0.006	1.000	101	1.00?	0.00	0.00
53	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.006	0.000	101	1.00?	0.00	0.00
57	1500	15	12.0	15	12.1	---	---	0	5.60	0.08	1	1.50	1.60	0.024	0.981	263	0.68?	0.08	0.07
5	900	139	12.1	139	12.1	181	12.0	0	3.77	0.08	0	0.190	1.70	0.008	1.000	102	1.00?	0.00	0.00
47	800	181	12.0	181	12.1	---	---	0	3.39	0.08	1	0.430	1.56	0.013	1.000	136	1.00?	0.08	0.04
63	1350	33	12.1	33	12.2	---	---	0	4.72	0.08	1	1.50	1.60	0.001	0.997	177	0.87?	0.08	0.05

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
STRUCTURE 8	1.41				
ALTERNATE 1		165.76	545.22	699.67	926.67
XSECTION 1	0.05				
ALTERNATE 1		20.16	25.11	28.10	32.92
XSECTION 2	0.05				
ALTERNATE 1		21.53	72.35	99.82	142.55
XSECTION 3	0.08				
ALTERNATE 1		24.87	93.14	125.88	181.02
XSECTION 4	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 5	0.00				
XSECTION 6	0.00				
XSECTION 10	0.44				
ALTERNATE 1		93.78	257.50	353.46	506.65
XSECTION 13	0.15				
ALTERNATE 1		34.85	87.77	119.17	169.38
XSECTION 15	0.29				
ALTERNATE 1		55.54	166.55	231.43	335.07
XSECTION 16	0.34				
ALTERNATE 1		88.30	246.12	338.96	487.37
XSECTION 17	0.49				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 21	0.16				
XSECTION 23	0.33				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 25	0.62				
ALTERNATE 1		149.25	436.26	606.97	881.32

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 26	0.79				
ALTERNATE 1		177.74	534.30	750.58	1100.77
XSECTION 27	1.41				
ALTERNATE 1		165.72	545.22	699.67	926.67
XSECTION 28	0.07				
ALTERNATE 1		16.27	48.54	68.09	99.70
XSECTION 29	1.48				
ALTERNATE 1		169.97	561.93	719.49	954.15
XSECTION 30	0.01				
ALTERNATE 1		2.62	7.64	10.62	15.41
XSECTION 32	0.17				
ALTERNATE 1		26.16	83.91	119.26	176.88
XSECTION 33	0.19				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 34	0.03				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 35	0.36				
ALTERNATE 1		30.88	99.45	141.44	209.86
XSECTION 36	0.21				
ALTERNATE 1		73.18	186.91	251.82	354.15
XSECTION 39	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 40	0.03				
ALTERNATE 1		15.57	42.38	57.96	82.70
XSECTION 41	0.16				
ALTERNATE 1		66.28	136.95	175.92	236.21
XSECTION 43	0.13				
ALTERNATE 1		28.04	114.03	164.22	245.01

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 45	0.19				
ALTERNATE 1		73.48	158.61	206.27	280.55
XSECTION 46	0.03				
ALTERNATE 1		9.99	25.86	34.96	49.35
XSECTION 47	0.31				
ALTERNATE 1		77.40	253.56	357.64	524.28
XSECTION 48	0.15				
ALTERNATE 1		33.45	101.46	141.22	207.09
XSECTION 49	0.34				
ALTERNATE 1		82.58	279.28	392.48	573.53
XSECTION 51	0.51				
ALTERNATE 1		60.56	192.08	272.11	402.13
XSECTION 53	0.00				
XSECTION 55	0.32				
ALTERNATE 1		60.56	192.08	272.11	402.13
XSECTION 57	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 58	0.11				
ALTERNATE 1		22.90	70.59	99.48	146.32
XSECTION 63	0.05				
ALTERNATE 1		20.12	24.97	27.95	32.76
XSECTION 64	0.06				
ALTERNATE 1		15.11	44.62	62.23	90.56
XSECTION 65	0.11				
ALTERNATE 1		33.97	68.01	88.29	121.06
XSECTION 66	0.03				
ALTERNATE 1		7.44	22.04	30.78	44.85

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 67	0.14				
ALTERNATE 1		41.40	90.05	119.06	165.90
XSECTION 72	0.14				
ALTERNATE 1		27.42	85.19	120.33	177.39
XSECTION 73	0.48				
ALTERNATE 1		109.75	358.62	505.27	740.75
XSECTION 75	0.09				
ALTERNATE 1		32.29	66.87	87.17	118.96
XSECTION 76	0.05				
ALTERNATE 1		18.00	18.00	18.00	18.00
XSECTION 77	0.05				
ALTERNATE 1		21.53	72.35	99.82	142.55
XSECTION 80	0.15				
ALTERNATE 1		36.05	89.14	120.49	170.55
XSECTION 81	0.29				
ALTERNATE 1		57.73	168.36	232.97	336.11
XSECTION 82	0.16				
XSECTION 83	0.33				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 84	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 85	0.10				
ALTERNATE 1		22.45	92.34	133.85	200.64
XSECTION 86	0.00				
XSECTION 88	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 89	0.09				

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 89	0.09				
ALTERNATE 1		41.19	91.75	119.10	161.59
XSECTION 90	0.23				
ALTERNATE 1		57.76	173.43	243.05	354.79
XSECTION 91	0.23				
ALTERNATE 1		55.97	173.43	243.05	354.79
XSECTION 95	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 96	0.03				
ALTERNATE 1		7.56	22.31	31.12	45.28
XSECTION 97	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 99	0.00				
ALTERNATE 1		2.62	7.64	10.62	15.41
XSECTION 100	0.00				
XSECTION 102	0.19				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 103	0.00				
XSECTION 104	1.48				
ALTERNATE 1		168.43	559.92	718.97	954.04
XSECTION 105	1.59				
ALTERNATE 1		172.36	586.86	756.97	1026.08
XSECTION 106	1.59				
ALTERNATE 1		174.67	588.80	758.57	1028.09
XSECTION 115	1.73				
ALTERNATE 1		185.86	622.25	800.10	1081.93

LINCOLN TO CHENEY DRAINAGE STUDY - ALTERNATIVE B (100 YR) (EA 1053.2)

TR-20 COMPUTATIONS
PERFORMED BY:

ERIE AND ASSOCIATES, INC.
Consulting Engineers
3120 North 24th Street
Phoenix, Arizona, 85016

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:::::::::::::::::::::::::::::::::::::::::::::::::
::::                                          ::::
::::                HAESTAD METHODS           ::::
::::               37 Brookside Road          ::::
::::         Waterbury, Connecticut  06708    ::::
::::               (203) 753-9800             ::::
::::                                          ::::
::::    full micro-computer implementation of ::::
::::                                          ::::
::::      USDA - Soil Conservation Service    ::::
::::                    TR-20                 ::::
::::                September 1983            ::::
::::        PROJECT FORMULATION HYDROLOGY     ::::
::::                                          ::::
:::::::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::::::
```

RUN DATE: Fri 10-OCT-1986 TIME: 08:52:31.58

DATA FILE: LSALT3C

```
*******************80-80 LIST OF INPUT DATA FOR TR-20 HYDROLOGY*******************

JOB                     NOPRINT
TITLE       MAY 85      DRAINAGE STUDY-ALT.B(100YR) (LSALT3C:Q=880) EA 1053.2
 5 RAINFL 2 .            0.0208
 8          .0000       .0030       .0110       .0160       .0220
 8          .0280       .0350       .0410       .0480       .0560
 8          .0630       .0710       .0800       .0890       .0980
 8          .1090       .1200       .1330       .1470       .1630
 8          .1810       .2040       .2350       .2830       .6630
 8          .7350       .7720       .7990       .8200       .8380
 8          .9120       .8210       .9290       .9370       .9450
 8          .9520       .9590       .9650       .9720       .9783
 8          .9840       .9890       .9950       1.000       1.000
 9 ENDTBL
 2 XSECTN     5         1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN     6         1.0
 8                      .50         0.0         0.0
 8                      1.0         10.1        6.25
 8                      1.5         35.5        16.8
 8                      2.0         146.1       39.3
 9 ENDTBL
 2 XSECTN    75         1.0
 8                      0.0         0.0         0.0
 8                      .25         7.1         3.9
 8                      .75         45.9        12.9
 8                      1.0         75.6        18.0
 8                      1.5         155.        29.3
 8                      2.0         261.        42.
 9 ENDTBL
 2 XSECTN    77         1.0
 8                      0.0         0.0         0.0
 8                      .25         13.         11.
 8                      .50         41.         22.5
 8                      1.0         142.        53.
 8                      1.5         300.        90.3
 8                      2.0         480.        141.
 9 ENDTBL
 2 XSECTN    82         1.0
 8                      0.2         0.0         0.0
 8                      0.3         5.0         2.3
 8                      0.4         11.0        4.0
 8                      0.56        27.0        7.8
```

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8                    0.6        31.0       9.2
8                    0.8        78.0       16.2
8                    1.0        142.0      23.2
9 ENDTBL
2 XSECTN    83       1.0
8                    0.1        0.0        0.0
8                    0.24       2.0        1.4
8                    0.5        13.0       4.6
8                    0.6        18.0       6.2
8                    0.7        27.0       7.8
8                    0.8        37.0       9.4
8                    0.9        40.0       11.0
8                    1.0        60.0       12.6
9 ENDTBL
2 XSECTN    81       1.0
8                    0.2        0.0        0.0
8                    0.3        5.0        2.3
8                    0.4        12.0       4.0
8                    0.53       25.0       7.1
8                    0.6        33.0       9.4
8                    0.8        84.0       16.5
8                    1.0        152.0      23.4
9 ENDTBL
2 XSECTN    80       1.0
8                    0.1        0.0        0.0
8                    0.24       2.7        1.4
8                    0.5        18.1       4.6
8                    0.6        24.8       6.2
8                    0.7        36.4       7.7
8                    0.8        49.8       9.4
8                    0.9        64.7       11.0
8                    1.0        81.2       12.6
9 ENDTBL
2 XSECTN    84       1.0
8                    0.0        0.0        0.0
8                    .25        10.0       6.3
8                    .50        31.2       12.5
8                    .75        60.6       18.8
8                    1.0        96.7       25.0
8                    1.5        185.4      37.5
8                    2.0        292.6      50.0
9 ENDTBL
2 XSECTN    85       1.0
8                    .5         0.0        0.0
8                    .75        33.8       25.0
8                    1.0        96.0       50.0
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8                    1.25        175.0       75.0
8                    1.5         270.0       100.0
9 ENDTBL
2 XSECTN    86       1.0
8                    1301.2      0.0         0.0
8                    1301.7      371.0       173.
8                    1302.       821.0       416.
8                    1302.5      2440.       1003.
9 ENDTBL
2 XSECTN    88       1.0
8                    .50         0.0         0.0
8                    1.0         28.0        21.0
8                    1.5         185.0       73.5
8                    2.0         414.0       126.0
9 ENDTBL
2 XSECTN    89       1.0
8                    0.0         0.0         0.0
8                    0.25        9.9         5.2
8                    0.50        31.8        10.8
8                    0.75        63.3        16.7
8                    1.0         103.6       23.0
8                    1.5         209.8       36.8
8                    2.0         349.5       52.0
9 ENDTBL
2 XSECTN    99       1.0
8                    1299.       0.0         0.0
8                    1300.       32.2        15.0
8                    1301.       330.8       140.3
8                    1301.6      944.        323.
8                    1302.       2115.       523.7
9 ENDTBL
3 STRUCT     08
8                    0.          0.          0.
8                    2.          176.        4.3
8                    4.          480.        8.9
8                    6.          720.        13.8
8                    8.          880.        19.1
8                    10.         1040.       24.6
8                    12.         1200.       30.6
8                    14.         1280.       36.8
8                    18.         1520.       50.3
9 ENDTBL
6 RUNOFF 1  10       5  .44       88.         .65       1 0 0 1   1
6 DIVERT 6  81   5 1 2  0.0       .67         80.       1     1   1
6 REACH  3  13   2   5  2640.     1.5         1.6       1     1   1
6 REACH  3  15   1   2  2900.     1.5         1.6       1     1   1
```

**********80-80 LIST OF INPUT DATA (CONTINUED)**********

```
6 RUNOFF 1  16       6  0.34        87.        .35        1     1   1
6 ADDHYD 4  17   5 6 7                                     1     1   1
6 DIVERT 6  82   7 3 5  0.0001      .33        83.        1     1   1
6 REACH  3  21   3   1  2640.       1.5        1.6        1     1   1
6 REACH  3  23   5   3  1150.       1.5        1.6        1     1   1
6 ADDHYD 4  25   3 2 7                                     1     1   1
6 RUNOFF 1  26       5  0.79        85.        .30        1     1   1
6 ADDHYD 4  27   5 7 6                                     1 1   1   1
6 RESVOR 2    08 6   7  0.001                              1     1   1
6 REACH  3  27   7   5  2000.       1.5        1.6        1     1   1
6 RUNOFF 1  28       6  .07         85.        .27        1     1   1
6 ADDHYD 4  29   5 6 4                                     1     1   1
6 RUNOFF 1  34       5  .03         85.        .37        1     1   1
6 ADDHYD 4  33   5 1 7                                     1     1   1
6 DIVERT 6 100   7 6 1  .0001       50.        102.       1     1   1
6 REACH  3 103   6   5  850.        1.0        1.38       1     1   1
6 ADDHYD 4 104   5 4 6                                     1     1   1
6 REACH  3 104   6   4  1900.       0.5        1.57       1     1   1
6 RUNOFF 1  38       5  0.11        85.        .36        1     1   1
6 ADDHYD 4 106   5 4 7                                     1     1   1
6 REACH  3 105   7   4  2000.       0.4        1.58       1     1   1
6 SAVMOV 5 107   1   7                                     1         1
6 RUNOFF 1  32       5  .17         85.        .65        1     1   1
6 ADDHYD 4  35   5 7 1                                     1 1   1   1
6 RUNOFF 1  36       5  .21         88.        .16        1     1   1
6 DIVERT 6  84   5 6 3              .50        85.0       1     1   1
6 REACH  3  39   6   5  800.        1.5        1.6        1     1   1
6 RUNOFF 1  40       7  .05         86.        0.12       1     1   1
6 ADDHYD 4  41   5 7 6                                     1     1   1
6 REACH  3  45   6   5  1300.       1.5        1.6        1     1   1
6 RUNOFF 1  97       6  .03         85.        .22        1     1   1
6 ADDHYD 4  45   5 6 7                                     1     1   1
6 DIVERT 6  89   7 5 6              .50        75.        1     1   1
6 REACH  3   2   5   2  1300.       1.6        1.38       1     1   1
6 REACH  3  43   3   7  1500.       1.5        1.6        1     1   1
6 RUNOFF 1  95       5  .03         85.        .22        1     1   1
6 ADDHYD 4  43   7 5 3                                     1     1   1
6 REACH  3   1   6   5  1050.       .43        1.52       1     1   1
6 ADDHYD 4  90   3 5 6                                     1     1   1
6 REACH  3  91   6   7  1100.       .50        1.65       1     1   1
6 RUNOFF 1  48       5  .15         85.        0.31       1     1   1
6 ADDHYD 4  51   1 5 6                                     1     1   1
6 RUNOFF 1  30       5  .01         85.        .17        1     1   1
6 DIVERT 6  66   5 1 3              .50        99.0       1     1   1
6 REACH  3  33   1   5  2800.       1.5        1.6        1 1   1   1
6 ADDHYD 4  55   6 5 1                                     1 1   1   1
```

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**********************80-80 LIST OF INPUT DATA (CONTINUED)**********************

 6 REACH  5 57   3   5 1500.      1.5        1.6        1     1   1
 6 SAVMOV 5 111  5   3                                   1         1
 6 DIVERT 6  4   3 1 6  36.       0.50       5.0        1     1   1
 6 SAVMOV 5  4   6   3                                   1         1
 6 DIVERT 6 88   3 5 6            0.50       6.0        1     1   1
 6 ADDHYD 4 68   5 1 3                                   1     1   1
 6 SAVMOV 5 88   6   1                                   1         1
 6 DIVERT 6 76   2 6 5  18.       .50        77.        1     1   1
 6 SAVMOV 5 112  1   2                                   1         1
 6 SAVMOV 5  2   6   1                                   1         1
 6 ADDHYD 4  2   5 2 6                                   1     1   1
 6 SAVMOV 5  3   6   5                                   1         1
 6 ADDHYD 4  1   1 3 6                                   1     1   1
 6 SAVMOV 5  1   6   1                                   1         1
 6 REACH  3  3   5   6 500.       .19        1.7        1     1   1
 6 RUNOFF 1 96       3 .03        85.        .20        1     1   1
 6 ADDHYD 4  3   3 6 5                                   1     1   1
 6 REACH  3 47   5   6 800.       .43        1.56       1     1   1
 6 ADDHYD 4 47   7 6 3                                   1     1   1
 6 SAVMOV 5 47   3   6                                   1         1
 6 RUNOFF 1 46       5 .03        88.        0.20       1     1   1
 6 ADDHYD 4 49   5 6 3                                   1     1   1
 6 REACH  3 63   1   7 1350.      1.5        1.6        1     1   1
 6 RUNOFF 1 64       5 0.06       85.        .20        1     1   1
 6 ADDHYD 4 65   5 7 2                                   1     1   1
 6 RUNOFF 1 66       5 0.03       85.        0.21       1     1   1
 6 ADDHYD 4 67   5 2 7                                   1 1   1   1
 6 RUNOFF 1 72       5 0.14       85.        0.42       1     1   1
 6 ADDHYD 4 73   5 3 2                                   1     1   1
 6 ADDHYD 4 115  7 4 5                                   1 1   1   1
   ENDATA
 7 INCREM 6            0.075
 7 COMPUT 7 10   115   0.0        1.44       24.        2 2  01  01
   ENDCMP 1
 7 COMPUT 7 10   115   0.0        2.53       24.        2 2  01  02
   ENDCMP 1
 7 COMPUT 7 10   115   0.0        3.12       24.        2 2  01  03
   ENDCMP 1
 7 COMPUT 7 10   115   0.0        4.04       24.0       2 2  01  04
   ENDCMP 1
   ENDJOB 2

*******************************END OF 80-80 LIST*******************************
```

COMPUTER PROGRAM FOR PROJECT FORMULATION - HYDROLOGY USER NOTES

THE USERS MANUAL FOR THIS PROGRAM IS THE MAY 1982 DRAFT OF TR-20. CHANGES FROM THE 2/14/74 VERSION INCLUDE:

REACH ROUTING - THE MODIFIED ATT-KIN ROUTING PROCEDURE REPLACES THE CONVEX METHOD. INPUT DATA PREPARED FOR PREVIOUS PROGRAM VERSIONS USING CONVEX ROUTING COEFFICIENTS WILL NOT RUN ON THIS VERSION.

THE PREFERRED TYPE OF DATA ENTRY IS CROSS SECTION DATA REPRESENTATIVE OF A REACH. IT IS RECOMMENDED THAT THE OPTIONAL CROSS SECTION DISCHARGE-AREA PLOTS BE OBTAINED WHENEVER NEW CROSS SECTION DATA IS ENTERED. THE PLOTS SHOULD BE CHECKED FOR REASONABLENESS AND ADEQUACY OF INPUT DATA FOR THE COMPUTATION OF "M" VALUES USED IN THE ROUTING PROCEDURE.

GUIDELINES FOR DETERMINING OR ANALYZING REACH LENGTHS AND COEFFICIENTS (X,M) ARE AVAILABLE IN THE USERS MANUAL. SUMMARY TABLE 2 DISPLAYS REACH ROUTING RESULTS AND ROUTING PARAMETERS FOR COMPARISON AND CHECKING.

HYDROGRAPH GENERATION - THE PROCEDURE TO CALCULATE THE INTERNAL TIME INCREMENT AND PEAK TIME OF THE UNIT HYDROGRAPH HAVE BEEN IMPROVED. PEAK DISCHARGES AND TIMES MAY DIFFER FROM THE PREVIOUS VERSION. OUTPUT HYDROGRAPHS ARE STILL INTERPOLATED, PRINTED, AND ROUTED AT THE USER SELECTED MAIN TIME INCREMENT.

INTERMEDIATE PEAKS - METHOD ADDED TO PROVIDE DISCHARGES AT INTERMEDIATE POINTS WITHIN REACHES WITHOUT ROUTING.

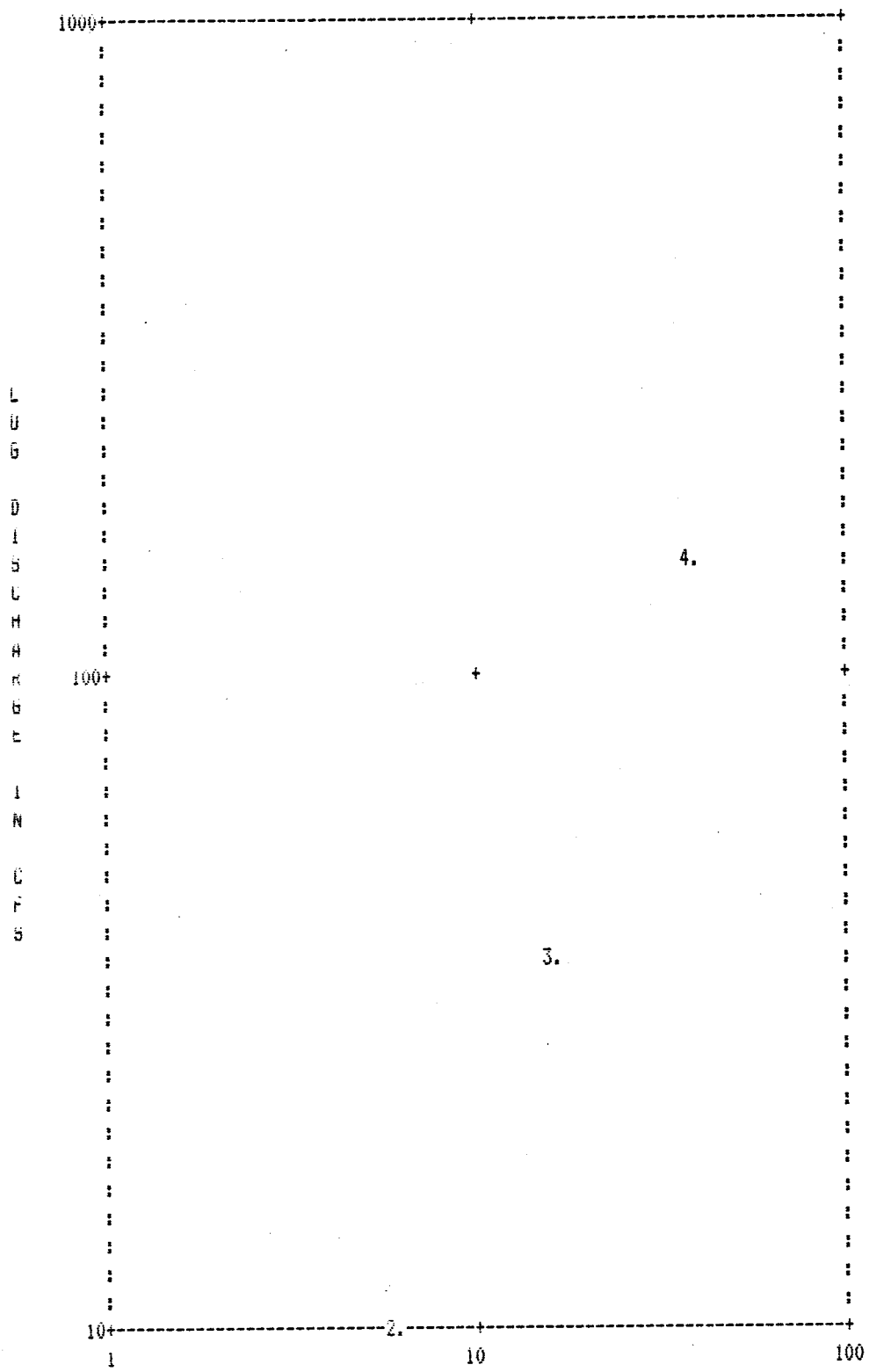
OTHER - THIS VERSION CONTAINS SOME ADDITIONS TO THE INPUT AND NUMEROUS MODIFICATIONS TO THE OUTPUT. USER OPTIONS HAVE BEEN MODIFIED AND AUGMENTED ON THE JOB RECORD, RAINTABLES ADDED, ERROR AND WARNING MESSAGES EXPANDED, AND THE SUMMARY TABLES COMPLETELY REVISED. THE HOLDOUT OPTION IS NOT OPERATIONAL AT THIS TIME.

PROGRAM QUESTIONS OR PROBLEMS SHOULD BE DIRECTED TO HYDRAULIC ENGINEERS AT THE SCS NATIONAL TECHNICAL CENTERS:

CHESTER, PA (NORTHEAST) -- 215-499-3933, FORT WORTH, TX (SOUTH) -- 334-5242 (FTS)
LINCOLN, NB (MIDWEST) -- 541-5318 (FTS), PORTLAND, OR (WEST) -- 423-4099 (FTS)
OR HYDROLOGY UNIT, ENGINEERING DIVISION, LANHAM, MD -- 436-7383 (FTS).

PROGRAM CHANGES SINCE MAY 1982:

12/17/82 - CORRECT PEAK RATE FACTOR FOR USER ENTERED DIMHYD
CORRECT REACH ROUTING PEAK TRAVEL TIME PRINTED WITH FULLPRINT OPTION
5/02/83 - CORRECT COMPUTATIONS FOR ---
1. DIVISION OF BASEFLOW IN DIVERT OPERATION
2. HYDROGRAPH VOLUME SPLIT BETWEEN BASEFLOW AND ABOVE BASEFLOW
3. CROSS SECTION DATA PLOTTING POSITION
4. INTERMEDIATE PEAK WHEN "FROM" AREA IS LARGER THAN "THRU" AREA
5. STORAGE ROUTED REACH TRAVEL TIME FOR MULTIPEAK HYDROGRAPH
6. ORDERING "FLOW-FREQ" FILE FROM SUMMARY TABLE #3 DATA
7. BASEFLOW ENTERED WITH READHYD
8. LOW FLOW SPLIT DURING DIVERT PROCEDURE #2 WHEN SECTION RATINGS START AT DIFFERENT ELEVATIONS
ENHANCEMENTS ---
1. REPLACE USER MANUAL ERROR CODES (PAGE 4-9 TO 4-11) WITH MESSAGES
2. LABEL OUTPUT HYDROGRAPH FILES WITH CROSS SECTION/STRUCTURE, ALTERNATE AND STORM NO'S
09/01/83 - CORRECT INPUT AND OUTPUT ERRORS FOR INTERMEDIATE PEAKS
CORRECT COMBINATION OF RATING TABLES FOR DIVERT
CHECK REACH ROUTING PARAMETERS FOR ACCEPTABLE LIMITS
ELIMINATE MINIMUM REACH TRAVEL TIME WHEN ATT-KIN COEFFICIENT EQUALS ONE

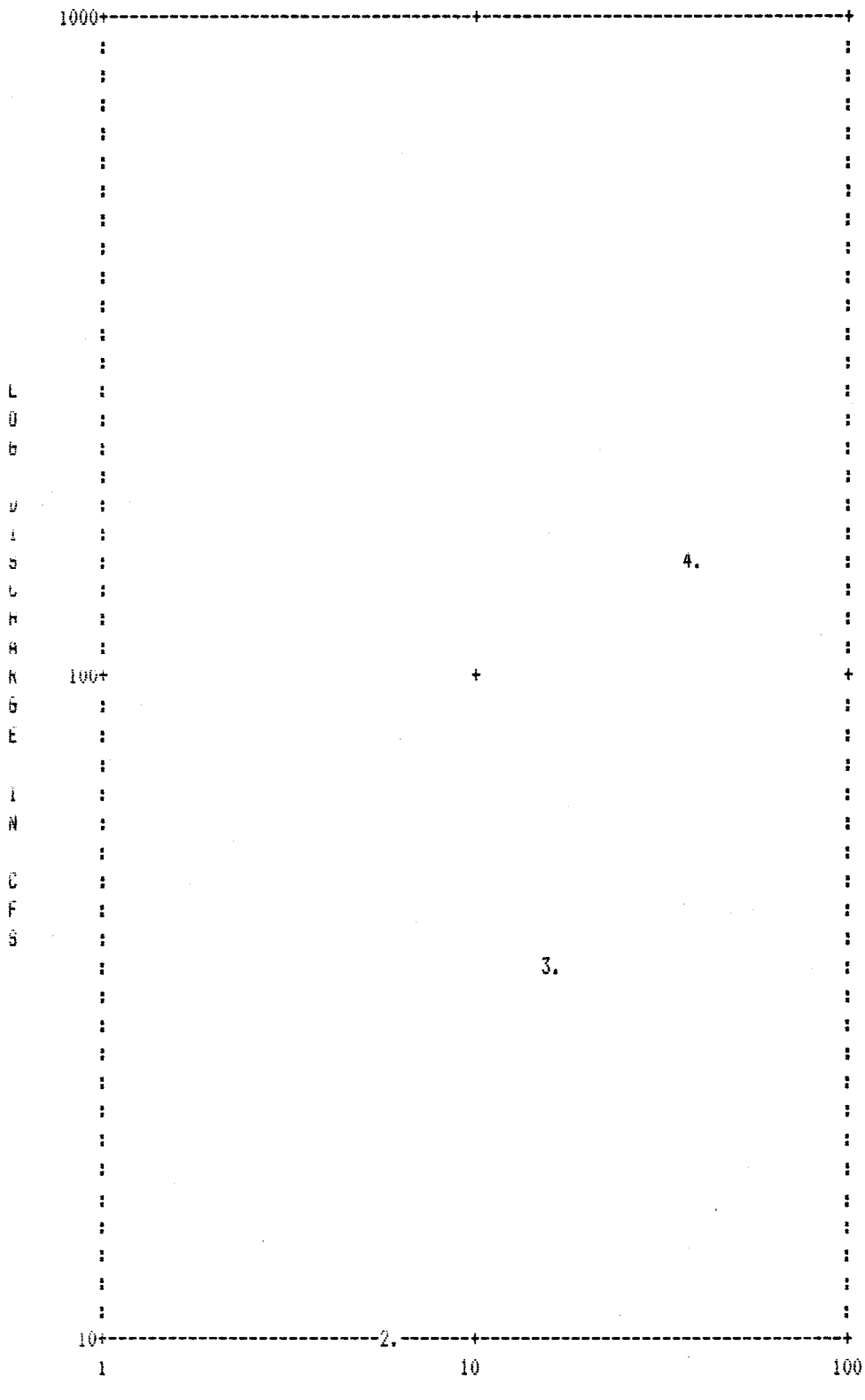


CROSS SECTION 5 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

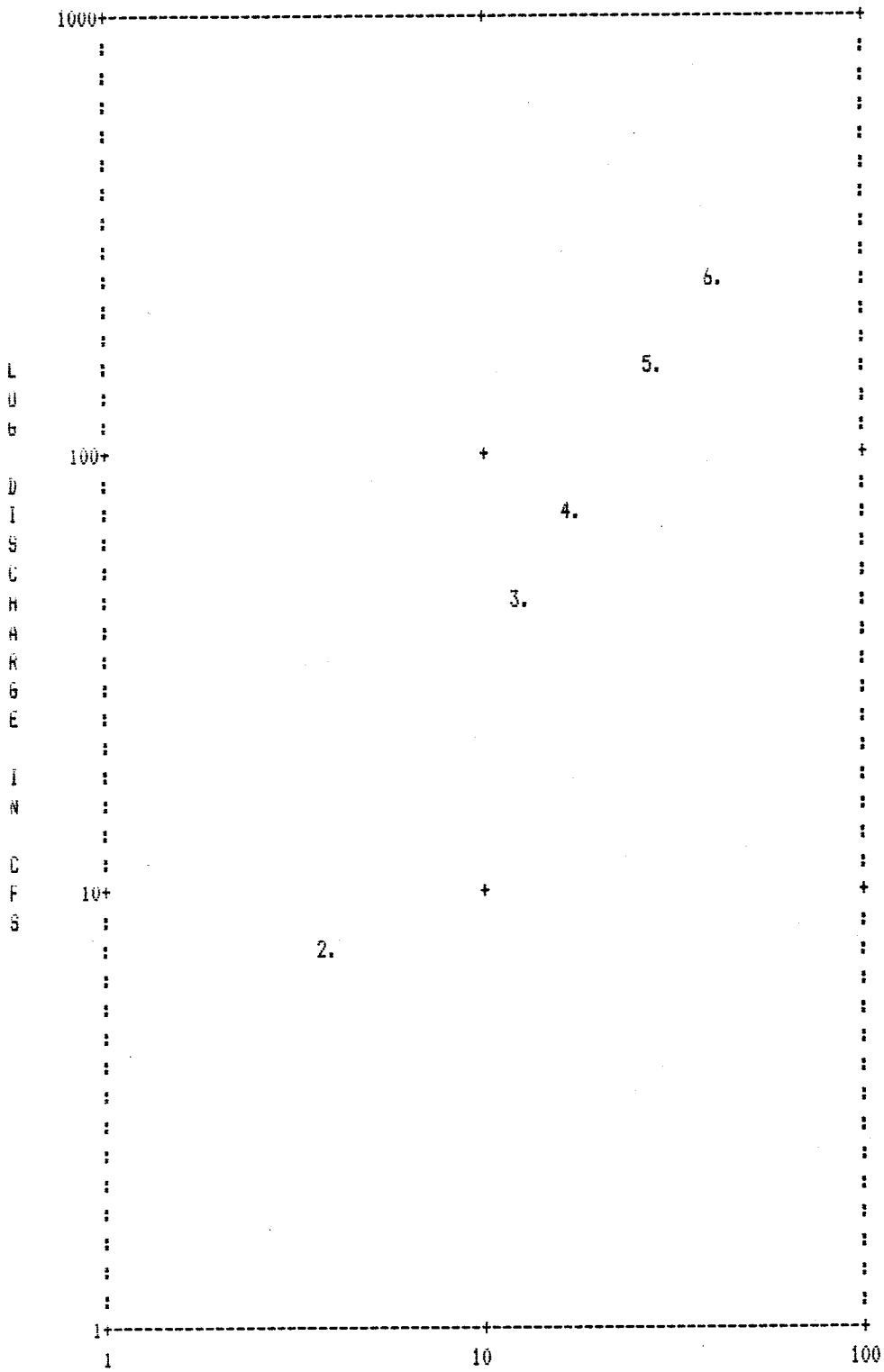


CROSS SECTION 6 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.27
2	10.10	6.25	1.27
3	35.50	16.80	1.27
4	146.10	39.30	1.57

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

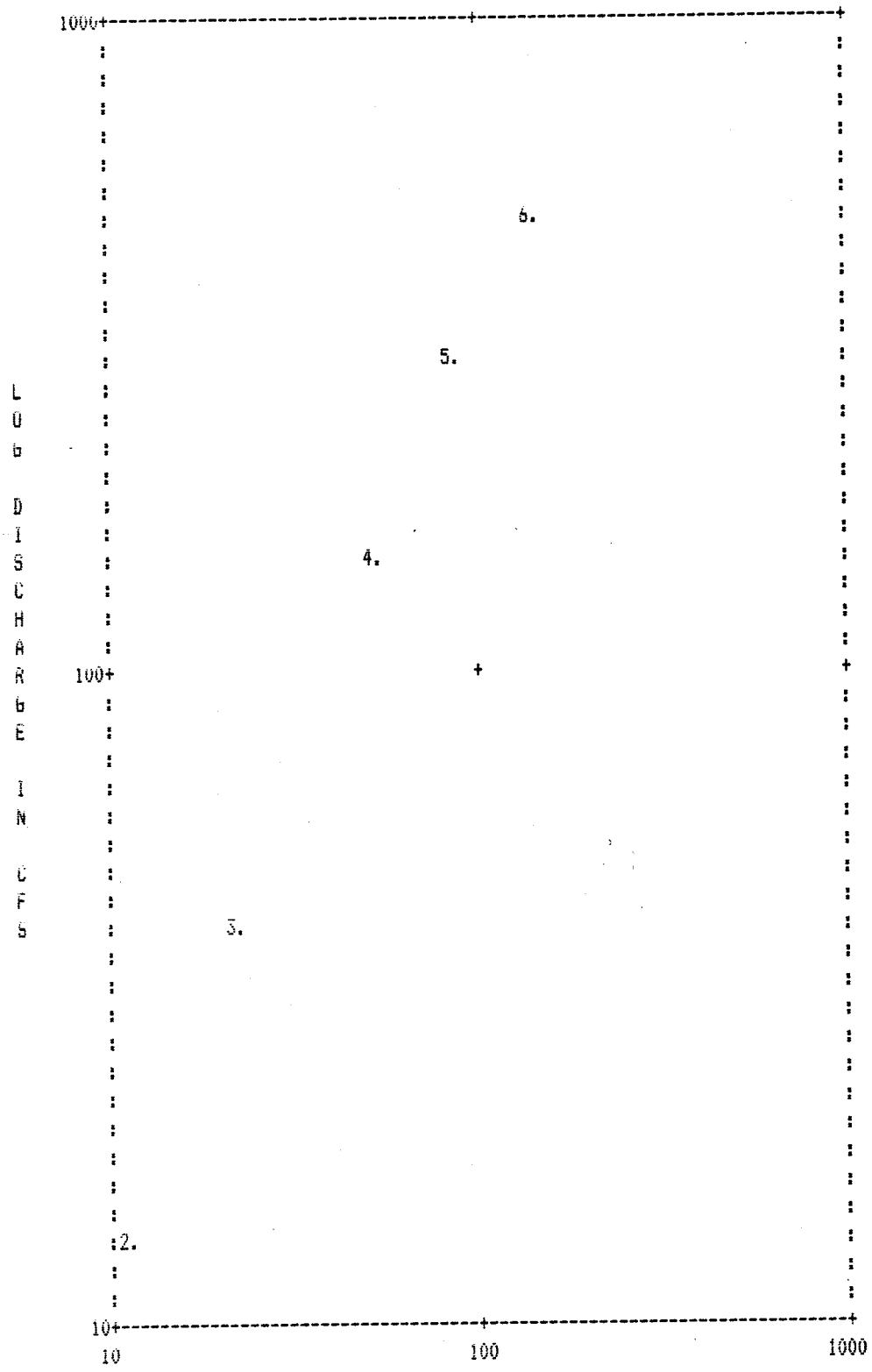


CROSS SECTION 75 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.56
2	7.10	3.90	1.56
3	45.90	12.90	1.56
4	75.60	18.00	1.54
5	155.00	29.30	1.50
6	261.00	42.00	1.48

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

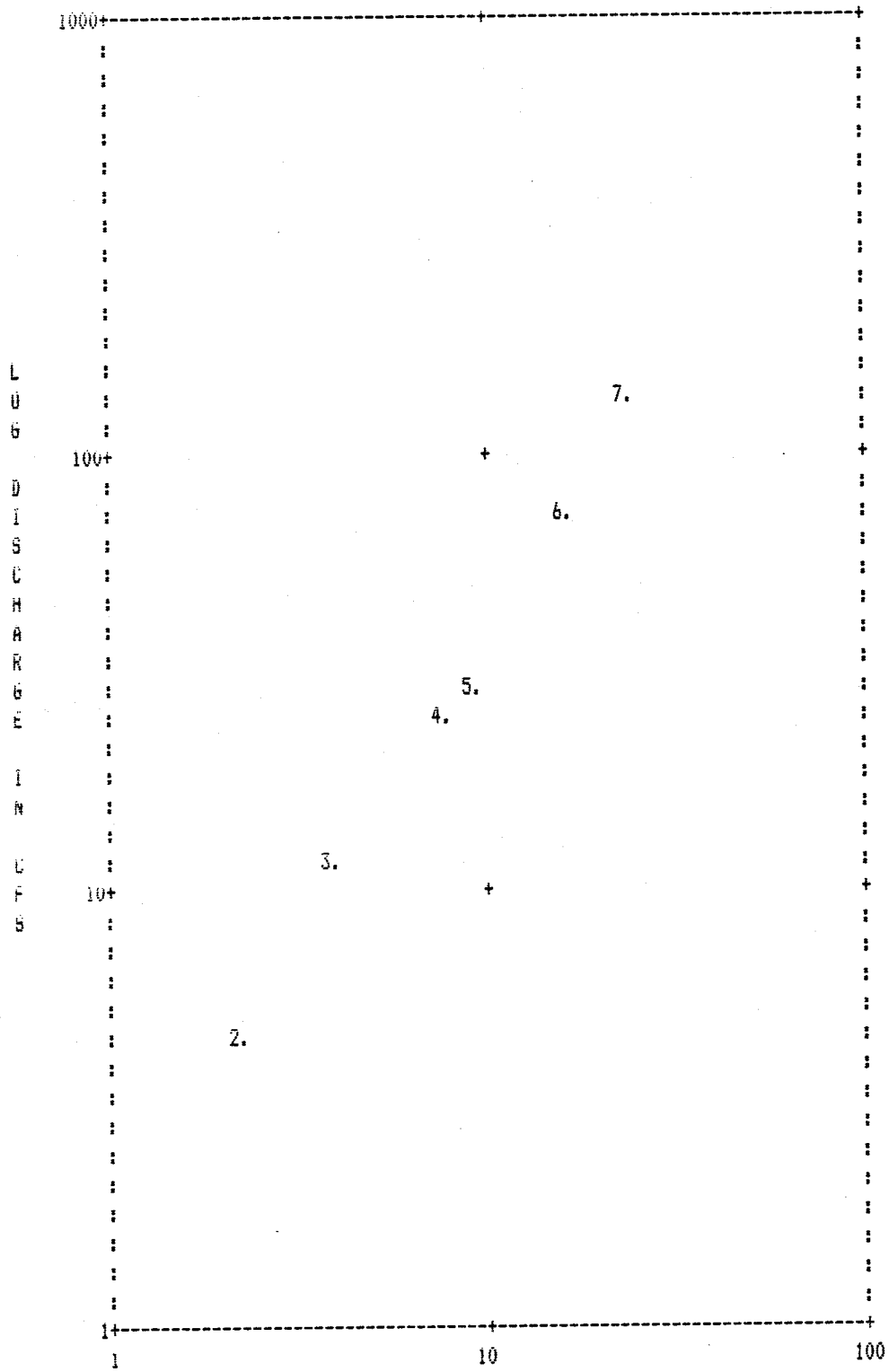


CROSS SECTION 77 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.61
2	13.00	11.00	1.61
3	41.00	22.50	1.61
4	142.00	53.00	1.49
5	300.00	90.30	1.45
6	480.00	141.00	1.30

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

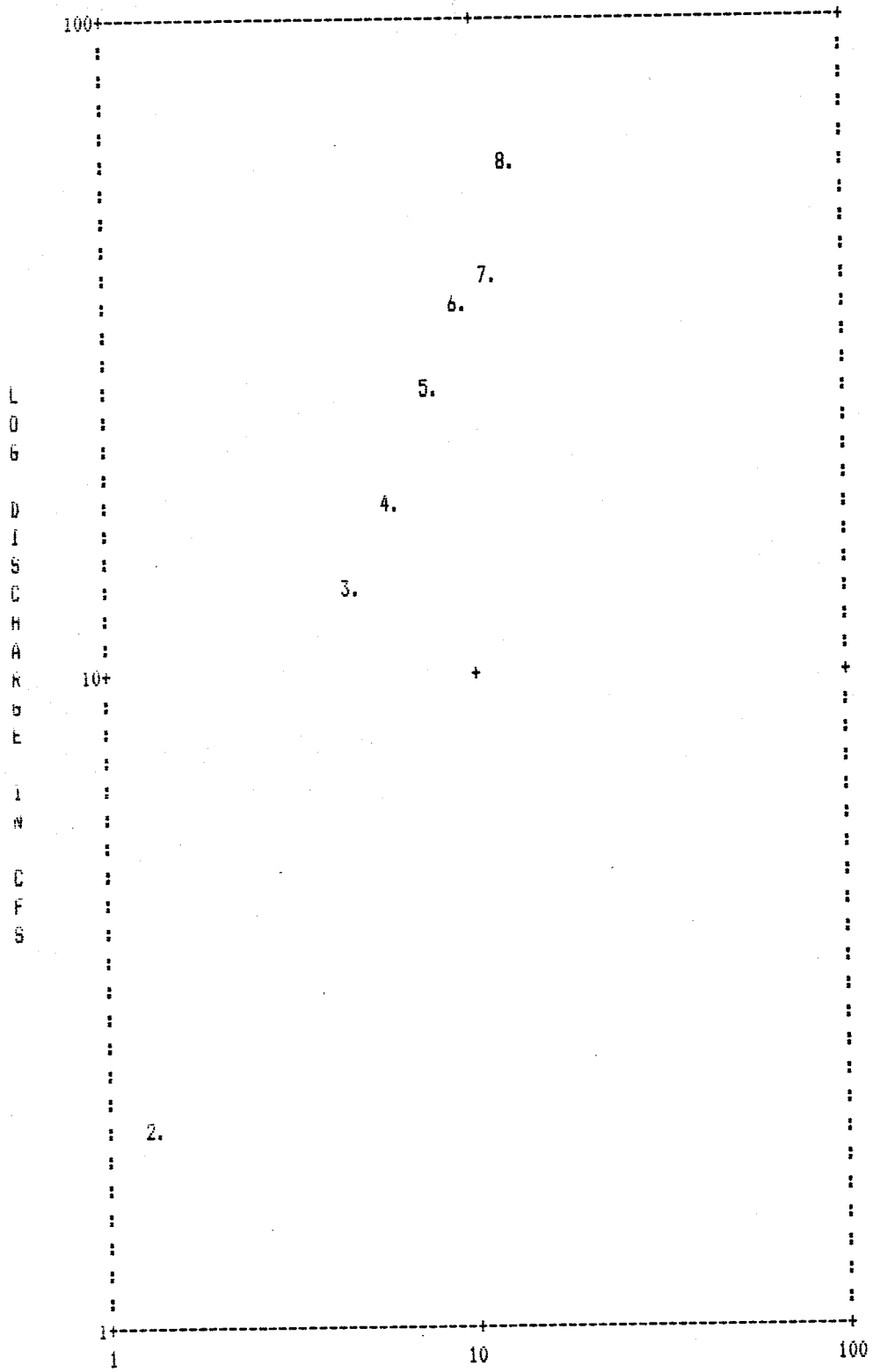


CROSS SECTION 82 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.42
2	5.00	2.30	1.42
3	11.00	4.00	1.42
4	27.00	7.80	1.38
5	31.00	9.20	1.31
6	78.00	16.20	1.50
7	142.00	23.20	1.58

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

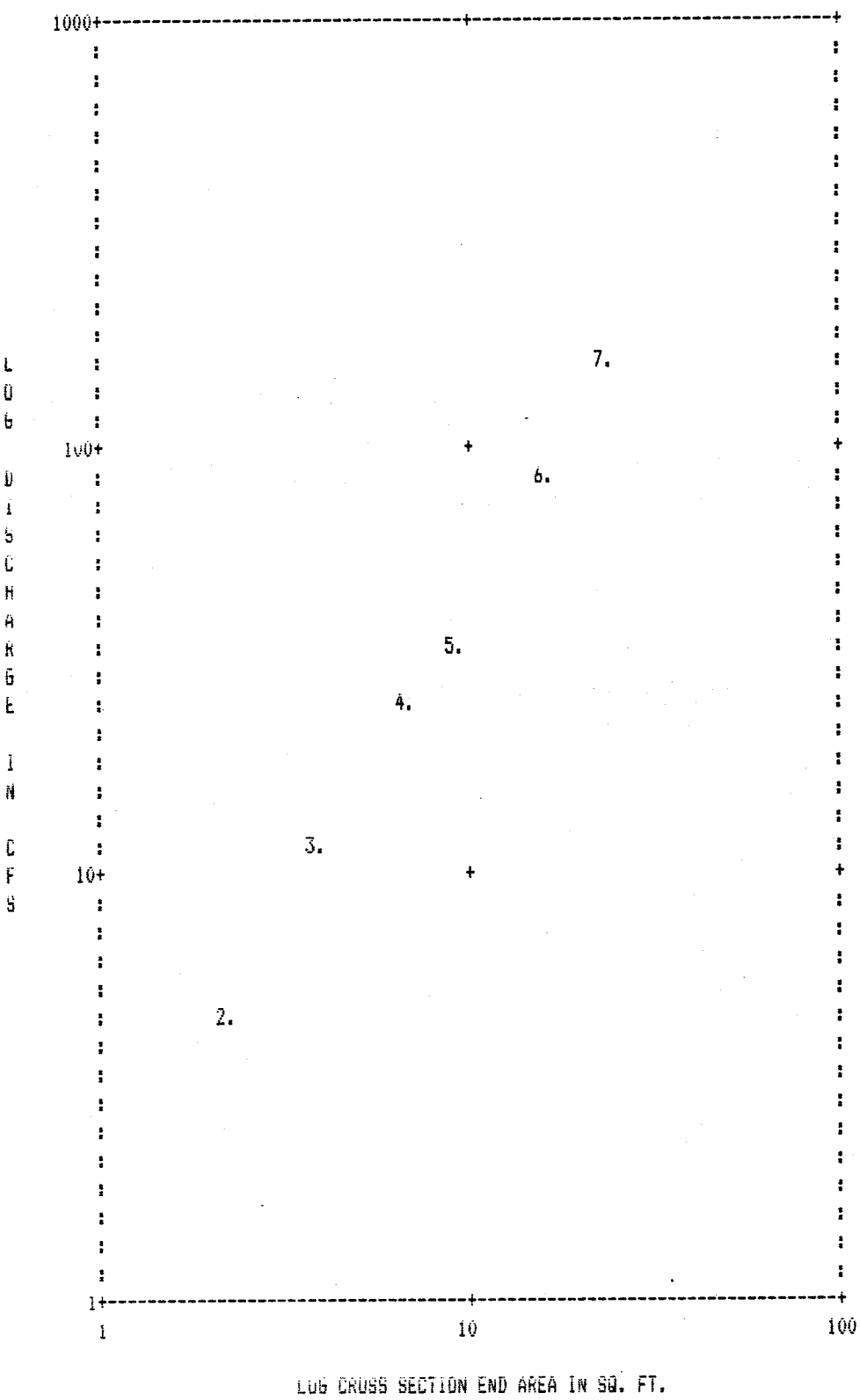


CROSS SECTION 83 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.57
2	2.00	1.40	1.57
3	13.00	4.60	1.57
4	18.00	6.20	1.44
5	27.00	7.80	1.55
6	37.00	9.40	1.59
7	40.00	11.00	1.50
8	60.00	12.60	2.00

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

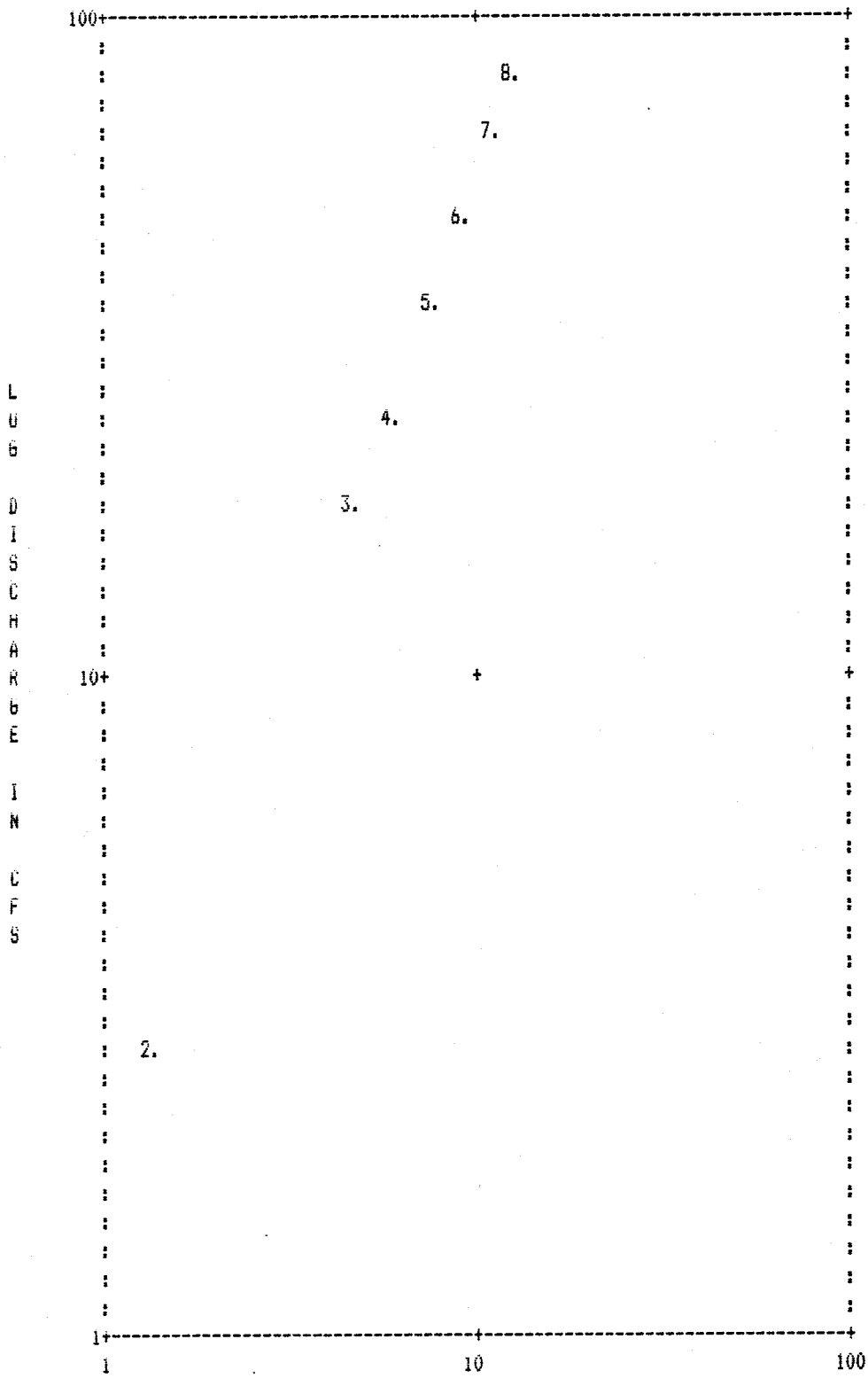


CROSS SECTION 81 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.58
2	5.00	2.30	1.58
3	12.00	4.00	1.58
4	25.00	7.10	1.42
5	33.00	9.40	1.32
6	84.00	16.50	1.53
7	152.00	23.40	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

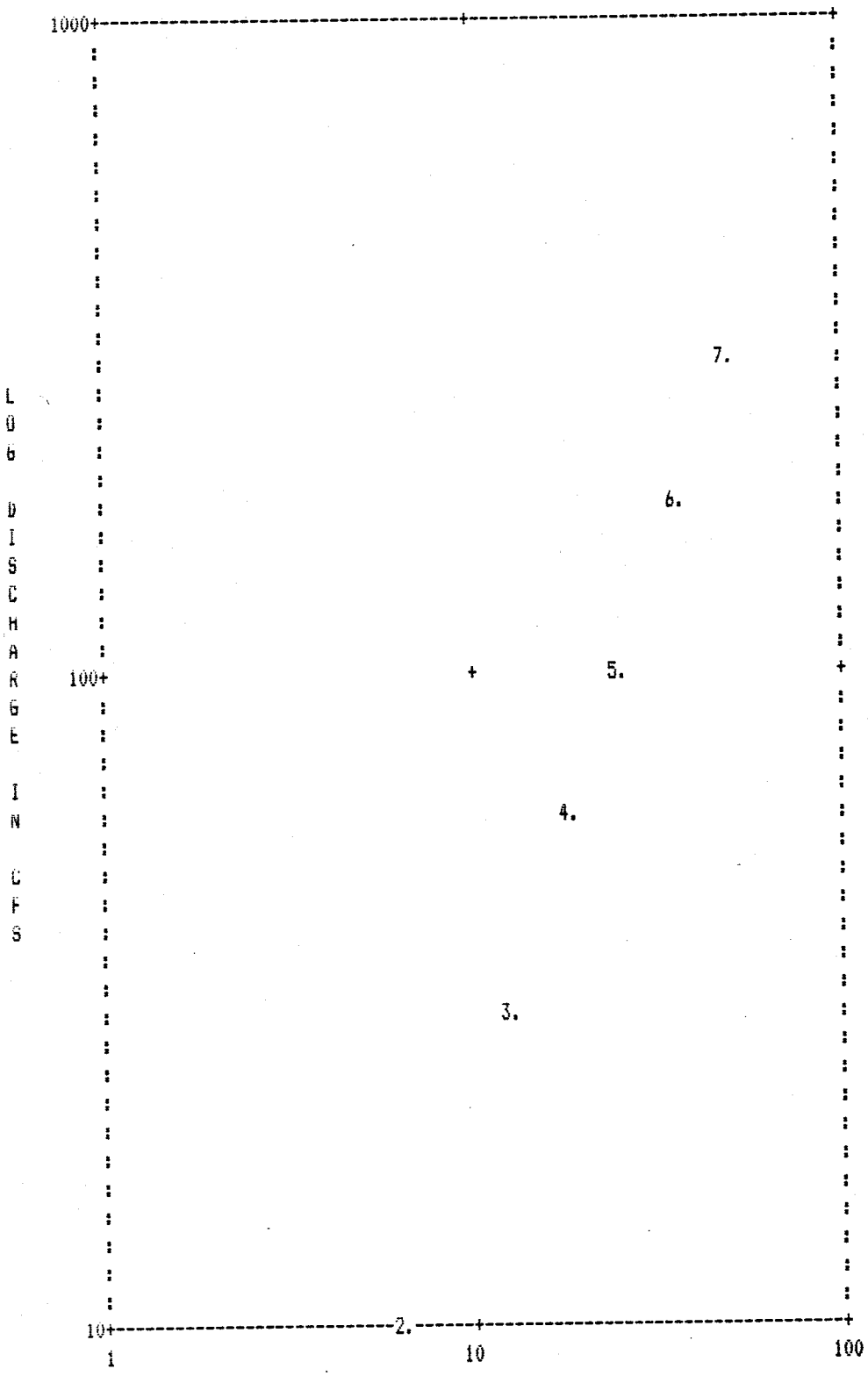


CROSS SECTION 80 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	2.70	1.40	1.60
3	18.10	4.60	1.60
4	24.80	6.20	1.45
5	36.40	7.70	1.55
6	49.80	9.40	1.56
7	64.70	11.00	1.58
8	81.20	12.60	1.60

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

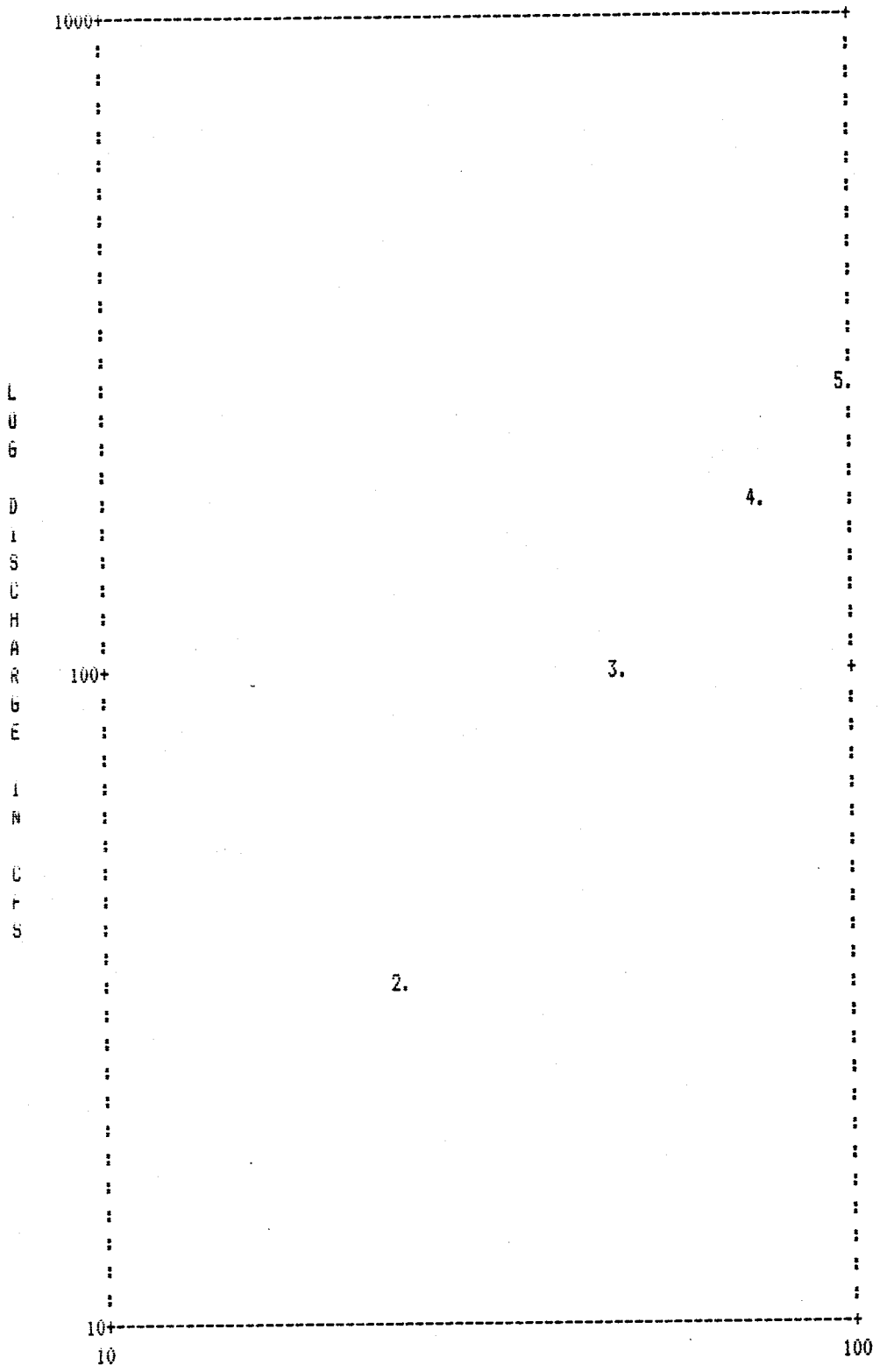


CROSS SECTION 84 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.66
2	10.00	6.30	1.66
3	31.20	12.50	1.66
4	60.60	18.80	1.64
5	96.70	25.00	1.64
6	185.40	37.50	1.62
7	292.60	50.00	1.61

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

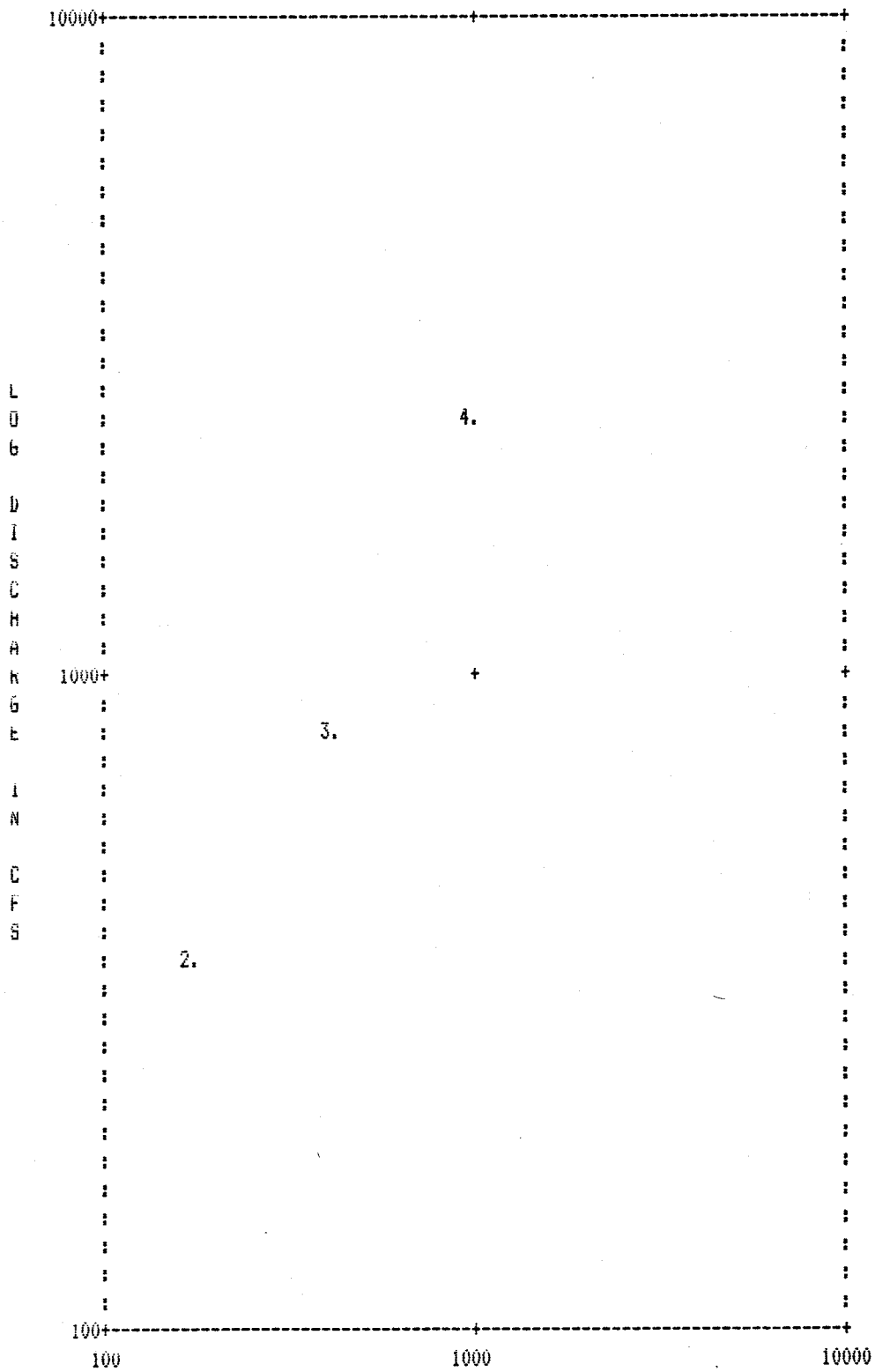


CROSS SECTION 85 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	33.80	25.00	1.51
3	96.00	50.00	1.51
4	175.00	75.00	1.49
5	270.00	100.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



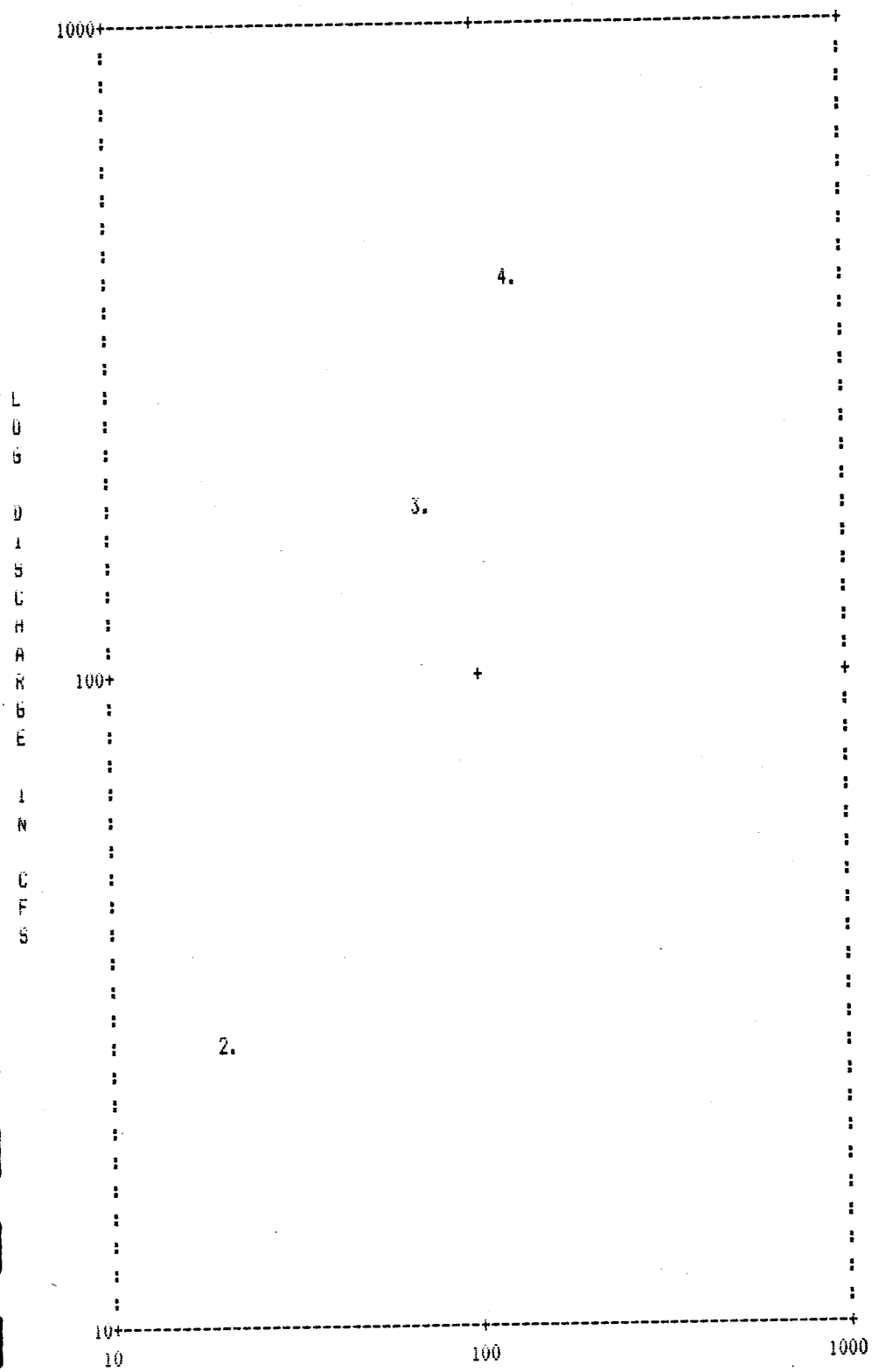
CROSS SECTION 86 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	0.91 *
2	371.00	173.00	0.91 *
3	821.00	416.00	0.91 *
4	2440.00	1003.00	1.13

A STAR (*) INDICATES A COMPUTED M VALUE IS OUTSIDE THE 1.00 - 2.00 RANGE. IN ROUTING THIS REACH THE M VALUE WILL BE SET TO THE CLOSEST LIMIT VALUE.

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

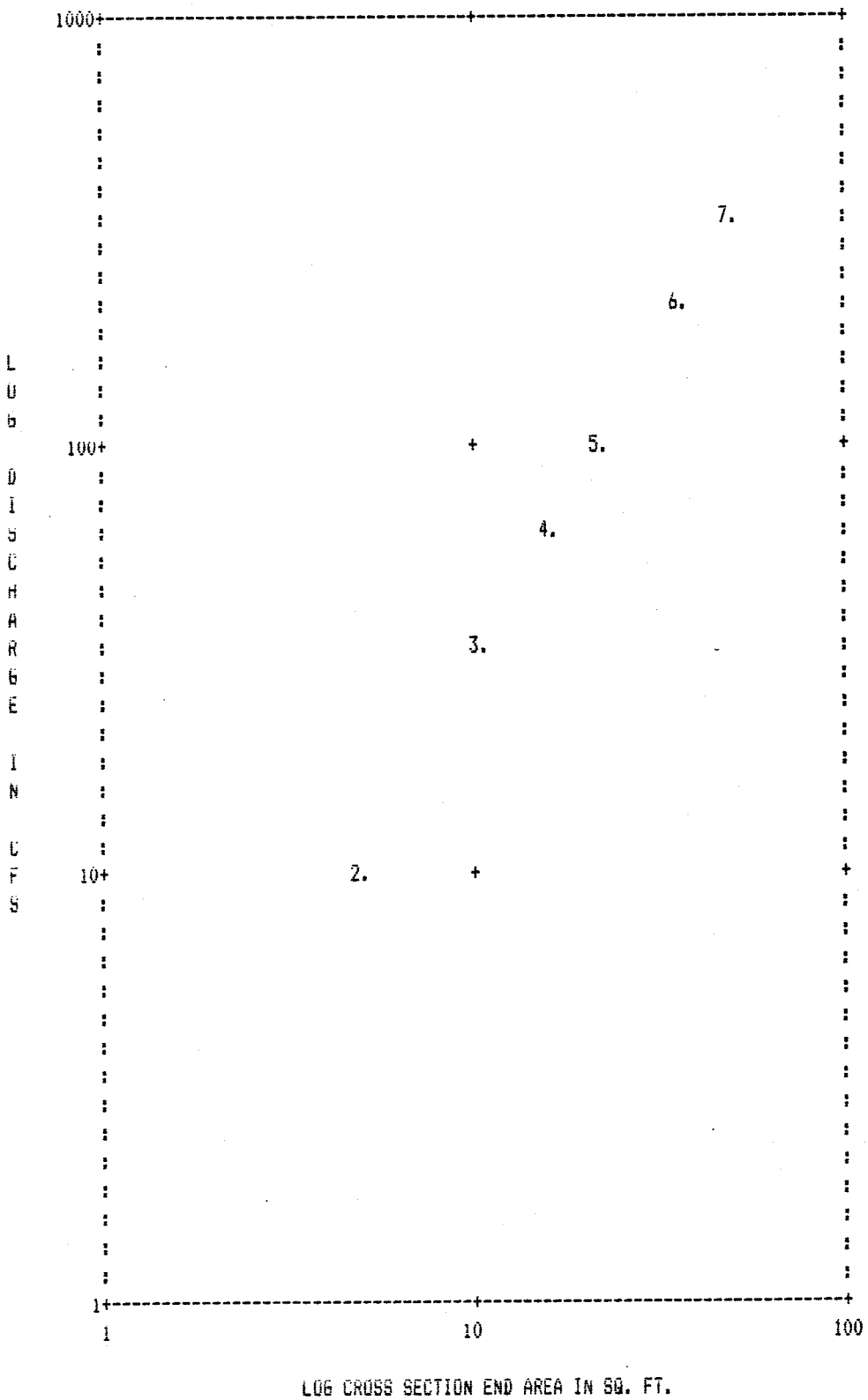


CROSS SECTION 88 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.51
2	28.00	21.00	1.51
3	185.00	73.50	1.51
4	414.00	126.00	1.50

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

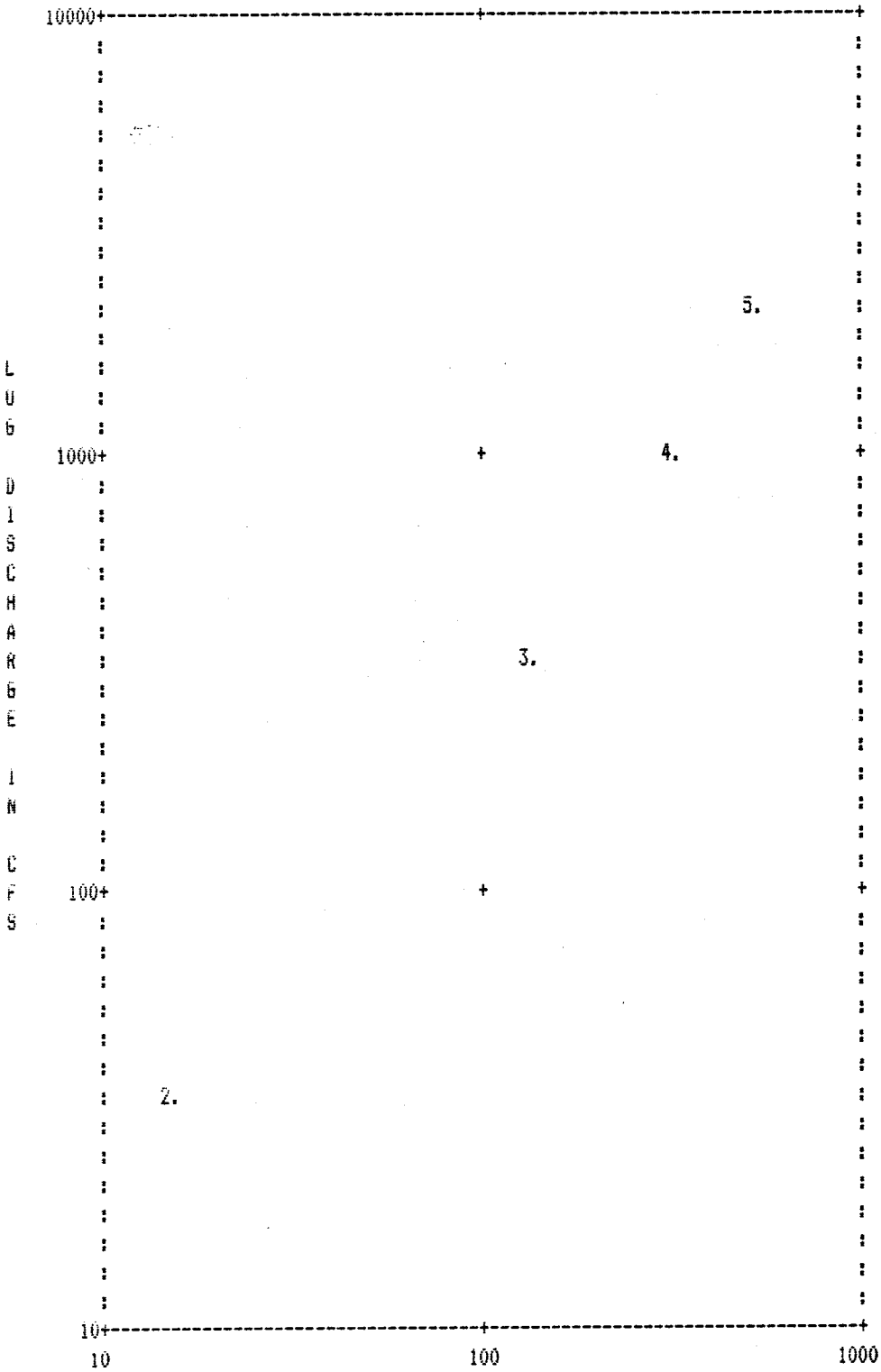


CROSS SECTION 89 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.60
2	9.90	5.20	1.60
3	31.80	10.80	1.60
4	63.30	16.70	1.59
5	103.60	23.00	1.57
6	209.80	36.80	1.53
7	349.50	52.00	1.51

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS



CROSS SECTION 99 END AREA VS DISCHARGE

REFERENCE NO'S	DISCHARGE (CFS)	END AREA (SQ.FT.)	M
1	0.00	0.00	1.04
2	32.20	15.00	1.04
3	330.80	140.30	1.04
4	944.00	323.00	1.18
5	2115.00	523.70	1.45

LEGEND

+ = GRID REFERENCE
. = LOCATION OF PLOTTED VALUE
3 = REFERENCE NO. OF PLOTTED VALUE
X = MULTIPLE REFERENCE NUMBERS
B = BANKFULL RELATION SHOWN ON AXIS

EXECUTIVE CONTROL OPERATION INCREM MAIN TIME INCREMENT = 0.08 HOURS RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID

ALTERNATE NO.= 1 STORM NO.= 1 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	93.78	(RUNOFF)
15.13	29.67	(RUNOFF)
16.17	41.52	(RUNOFF)
21.15	3.31	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 175.06 CFS-HRS, 14.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	57.73	0.70
15.13	15.45	0.43
16.17	22.86	0.51

RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.85 CFS-HRS, 7.43 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.24	36.05	0.70
15.13	14.22	0.43
16.17	18.67	0.51
21.15	2.31	0.22

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.21 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.37	34.85	(NULL)
15.25	13.80	(NULL)
16.29	18.04	(NULL)
21.27	2.31	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.91 WATERSHED INCHES, 85.16 CFS-HRS, 7.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	55.54	(NULL)
15.24	14.89	(NULL)
16.29	22.01	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.47 WATERSHED INCHES, 89.83 CFS-HRS, 7.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	88.30	(RUNOFF)
15.00	27.51	(RUNOFF)
16.02	39.59	(RUNOFF)
20.99	2.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.57 WATERSHED INCHES, 125.44 CFS-HRS, 10.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	(NULL)
15.04	38.86	(NULL)
16.05	52.49	(NULL)
21.02	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.67 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	1.26
15.04	38.86	0.86
16.05	52.49	0.96
21.02	4.80	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 1.00 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-K1N COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	111.59	(NULL)
15.04	38.86	(NULL)
16.05	52.49	(NULL)
21.02	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.00 WATERSHED INCHES, 210.60 CFS-HRS, 17.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	149.25	(NULL)
15.07	50.87	(NULL)
16.10	68.18	(NULL)
19.12	6.67	(NULL)
21.08	5.72	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.75 WATERSHED INCHES, 300.43 CFS-HRS, 24.83 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	177.74	(RUNOFF)
14.97	59.39	(RUNOFF)
15.99	85.22	(RUNOFF)
18.99	6.18	(RUNOFF)
20.98	5.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 247.12 CFS-HRS, 20.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	318.72	(NULL)
15.00	107.56	(NULL)
16.03	150.80	(NULL)
19.03	12.82	(NULL)
21.01	11.06	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

10.50	DISCHG	0.01	0.03	0.08	0.17	0.33	0.55	0.82	1.14	1.54	2.10
11.25	DISCHG	2.89	3.96	5.29	6.77	11.90	30.93	69.19	120.26	176.81	234.47
12.00	DISCHG	289.48	318.46	299.45	257.37	220.65	196.78	179.86	165.19	148.53	128.89
12.75	DISCHG	111.30	98.25	89.01	82.10	76.28	70.21	64.11	59.13	55.56	53.01
13.50	DISCHG	51.02	48.96	46.27	43.56	41.44	39.99	38.91	37.99	36.88	35.53
14.25	DISCHG	34.30	33.40	32.79	32.44	35.53	47.93	65.80	81.89	93.42	101.95
15.00	DISCHG	107.56	102.62	84.21	63.64	47.79	36.96	28.71	24.35	34.55	62.65
15.75	DISCHG	92.93	116.22	132.86	145.77	150.09	135.35	109.10	85.37	69.22	57.57
16.50	DISCHG	48.37	40.71	34.42	29.43	25.65	22.86	20.81	19.27	17.96	16.81
17.25	DISCHG	15.87	15.17	14.66	14.28	13.98	13.75	13.57	13.43	13.32	13.25
18.00	DISCHG	13.18	13.00	12.68	12.32	12.05	11.87	11.74	11.67	11.78	12.05
18.75	DISCHG	12.33	12.53	12.67	12.78	12.82	12.71	12.53	12.37	12.27	12.19
19.50	DISCHG	12.12	11.99	11.77	11.53	11.35	11.22	11.13	11.03	10.83	10.55
20.25	DISCHG	10.28	10.09	9.96	9.87	9.88	10.08	10.39	10.65	10.84	10.97
21.00	DISCHG	11.06	11.00	10.76	10.47	10.25	10.10	9.98	9.65	8.53	6.71
21.75	DISCHG	5.01	3.80	2.95	2.30	1.78	1.35	1.02	0.76	0.56	0.42

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 547.55 CFS-HRS, 45.25 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.27	237.99	2.41
15.15	84.55	0.96
16.19	115.60	1.31
19.18	12.58	0.14
21.15	10.76	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 546.85 CFS-HRS, 45.19 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.27	237.99	(NULL)
15.15	84.55	(NULL)
16.19	115.60	(NULL)
19.18	12.58	(NULL)
21.15	10.76	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 546.85 CFS-HRS, 45.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	16.27	(RUNOFF)
14.97	5.37	(RUNOFF)
15.97	7.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 21.97 CFS-HRS, 1.82 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	246.85	(NULL)
15.13	87.90	(NULL)
16.16	119.91	(NULL)
19.16	13.11	(NULL)
21.13	11.21	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 568.82 CFS-HRS, 47.01 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(RUNOFF)
14.99	2.13	(RUNOFF)
16.02	3.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(NULL)
14.99	2.13	(NULL)
16.02	3.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.08 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	6.21	(DIVERT)
14.99	2.13	(DIVERT)
16.02	3.07	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.08 WATERSHED INCHES, 9.32 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	246.85	(NULL)
15.13	87.90	(NULL)
16.16	119.91	(NULL)
19.16	13.11	(NULL)
21.13	11.21	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 568.82 CFS-HRS, 47.01 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.38	240.75	(NULL)
15.23	86.46	(NULL)
16.27	117.84	(NULL)
19.27	13.09	(NULL)
21.23	11.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.60 WATERSHED INCHES, 568.72 CFS-HRS, 47.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	22.90	(RUNOFF)
15.01	7.95	(RUNOFF)
16.02	11.34	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 34.39 CFS-HRS, 2.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.36	251.77	(NULL)
15.20	91.02	(NULL)
16.24	123.68	(NULL)
19.23	13.91	(NULL)
21.20	11.88	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 603.11 CFS-HRS, 49.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.49	245.32	(NULL)
15.32	89.10	(NULL)
16.36	121.25	(NULL)
19.35	13.89	(NULL)
21.31	11.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.59 WATERSHED INCHES, 602.62 CFS-HRS, 49.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	26.16	(RUNOFF)
15.13	9.72	(RUNOFF)
16.17	13.64	(RUNOFF)
21.15	1.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 52.74 CFS-HRS, 4.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	30.88	(NULL)
15.09	11.54	(NULL)
16.13	16.21	(NULL)
21.11	1.31	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

11.25	DISCHG	0.01	0.04	0.08	0.16	0.42	1.21	2.97	6.03	10.32	15.59
12.00	DISCHG	21.41	26.64	29.98	30.87	29.70	27.40	24.71	21.96	19.39	17.15
12.75	DISCHG	15.25	13.57	12.13	10.92	9.91	9.07	8.36	7.74	7.21	6.76
13.50	DISCHG	6.39	6.07	5.78	5.51	5.25	5.01	4.81	4.64	4.49	4.36
14.25	DISCHG	4.23	4.11	4.01	3.95	4.06	4.56	5.52	6.84	8.32	9.76
15.00	DISCHG	10.95	11.53	11.26	10.18	8.65	7.03	5.49	4.26	3.77	4.46
15.75	DISCHG	6.18	8.55	11.10	13.52	15.38	16.19	15.72	14.23	12.28	10.24
16.50	DISCHG	8.35	6.70	5.43	4.50	3.81	3.30	2.91	2.62	2.40	2.23
17.25	DISCHG	2.08	1.97	1.87	1.80	1.74	1.69	1.65	1.62	1.60	1.58
18.00	DISCHG	1.57	1.56	1.54	1.52	1.49	1.47	1.44	1.42	1.41	1.41
18.75	DISCHG	1.43	1.45	1.47	1.49	1.51	1.52	1.52	1.51	1.49	1.48
19.50	DISCHG	1.47	1.45	1.43	1.42	1.39	1.37	1.36	1.34	1.32	1.30
20.25	DISCHG	1.28	1.25	1.23	1.21	1.20	1.19	1.21	1.23	1.25	1.27
21.00	DISCHG	1.29	1.31	1.31	1.29	1.27	1.25	1.23	1.20	1.13	1.03
21.75	DISCHG	0.89	0.74	0.59	0.46	0.35	0.26	0.19	0.14	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.27 WATERSHED INCHES, 62.06 CFS-HRS, 5.13 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.18	(RUNOFF)
12.94	8.89	(RUNOFF)
13.41	6.60	(RUNOFF)
14.92	19.28	(RUNOFF)
15.94	29.02	(RUNOFF)
20.90	1.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 84.35 CFS-HRS, 6.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	0.67
12.94	8.89	0.22
13.41	6.60	0.16
14.92	19.28	0.36
15.94	29.02	0.47
20.90	1.66	0.04

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	22.45	0.67

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.20 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	50.73	(NULL)
12.94	8.89	(NULL)
13.41	6.60	(NULL)
14.92	19.28	(NULL)
15.94	29.02	(NULL)
20.90	1.66	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 78.15 CFS-HRS, 6.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.57	(RUNOFF)
12.43	3.45	(RUNOFF)
14.90	4.16	(RUNOFF)
15.94	6.38	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.53 WATERSHED INCHES, 17.03 CFS-HRS, 1.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	66.28	(NULL)
12.94	10.77	(NULL)
13.41	7.99	(NULL)
14.92	23.43	(NULL)
15.94	35.40	(NULL)
20.90	2.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.95 WATERSHED INCHES, 95.18 CFS-HRS, 7.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	73.48	(NULL)
12.94	11.83	(NULL)
13.40	8.78	(NULL)
14.92	25.73	(NULL)
15.94	38.80	(NULL)
20.90	2.22	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.88 WATERSHED INCHES, 104.53 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	41.19	0.57
12.94	6.89	0.17
13.40	5.11	0.13
14.92	14.53	0.30
15.94	21.46	0.38
20.90	1.29	0.03

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.20 CFS-HRS, 4.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	32.29	0.57
12.94	4.94	0.17
14.92	11.20	0.30
15.94	17.34	0.38

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.33 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	39.53	(NULL)
15.02	14.43	(NULL)
16.02	21.09	(NULL)
20.99	1.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.99 WATERSHED INCHES, 59.32 CFS-HRS, 4.90 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	20.98	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.09 WATERSHED INCHES, 6.17 CFS-HRS, 0.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.34	(RUNOFF)
14.94	2.30	(RUNOFF)
15.95	3.41	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.36 CFS-HRS, 0.77 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	28.04	(NULL)
14.94	2.30	(NULL)
15.95	3.41	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.18 WATERSHED INCHES, 15.52 CFS-HRS, 1.28 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	29.87	(NULL)
15.04	11.19	(NULL)
16.03	16.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 45.37 CFS-HRS, 3.75 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	57.76	(NULL)
15.00	13.08	(NULL)
16.02	19.72	(NULL)
20.99	1.13	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.89 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	55.97	(NULL)
15.09	12.95	(NULL)
16.10	19.44	(NULL)
21.08	1.12	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 60.88 CFS-HRS, 5.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	33.45	(RUNOFF)
14.98	11.20	(RUNOFF)
16.00	15.98	(RUNOFF)
20.98	1.02	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 46.79 CFS-HRS, 3.87 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	60.56	(NULL)
15.02	22.12	(NULL)
16.05	31.03	(NULL)
21.03	2.32	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 108.85 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	2.62	(RUNOFF)
15.94	1.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 3.13 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	2.62	1299.08
15.94	1.17	1299.04

RUNOFF VOLUME ABOVE BASEFLOW = 0.97 WATERSHED INCHES, 3.13 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.10	60.56	(NULL)
15.02	22.12	(NULL)
16.05	31.03	(NULL)
21.03	2.32	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

10.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
11.25	DISCHG	0.04	0.13	0.28	0.50	1.31	4.24	10.38	19.38	29.99	41.42
12.00	DISCHG	52.68	59.98	58.90	52.65	45.88	40.53	36.22	32.54	28.93	25.28
12.75	DISCHG	22.12	19.64	17.77	16.35	15.19	14.04	12.94	12.01	11.31	10.78
13.50	DISCHG	10.36	9.95	9.46	8.96	8.54	8.22	7.98	7.78	7.56	7.32
14.25	DISCHG	7.09	6.90	6.77	6.71	7.24	9.39	12.62	15.85	18.50	20.63
15.00	DISCHG	22.08	21.50	18.44	14.48	10.98	8.32	6.21	4.94	6.14	10.69
15.75	DISCHG	16.57	21.85	26.05	29.45	31.03	29.19	24.69	19.88	15.99	12.89
16.50	DISCHG	10.39	8.41	6.96	5.93	5.19	4.64	4.24	3.94	3.70	3.48
17.25	DISCHG	3.30	3.16	3.05	2.97	2.91	2.86	2.82	2.79	2.77	2.75
18.00	DISCHG	2.74	2.71	2.66	2.59	2.54	2.49	2.46	2.44	2.45	2.50
18.75	DISCHG	2.55	2.60	2.64	2.67	2.68	2.67	2.64	2.60	2.58	2.56
19.50	DISCHG	2.54	2.51	2.47	2.42	2.38	2.36	2.33	2.31	2.27	2.22
20.25	DISCHG	2.17	2.12	2.09	2.07	2.06	2.10	2.15	2.21	2.25	2.29
21.00	DISCHG	2.31	2.31	2.27	2.22	2.17	2.13	2.10	2.03	1.82	1.50
21.75	DISCHG	1.16	0.89	0.67	0.50	0.37	0.27	0.19	0.14	0.11	0.08

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 108.85 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.97 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 1.93 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	2.16	0.54

RUNOFF VOLUME ABOVE BASEFLOW = 1.29 WATERSHED INCHES, 3.12 CFS-HRS, 0.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.78	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.02	14.43	(DIVERT)	
15.83	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
20.99	1.29	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 52.13 CFS-HRS, 4.31 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	21.53	0.33
16.02	3.05	0.06

RUNOFF VOLUME ABOVE BASEFLOW = 0.24 WATERSHED INCHES, 7.22 CFS-HRS, 0.60 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	21.53	(NULL)
16.02	3.05	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.24 WATERSHED INCHES, 7.22 CFS-HRS, 0.60 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	20.16	(NULL)
15.03	15.12	(NULL)
16.03	19.01	(NULL)
21.00	1.36	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 55.25 CFS-HRS, 4.57 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	20.31	(NULL)
16.10	2.77	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.23 WATERSHED INCHES, 7.16 CFS-HRS, 0.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	7.56	(RUNOFF)
14.93	2.32	(RUNOFF)
15.95	3.46	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 9.38 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	24.87	(NULL)
14.93	2.32	(NULL)
16.04	5.19	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 16.54 CFS-HRS, 1.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	23.39	(NULL)
15.04	2.33	(NULL)
16.14	4.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.33 WATERSHED INCHES, 16.54 CFS-HRS, 1.37 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	77.40	(NULL)
15.07	15.21	(NULL)
16.11	24.22	(NULL)
21.07	1.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.39 WATERSHED INCHES, 77.42 CFS-HRS, 6.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	9.99	(RUNOFF)
14.92	2.73	(RUNOFF)
15.95	4.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.62 WATERSHED INCHES, 12.02 CFS-HRS, 0.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	82.58	(NULL)
15.02	17.40	(NULL)
16.08	26.66	(NULL)
21.03	1.56	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.41 WATERSHED INCHES, 89.45 CFS-HRS, 7.39 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 MIT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.27	20.12	(NULL)
15.11	15.38	(NULL)
16.12	18.95	(NULL)
21.10	1.36	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 55.20 CFS-HRS, 4.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	15.11	(RUNOFF)
14.93	4.64	(RUNOFF)
15.95	6.92	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 18.76 CFS-HRS, 1.55 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	33.97	(NULL)
15.00	19.00	(NULL)
15.99	25.33	(NULL)
21.00	1.76	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.04 WATERSHED INCHES, 73.96 CFS-HRS, 6.11 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	7.44	(RUNOFF)
14.95	2.32	(RUNOFF)
15.95	3.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.49 WATERSHED INCHES, 9.40 CFS-HRS, 0.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	41.40	(NULL)
14.99	21.31	(NULL)
15.98	28.71	(NULL)
20.99	1.96	(NULL)

FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

TIME(HRS)											
10.50	DISCHG	0.02	0.05	0.08	0.13	0.19	0.26	0.33	0.40	0.46	0.55
11.25	DISCHG	0.78	1.09	1.39	1.69	2.53	5.49	11.96	23.56	32.76	37.76
12.00	DISCHG	41.33	39.50	32.69	28.56	26.87	25.81	22.60	20.49	18.67	17.07
12.75	DISCHG	14.86	12.75	11.45	10.80	10.42	10.00	9.50	8.81	8.26	7.96
13.50	DISCHG	7.82	7.65	7.43	7.07	6.66	6.38	6.24	6.16	6.06	5.93
14.25	DISCHG	5.73	5.54	5.42	5.38	6.04	8.02	11.00	15.22	18.52	20.47
15.00	DISCHG	21.29	19.88	17.31	12.86	7.43	3.70	1.70	1.17	3.73	8.09
15.75	DISCHG	15.59	22.78	27.37	28.69	27.86	24.32	21.43	14.64	8.93	5.58
16.50	DISCHG	3.92	3.15	2.81	2.67	2.61	2.59	2.57	2.56	2.53	2.48
17.25	DISCHG	2.40	2.33	2.29	2.27	2.26	2.26	2.25	2.26	2.26	2.26
18.00	DISCHG	2.26	2.23	2.19	2.12	2.04	1.99	1.97	1.96	1.99	2.04
18.75	DISCHG	2.12	2.19	2.23	2.26	2.26	2.23	2.20	2.14	2.10	2.08
19.50	DISCHG	2.06	2.04	2.02	1.97	1.93	1.90	1.88	1.87	1.84	1.80
20.25	DISCHG	1.75	1.70	1.67	1.65	1.67	1.70	1.77	1.85	1.91	1.95
21.00	DISCHG	1.96	1.94	1.90	1.83	1.75	1.70	1.67	1.62	1.43	1.17
21.75	DISCHG	0.76	0.40	0.19	0.08	0.03	0.01	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 0.92 WATERSHED INCHES, 83.35 CFS-HRS, 6.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	27.42	(RUNOFF)
15.01	9.58	(RUNOFF)
16.03	13.67	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 0.48 WATERSHED INCHES, 43.50 CFS-HRS, 3.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.15	109.75	(NULL)
15.02	26.97	(NULL)
16.07	40.27	(NULL)
21.03	2.49	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.43 WATERSHED INCHES, 132.94 CFS-HRS, 10.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.48	267.39	(NULL)
15.22	98.72	(NULL)
16.27	132.70	(NULL)
19.23	16.02	(NULL)
21.20	13.65	(NULL)

FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

TIME(HRS)											
0.00	DISCHG	0.00	0.00	0.04	0.05	0.05	0.05	0.04	0.03	0.02	0.02
0.75	DISCHG	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.50	DISCHG	0.02	0.05	0.08	0.13	0.20	0.28	0.38	0.50	0.65	0.85
11.25	DISCHG	1.24	1.77	2.39	3.14	4.59	8.49	16.91	33.33	52.55	74.64

12.00	DISCHG	103.01	133.20	163.39	196.59	231.67	257.43	266.75	265.00	255.69	242.34
12.75	DISCHG	225.96	208.92	193.51	179.32	165.94	153.25	141.35	130.13	119.85	110.62
13.50	DISCHG	102.41	95.08	88.58	82.72	77.40	72.69	68.54	64.89	61.63	58.75
14.25	DISCHG	56.11	53.73	51.62	49.76	48.82	49.57	52.23	58.06	65.51	73.95
15.00	DISCHG	82.91	90.38	96.47	98.72	96.41	91.66	85.30	78.26	73.28	70.42
15.75	DISCHG	75.37	80.63	90.46	101.21	112.47	122.01	131.13	132.67	130.13	124.99
16.50	DISCHG	117.79	109.19	99.90	90.47	81.29	72.61	64.62	57.42	51.04	45.49
17.25	DISCHG	40.68	36.57	33.09	30.17	27.73	25.69	24.02	22.63	21.50	20.57
18.00	DISCHG	19.81	19.17	18.62	18.12	17.65	17.22	16.84	16.50	16.23	16.02
18.75	DISCHG	15.91	15.86	15.85	15.89	15.94	15.99	16.02	16.02	15.99	15.95
19.50	DISCHG	15.90	15.83	15.74	15.61	15.46	15.31	15.15	14.99	14.81	14.63
20.25	DISCHG	14.41	14.19	13.97	13.76	13.57	13.43	13.34	13.33	13.36	13.42
21.00	DISCHG	13.51	13.58	13.64	13.65	13.61	13.54	13.45	13.30	13.00	12.55
21.75	DISCHG	11.81	10.90	9.91	8.89	7.87	6.86	5.93	5.08	4.30	3.62

RUNOFF VOLUME ABOVE BASEFLOW = 0.61 WATERSHED INCHES, 685.97 CFS-HRS, 56.69 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 1 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 2.53 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 2 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	257.50	(RUNOFF)
15.12	65.31	(RUNOFF)
16.17	91.13	(RUNOFF)
19.18	8.27	(RUNOFF)
21.14	7.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.58 WATERSHED INCHES, 448.40 CFS-HRS, 37.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	168.36	1.05
15.12	38.16	0.62
16.17	55.91	0.69
21.14	3.08	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.39 CFS-HRS, 21.44 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	89.14	1.05
15.12	27.15	0.62
16.17	35.22	0.69
21.14	3.97	0.26

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 189.02 CFS-HRS, 15.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	87.77	(NULL)
15.22	26.80	(NULL)
16.27	34.72	(NULL)
21.24	3.97	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 188.95 CFS-HRS, 15.61 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	166.55	(NULL)
15.22	37.69	(NULL)
16.26	55.20	(NULL)
21.24	3.07	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 259.36 CFS-HRS, 21.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	246.12	(RUNOFF)
14.99	61.98	(RUNOFF)
16.02	88.99	(RUNOFF)
19.01	6.40	(RUNOFF)
20.99	5.51	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.51 WATERSHED INCHES, 331.60 CFS-HRS, 27.40 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	(NULL)
15.03	84.07	(NULL)
16.04	114.96	(NULL)
19.07	10.91	(NULL)
21.04	9.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.66 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	2.24
15.03	84.07	1.12
16.04	114.96	1.27
19.07	10.91	0.45
21.04	9.35	0.41

RUNOFF VOLUME ABOVE BASEFLOW = 2.48 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	308.10	(NULL)
15.03	84.07	(NULL)
16.04	114.96	(NULL)
19.07	10.91	(NULL)
21.04	9.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.48 WATERSHED INCHES, 520.55 CFS-HRS, 43.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	436.26	(NULL)
15.07	116.21	(NULL)
16.09	156.48	(NULL)
19.11	14.48	(NULL)
21.07	12.35	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.95 WATERSHED INCHES, 779.91 CFS-HRS, 64.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	534.30	(RUNOFF)
14.97	141.05	(RUNOFF)
15.98	202.03	(RUNOFF)
17.99	14.23	(RUNOFF)
18.98	14.20	(RUNOFF)
20.98	12.27	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 698.58 CFS-HRS, 57.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	954.00	(NULL)
15.00	251.27	(NULL)
16.03	352.37	(NULL)
19.03	28.61	(NULL)
21.01	24.54	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.01	0.02	0.04	0.07	0.12	0.20	0.30
8.25	DISCHG	0.44	0.60	0.78	0.97	1.18	1.39	1.62	1.85	2.12	2.43
9.00	DISCHG	2.81	3.24	3.75	4.32	4.91	5.50	6.09	6.69	7.35	8.10
9.75	DISCHG	8.89	9.65	10.40	11.13	11.95	13.08	14.50	15.95	17.29	18.54
10.50	DISCHG	19.78	21.40	23.79	26.58	29.23	31.58	33.75	36.17	40.20	46.32
11.25	DISCHG	52.93	58.86	64.03	68.76	93.58	184.99	338.42	505.08	657.43	792.82
12.00	DISCHG	909.96	952.34	869.12	730.50	611.51	530.44	471.70	423.02	373.16	318.94
12.75	DISCHG	272.23	238.34	214.51	196.84	182.18	167.13	152.17	140.05	131.38	125.17
13.50	DISCHG	120.36	115.35	108.82	102.26	97.14	93.60	90.99	88.77	86.11	82.88
14.25	DISCHG	79.96	77.62	76.34	75.47	82.82	112.29	154.65	192.58	219.47	238.99
15.00	DISCHG	251.27	238.62	194.53	145.38	107.22	80.99	61.24	51.25	76.52	144.60
15.75	DISCHG	217.46	273.06	312.19	341.62	350.28	314.29	251.47	194.38	154.92	126.39
16.50	DISCHG	104.30	86.58	72.55	61.91	54.19	48.67	44.68	41.69	39.12	36.80
17.25	DISCHG	34.88	33.45	32.42	31.64	31.04	30.57	30.20	29.92	29.71	29.55
18.00	DISCHG	29.40	29.02	28.28	27.48	26.85	26.43	26.12	25.96	26.22	26.85

18.75	DISCHG	27.49	27.96	28.29	28.53	28.60	28.35	27.92	27.53	27.28	27.09
19.50	DISCHG	26.92	26.61	26.10	25.56	25.14	24.86	24.66	24.42	23.97	23.33
20.25	DISCHG	22.74	22.31	22.01	21.81	21.83	22.30	23.00	23.61	24.03	24.34
21.00	DISCHG	24.54	24.39	23.82	23.15	22.63	22.27	21.99	21.26	18.72	14.61
21.75	DISCHG	10.79	8.06	6.13	4.65	3.49	2.58	1.91	1.42	1.05	0.78

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1478.49 CFS-HRS, 122.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.23	738.35	6.23
15.14	205.76	2.20
16.15	294.15	2.78
19.18	28.05	0.32
21.15	23.85	0.27

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1477.35 CFS-HRS, 122.09 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.23	738.35	(NULL)
15.14	205.76	(NULL)
16.15	294.15	(NULL)
19.18	28.05	(NULL)
21.15	23.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.62 WATERSHED INCHES, 1477.35 CFS-HRS, 122.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	48.54	(RUNOFF)
14.97	12.73	(RUNOFF)
15.97	18.29	(RUNOFF)
20.96	1.09	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 62.07 CFS-HRS, 5.13 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	765.09	(NULL)
15.12	214.20	(NULL)
16.14	306.07	(NULL)
19.10	29.26	(NULL)
21.12	24.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 1539.42 CFS-HRS, 127.22 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(RUNOFF)
14.99	5.07	(RUNOFF)
16.02	7.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(NULL)
14.99	5.07	(NULL)
16.02	7.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.22 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	19.16	(DIVERT)
14.99	5.07	(DIVERT)
16.02	7.28	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.21 WATERSHED INCHES, 26.38 CFS-HRS, 2.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.19	765.09	(NULL)
15.12	214.20	(NULL)
16.14	306.07	(NULL)
19.15	29.26	(NULL)
21.12	24.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 1539.42 CFS-HRS, 127.22 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	762.65	(NULL)
15.21	212.96	(NULL)
16.22	304.33	(NULL)
19.24	29.25	(NULL)
21.21	24.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.61 WATERSHED INCHES, 1538.76 CFS-HRS, 127.16 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	70.59	(RUNOFF)
15.00	18.88	(RUNOFF)
16.02	26.89	(RUNOFF)
21.00	1.69	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 97.21 CFS-HRS, 8.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	809.95	(NULL)
15.19	225.23	(NULL)
16.20	321.49	(NULL)
19.21	31.14	(NULL)
21.18	26.45	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 1635.97 CFS-HRS, 135.20 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.35	800.91	(NULL)
15.28	222.93	(NULL)
16.29	318.39	(NULL)
19.30	31.13	(NULL)
21.27	26.43	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 1635.61 CFS-HRS, 135.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	83.91	(RUNOFF)
15.12	23.19	(RUNOFF)
16.17	32.39	(RUNOFF)
21.15	2.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 149.26 CFS-HRS, 12.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.18	99.45	(NULL)
15.09	27.52	(NULL)
16.13	38.49	(NULL)
21.11	2.99	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

9.00	DISCHG	0.02	0.03	0.06	0.09	0.14	0.19	0.24	0.30	0.36	0.43
9.75	DISCHG	0.50	0.58	0.66	0.75	0.83	0.93	1.05	1.18	1.32	1.46
10.50	DISCHG	1.61	1.77	1.96	2.18	2.43	2.69	2.96	3.24	3.57	4.00
11.25	DISCHG	4.53	5.13	5.75	6.40	7.98	12.14	20.10	32.27	47.16	63.33
12.00	DISCHG	79.35	92.27	98.86	98.12	91.78	82.71	73.07	63.74	55.33	48.18
12.75	DISCHG	42.23	37.11	32.78	29.17	26.22	23.76	21.70	19.95	18.46	17.21
13.50	DISCHG	16.17	15.28	14.48	13.73	13.04	12.41	11.87	11.42	11.03	10.69
14.25	DISCHG	10.36	10.06	9.79	9.62	9.87	11.06	13.35	16.50	20.00	23.39
15.00	DISCHG	26.18	27.49	26.80	24.21	20.55	16.70	13.03	10.11	8.97	10.68
15.75	DISCHG	14.84	20.53	26.57	32.28	36.62	38.47	37.26	33.69	29.02	24.18
16.50	DISCHG	19.68	15.79	12.77	10.57	8.95	7.74	6.82	6.13	5.61	5.19
17.25	DISCHG	4.85	4.58	4.35	4.17	4.03	3.91	3.82	3.75	3.70	3.66
18.00	DISCHG	3.63	3.61	3.57	3.51	3.45	3.38	3.32	3.27	3.25	3.26
18.75	DISCHG	3.29	3.34	3.39	3.44	3.48	3.49	3.49	3.46	3.43	3.40
19.50	DISCHG	3.37	3.33	3.29	3.25	3.20	3.15	3.11	3.07	3.03	2.98

20.25	DISCHG	2.92	2.86	2.81	2.76	2.74	2.73	2.76	2.80	2.86	2.91
21.00	DISCHG	2.96	2.98	2.98	2.95	2.91	2.85	2.80	2.73	2.59	2.35
21.75	DISCHG	2.03	1.68	1.35	1.04	0.79	0.59	0.44	0.32	0.24	0.18

RUNOFF VOLUME ABOVE BASEFLOW = 0.76 WATERSHED INCHES, 175.63 CFS-HRS, 14.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	186.91	(RUNOFF)
14.91	42.23	(RUNOFF)
15.94	63.36	(RUNOFF)
18.94	4.10	(RUNOFF)
20.90	3.53	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 215.83 CFS-HRS, 17.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	0.99
14.91	36.33	0.54
15.94	46.16	0.63
18.94	4.10	0.10
20.90	3.53	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	0.99
14.91	5.90	0.54
15.94	17.20	0.63

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	94.57	(NULL)
14.91	36.33	(NULL)
15.94	46.16	(NULL)
18.94	4.10	(NULL)
20.90	3.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.49 WATERSHED INCHES, 168.57 CFS-HRS, 13.93 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	42.38	(RUNOFF)
12.42	8.60	(RUNOFF)
12.94	4.57	(RUNOFF)
14.90	9.58	(RUNOFF)
15.94	14.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.44 WATERSHED INCHES, 46.52 CFS-HRS, 3.84 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	136.95	(NULL)
13.91	14.36	(NULL)
14.91	45.91	(NULL)
15.94	60.79	(NULL)
18.94	5.04	(NULL)
20.90	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 215.10 CFS-HRS, 17.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	158.61	(NULL)
14.91	51.37	(NULL)
15.94	68.85	(NULL)
18.94	5.58	(NULL)
20.90	4.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.02 WATERSHED INCHES, 241.56 CFS-HRS, 19.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	91.75	0.93
14.91	28.12	0.46
15.94	38.29	0.55
20.90	2.80	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.24 CFS-HRS, 11.34 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	66.87	0.93
14.91	23.24	0.46
15.94	30.55	0.55
20.90	2.00	0.07

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.31 CFS-HRS, 8.62 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	90.35	(NULL)
15.00	28.06	(NULL)
16.02	38.02	(NULL)
20.98	2.79	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.49 CFS-HRS, 11.36 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	92.34	(NULL)
14.91	5.90	(NULL)
15.94	17.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.70 WATERSHED INCHES, 47.37 CFS-HRS, 3.91 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	21.83	(RUNOFF)
14.93	5.47	(RUNOFF)
15.95	8.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.46 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	114.03	(NULL)
14.92	11.36	(NULL)
15.94	25.26	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.85 WATERSHED INCHES, 73.71 CFS-HRS, 6.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	64.15	(NULL)
15.03	23.01	(NULL)
16.02	29.97	(NULL)
21.00	2.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.75 WATERSHED INCHES, 104.54 CFS-HRS, 8.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	173.43	(NULL)
14.96	34.03	(NULL)
15.95	54.23	(NULL)
20.98	2.47	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.21 WATERSHED INCHES, 178.26 CFS-HRS, 14.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	101.46	(RUNOFF)
14.97	26.60	(RUNOFF)
15.99	37.88	(RUNOFF)
20.98	2.33	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 132.33 CFS-HRS, 10.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	192.08	(NULL)
15.01	52.67	(NULL)
16.05	73.61	(NULL)
19.03	6.17	(NULL)
21.03	5.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.94 WATERSHED INCHES, 307.96 CFS-HRS, 25.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	7.64	(RUNOFF)
14.91	1.85	(RUNOFF)
15.94	2.77	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 8.85 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	7.64	1299.24
14.91	1.85	1299.06
15.94	2.77	1299.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 8.85 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	192.08	(NULL)
15.01	52.67	(NULL)
16.05	73.61	(NULL)
19.05	6.17	(NULL)
21.03	5.28	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

8.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
9.00	DISCHG	0.06	0.11	0.18	0.26	0.35	0.45	0.55	0.66	0.79	0.92
9.75	DISCHG	1.07	1.22	1.36	1.51	1.67	1.88	2.13	2.40	2.66	2.91
10.50	DISCHG	3.16	3.47	3.90	4.40	4.91	5.38	5.82	6.31	7.06	8.15
11.25	DISCHG	9.38	10.56	11.63	12.77	17.44	32.79	59.54	91.49	122.73	152.17
12.00	DISCHG	178.34	191.98	182.57	159.84	136.75	118.48	103.82	91.54	80.10	69.12
12.75	DISCHG	59.81	52.54	47.06	42.86	39.47	36.21	33.16	30.60	28.65	27.16
13.50	DISCHG	25.99	24.86	23.54	22.23	21.13	20.28	19.63	19.09	18.54	17.90

14.25	DISCHG	17.31	16.84	16.48	16.32	17.57	22.72	30.44	38.11	44.34	49.27
15.00	DISCHG	52.58	51.08	43.77	34.36	26.06	19.74	14.72	11.73	14.71	25.73
15.75	DISCHG	39.84	52.40	62.26	70.10	73.60	69.08	58.34	46.95	37.71	30.36
16.50	DISCHG	24.45	19.77	16.33	13.89	12.14	10.85	9.90	9.20	8.61	8.10
17.25	DISCHG	7.67	7.34	7.09	6.89	6.73	6.61	6.52	6.45	6.40	6.36
18.00	DISCHG	6.33	6.27	6.14	5.99	5.85	5.75	5.67	5.62	5.65	5.76
18.75	DISCHG	5.88	5.98	6.07	6.13	6.17	6.13	6.06	5.98	5.92	5.87
19.50	DISCHG	5.83	5.76	5.66	5.56	5.47	5.40	5.34	5.29	5.20	5.08
20.25	DISCHG	4.96	4.86	4.79	4.73	4.72	4.79	4.92	5.05	5.15	5.22
21.00	DISCHG	5.28	5.27	5.18	5.06	4.94	4.85	4.78	4.62	4.16	3.42
21.75	DISCHG	2.65	2.02	1.53	1.15	0.84	0.61	0.45	0.33	0.24	0.19

RUNOFF VOLUME ABOVE BASEFLOW = 0.93 WATERSHED INCHES, 307.96 CFS-HRS. 25.45 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	(NULL)
15.03	1.80	(NULL)
16.03	2.66	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	(DIVERT)
15.03	1.80	(DIVERT)
16.03	2.66	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 5.48 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	7.11	0.63
15.03	1.80	0.53
16.03	2.66	0.55

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 8.84 CFS-HRS, 0.73 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.63	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
14.70	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
20.98	2.79	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 3.03 WATERSHED INCHES, 90.57 CFS-HRS, 7.49 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	0.66
15.00	10.06	0.19
16.02	20.02	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 1.57 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	(NULL)
15.00	10.06	(NULL)
16.02	20.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.53 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	25.11	(NULL)
15.03	19.80	(NULL)
16.03	20.66	(NULL)
20.98	2.95	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.08 WATERSHED INCHES, 99.41 CFS-HRS, 8.22 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	72.35	(NULL)
15.00	10.06	(NULL)
16.02	20.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.53 WATERSHED INCHES, 46.93 CFS-HRS, 3.88 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.31	(RUNOFF)
14.92	5.51	(RUNOFF)
15.95	8.18	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.52 CFS-HRS, 2.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	93.14	(NULL)
14.97	15.62	(NULL)
15.98	27.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.47 WATERSHED INCHES, 73.44 CFS-HRS, 6.07 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	92.23	(NULL)
15.05	15.53	(NULL)
16.07	27.03	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.47 WATERSHED INCHES, 73.40 CFS-HRS, 6.07 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	253.56	(NULL)
14.97	49.60	(NULL)
15.97	79.62	(NULL)
20.98	2.93	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.28 WATERSHED INCHES, 251.66 CFS-HRS, 20.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	25.86	(RUNOFF)
14.92	5.98	(RUNOFF)
15.95	8.87	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.59 WATERSHED INCHES, 30.77 CFS-HRS, 2.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	279.28	(NULL)
14.97	55.69	(NULL)
15.96	88.45	(NULL)
18.98	3.98	(NULL)
20.97	3.44	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 282.43 CFS-HRS, 23.34 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	24.97	(NULL)
15.12	19.82	(NULL)
16.11	20.63	(NULL)
21.07	2.94	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.08 WATERSHED INCHES, 99.24 CFS-HRS, 8.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	44.62	(RUNOFF)
14.92	11.01	(RUNOFF)
15.95	16.35	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 53.04 CFS-HRS, 4.38 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	68.01	(NULL)
14.95	30.57	(NULL)
15.96	36.55	(NULL)
19.01	4.49	(NULL)
20.99	3.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 152.29 CFS-HRS, 12.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	22.04	(RUNOFF)
14.94	5.49	(RUNOFF)
15.95	8.12	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.37 WATERSHED INCHES, 26.56 CFS-HRS, 2.20 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	90.05	(NULL)
14.95	36.06	(NULL)
15.95	44.66	(NULL)
19.00	5.03	(NULL)
20.98	4.34	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.01	0.03	0.05	0.07	0.10	0.12	0.15
8.25	DISCHG	0.19	0.23	0.27	0.31	0.34	0.38	0.43	0.48	0.53	0.61
9.00	DISCHG	0.67	0.75	0.83	0.94	1.07	1.19	1.30	1.40	1.51	1.62
9.75	DISCHG	1.79	1.95	2.09	2.22	2.35	2.52	2.77	3.13	3.45	3.70
10.50	DISCHG	3.90	4.15	4.50	5.06	5.73	6.26	6.65	7.02	7.66	8.55
11.25	DISCHG	10.14	11.69	12.80	13.63	18.09	32.77	54.56	67.36	76.88	84.46
12.00	DISCHG	89.98	81.65	61.06	47.69	41.00	37.56	35.89	34.79	32.17	29.46
12.75	DISCHG	28.06	27.35	25.65	24.69	24.05	23.13	21.89	20.16	18.97	18.40

13.50	DISCHG	18.16	17.80	17.26	16.35	15.35	14.75	14.48	14.35	14.10	13.79
14.25	DISCHG	13.23	12.77	12.52	12.44	14.04	18.83	26.28	33.29	35.27	36.01
15.00	DISCHG	35.85	31.41	25.18	21.64	12.47	5.58	2.23	1.85	8.53	19.66
15.75	DISCHG	37.00	41.88	43.72	44.54	41.82	33.22	26.67	23.39	15.12	9.78
16.50	DISCHG	7.31	6.28	5.90	5.78	5.74	5.72	5.72	5.71	5.63	5.52
17.25	DISCHG	5.32	5.16	5.08	5.04	5.03	5.02	5.02	5.02	5.03	5.03
18.00	DISCHG	5.02	4.96	4.87	4.69	4.50	4.40	4.35	4.35	4.42	4.54
18.75	DISCHG	4.74	4.90	4.99	5.02	5.01	4.96	4.85	4.71	4.62	4.58
19.50	DISCHG	4.56	4.52	4.45	4.34	4.23	4.17	4.14	4.12	4.06	3.97
20.25	DISCHG	3.83	3.72	3.66	3.64	3.67	3.76	3.92	4.12	4.25	4.31
21.00	DISCHG	4.33	4.28	4.18	3.99	3.81	3.71	3.66	3.55	3.12	2.49
21.75	DISCHG	1.46	0.67	0.28	0.10	0.03	0.00	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 1.98 WATERSHED INCHES, 178.85 CFS-HRS, 14.78 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	85.19	(RUNOFF)
15.01	22.79	(RUNOFF)
16.04	32.43	(RUNOFF)
21.02	2.14	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.36 WATERSHED INCHES, 123.08 CFS-HRS, 10.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	358.62	(NULL)
14.98	78.23	(NULL)
15.98	119.47	(NULL)
19.01	6.47	(NULL)
20.99	5.57	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.32 WATERSHED INCHES, 405.51 CFS-HRS, 33.51 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.34	839.42	(NULL)
15.24	241.09	(NULL)
16.27	341.09	(NULL)
19.21	35.89	(NULL)
21.17	30.44	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.06	0.07	0.06	0.04	0.03	0.03	0.02	0.01
0.75	DISCHG	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.50	DISCHG	0.00	0.00	0.00	0.01	0.03	0.05	0.07	0.10	0.14	0.18
8.25	DISCHG	0.24	0.32	0.41	0.52	0.65	0.80	0.98	1.18	1.40	1.65
9.00	DISCHG	1.92	2.22	2.57	2.99	3.49	4.02	4.59	5.20	5.84	6.53
9.75	DISCHG	7.29	8.11	8.94	9.78	10.66	11.60	12.65	13.91	15.24	16.61
10.50	DISCHG	18.01	19.52	21.16	23.13	25.45	27.89	30.38	32.98	35.92	39.25
11.25	DISCHG	43.71	48.85	54.24	59.83	69.32	90.35	125.00	168.64	234.71	327.66
12.00	DISCHG	466.15	604.39	706.40	788.93	835.44	837.58	817.21	777.65	724.72	668.67
12.75	DISCHG	612.98	557.28	492.19	430.54	377.89	334.40	298.66	268.34	242.73	221.17
13.50	DISCHG	205.48	194.02	184.18	174.82	165.76	157.36	149.75	142.94	136.77	131.22
14.25	DISCHG	125.92	121.01	116.63	112.76	111.06	113.47	121.45	135.17	151.22	171.51
15.00	DISCHG	193.52	211.44	225.49	240.61	234.57	214.00	188.09	166.85	153.54	147.69
15.75	DISCHG	158.08	170.88	194.57	225.83	259.71	296.45	327.03	341.08	326.87	297.76
16.50	DISCHG	262.83	227.77	196.12	174.13	155.44	138.45	123.13	109.60	97.84	87.77
17.25	DISCHG	79.12	71.78	65.63	60.49	56.22	52.70	49.81	47.43	45.49	43.91
18.00	DISCHG	42.61	41.50	40.54	39.59	38.64	37.77	36.97	36.27	35.73	35.34
18.75	DISCHG	35.20	35.21	35.32	35.49	35.67	35.82	35.88	35.83	35.73	35.59
19.50	DISCHG	35.43	35.23	34.99	34.66	34.28	33.88	33.48	33.10	32.70	32.28
20.25	DISCHG	31.77	31.23	30.71	30.22	29.80	29.50	29.36	29.43	29.59	29.82
21.00	DISCHG	30.08	30.29	30.43	30.40	30.23	30.00	29.73	29.35	28.60	27.49
21.75	DISCHG	25.49	23.10	20.60	18.09	15.68	13.44	11.41	9.60	8.00	6.62

RUNOFF VOLUME ABOVE BASEFLOW = 1.63 WATERSHED INCHES, 1814.46 CFS-HRS, 149.95 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 2 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 3.12 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 3 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	353.46	(RUNOFF)
15.12	84.74	(RUNOFF)
16.17	118.16	(RUNOFF)
19.18	10.66	(RUNOFF)
21.14	9.07	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.15 WATERSHED INCHES, 610.03 CFS-HRS, 50.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	232.97	1.24
15.12	51.52	0.67
16.17	73.75	0.76
19.18	4.73	0.29
21.14	4.00	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.70 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	120.49	1.24
15.12	33.22	0.67
16.17	44.41	0.76
19.18	5.93	0.29
21.14	5.07	0.28

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.32 CFS-HRS, 20.52 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.30	119.17	(NULL)
15.22	32.91	(NULL)
16.26	43.91	(NULL)
19.28	5.93	(NULL)
21.24	5.06	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.65 WATERSHED INCHES, 248.20 CFS-HRS, 20.51 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	231.43	(NULL)
15.21	51.13	(NULL)
16.26	73.20	(NULL)
19.27	4.73	(NULL)
21.23	4.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 361.72 CFS-HRS, 29.89 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	338.96	(RUNOFF)
14.99	80.89	(RUNOFF)
16.02	116.07	(RUNOFF)
19.01	8.30	(RUNOFF)
20.99	7.13	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.07 WATERSHED INCHES. 454.81 CFS-HRS, 37.59 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	(NULL)
15.03	108.27	(NULL)
16.04	148.38	(NULL)
19.07	14.07	(NULL)
21.04	12.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.25 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	2.82
15.03	108.27	1.24
16.04	148.38	1.44
19.07	14.07	0.52
21.04	12.04	0.48

RUNOFF VOLUME ABOVE BASEFLOW = 3.35 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

*** MUSKINGUM ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	424.58	(NULL)
15.03	108.27	(NULL)
16.04	148.38	(NULL)
19.07	14.07	(NULL)
21.04	12.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.33 WATERSHED INCHES, 703.01 CFS-HRS, 58.10 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	606.97	(NULL)
15.07	152.20	(NULL)
16.09	205.10	(NULL)
19.11	18.72	(NULL)
21.07	15.95	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.66 WATERSHED INCHES, 1064.73 CFS-HRS, 87.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	750.58	(RUNOFF)
14.97	186.51	(RUNOFF)
15.98	267.02	(RUNOFF)
17.90	18.69	(RUNOFF)
18.98	18.62	(RUNOFF)
20.98	16.06	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 974.63 CFS-HRS, 80.54 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	1334.91	(NULL)
15.00	330.96	(NULL)
16.03	464.17	(NULL)
19.03	37.26	(NULL)
21.01	31.91	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
6.75	DISCHG	0.02	0.04	0.07	0.11	0.18	0.28	0.42	0.58	0.77	0.97
7.50	DISCHG	1.19	1.41	1.64	1.86	2.11	2.40	2.74	3.12	3.57	4.10
8.25	DISCHG	4.67	5.29	5.89	6.49	7.10	7.76	8.46	9.16	9.85	10.51
9.00	DISCHG	11.16	11.89	12.79	13.78	14.74	15.65	16.51	17.37	18.39	19.61
9.75	DISCHG	20.86	22.03	23.12	24.15	25.36	27.21	29.63	32.01	34.09	35.95
10.50	DISCHG	37.73	40.22	44.09	48.60	52.74	56.25	59.36	62.85	69.03	78.64
11.25	DISCHG	88.86	97.76	105.21	111.81	149.45	288.10	514.69	751.86	959.24	1136.54
12.00	DISCHG	1285.13	1330.25	1205.54	1007.60	838.29	722.11	637.91	568.93	499.75	425.78
12.75	DISCHG	362.53	316.77	284.67	260.97	241.36	221.26	201.29	185.14	173.59	-165.32
13.50	DISCHG	158.91	152.26	143.59	134.87	128.06	123.37	119.89	116.94	113.42	109.15
14.25	DISCHG	105.28	102.43	100.47	99.30	109.02	148.02	204.02	254.09	289.48	315.04
15.00	DISCHG	330.95	313.87	255.38	190.24	139.61	104.77	78.65	65.67	99.53	190.04
15.75	DISCHG	286.76	360.37	411.93	450.44	461.21	413.16	329.83	254.09	201.59	163.71
16.50	DISCHG	134.53	111.30	93.10	79.49	69.72	62.74	57.70	53.93	50.69	47.73
17.25	DISCHG	45.28	43.46	42.14	41.14	40.38	39.78	39.31	38.95	38.68	38.48
18.00	DISCHG	38.29	37.80	36.82	35.77	34.96	34.40	33.99	33.79	34.12	34.95
18.75	DISCHG	35.79	36.41	36.84	37.15	37.24	36.91	36.34	35.83	35.48	35.24
19.50	DISCHG	35.01	34.61	33.94	33.23	32.69	32.32	32.05	31.74	31.15	30.32
20.25	DISCHG	29.54	28.99	28.60	28.32	28.36	28.98	29.89	30.69	31.25	31.64
21.00	DISCHG	31.91	31.72	30.96	30.08	29.39	28.92	28.55	27.59	24.28	18.91
21.75	DISCHG	13.92	10.35	7.84	5.92	4.42	3.25	2.37	1.76	1.30	0.97

RUNOFF VOLUME ABOVE BASEFLOW = 2.24 WATERSHED INCHES, 2039.36 CFS-HRS, 168.53 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.25	961.23	9.02
15.12	282.23	2.70
16.15	392.38	3.42
19.16	36.52	0.42
21.15	31.00	0.35

RUNOFF VOLUME ABOVE BASEFLOW = 2.24 WATERSHED INCHES. 2037.92 CFS-HRS, 168.41 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 MU-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.25	961.23	(NULL)
15.12	282.23	(NULL)
16.15	392.38	(NULL)
19.16	36.52	(NULL)
21.15	31.00	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.24 WATERSHED INCHES, 2037.92 CFS-HRS, 168.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	68.09	(RUNOFF)
14.97	16.83	(RUNOFF)
15.97	24.17	(RUNOFF)
20.96	1.43	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.92 WATERSHED INCHES, 86.59 CFS-HRS, 7.16 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	993.60	(NULL)
15.10	294.75	(NULL)
16.13	408.63	(NULL)
19.15	38.10	(NULL)
21.12	32.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2124.51 CFS-HRS, 175.57 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(RUNOFF)
14.99	6.71	(RUNOFF)
16.02	9.63	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(NULL)
14.99	6.71	(NULL)
16.02	9.63	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.30 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	27.00	(DIVERT)
14.99	6.71	(DIVERT)
16.02	9.63	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.30 WATERSHED INCHES, 36.81 CFS-HRS, 3.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	993.60	(NULL)
15.10	294.75	(NULL)
16.13	408.63	(NULL)
19.15	38.10	(NULL)
21.12	32.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2124.51 CFS-HRS, 175.57 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.30	992.50	(NULL)
15.18	293.83	(NULL)
16.21	407.47	(NULL)
19.23	38.10	(NULL)
21.20	32.32	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.22 WATERSHED INCHES, 2123.60 CFS-HRS, 175.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.48	(RUNOFF)
15.00	24.97	(RUNOFF)
16.02	35.54	(RUNOFF)
21.00	2.22	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 135.62 CFS-HRS, 11.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.26	1051.62	(NULL)
15.17	311.73	(NULL)
16.19	431.18	(NULL)
19.21	40.58	(NULL)
21.17	34.42	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.20 WATERSHED INCHES, 2259.22 CFS-HRS, 186.70 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 ATI-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.35	1046.81	(NULL)
15.25	309.61	(NULL)
16.28	428.53	(NULL)
19.29	40.57	(NULL)
21.26	34.40	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.20 WATERSHED INCHES, 2258.93 CFS-HRS, 186.68 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	119.26	(RUNOFF)
15.12	30.69	(RUNOFF)
16.17	42.83	(RUNOFF)
21.14	3.32	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 208.31 CFS-HRS, 17.21 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.17	141.44	(NULL)
15.09	36.42	(NULL)
16.13	50.89	(NULL)
19.14	4.58	(NULL)
21.11	3.91	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.05	0.08
8.25	DISCHG	0.12	0.17	0.22	0.28	0.34	0.41	0.47	0.55	0.62	0.69
9.00	DISCHG	0.77	0.85	0.94	1.03	1.13	1.23	1.33	1.44	1.54	1.66
9.75	DISCHG	1.78	1.91	2.04	2.17	2.31	2.47	2.66	2.87	3.10	3.34
10.50	DISCHG	3.57	3.82	4.13	4.49	4.89	5.31	5.73	6.16	6.68	7.35
11.25	DISCHG	8.19	9.12	10.08	11.06	13.48	19.81	31.76	49.66	71.09	93.76
12.00	DISCHG	115.68	132.85	140.99	138.89	129.15	115.80	101.84	88.46	76.49	66.38
12.75	DISCHG	57.99	50.80	44.75	39.72	35.61	32.19	29.34	26.93	24.87	23.15
13.50	DISCHG	21.72	20.50	19.40	18.38	17.43	16.57	15.84	15.23	14.71	14.25
14.25	DISCHG	13.81	13.40	13.03	12.80	13.12	14.70	17.73	21.90	26.53	31.00
15.00	DISCHG	34.67	36.39	35.46	32.02	27.18	22.08	17.23	13.37	11.87	14.15
15.75	DISCHG	19.67	27.21	35.21	42.75	48.45	50.87	49.25	44.50	38.33	31.92
16.50	DISCHG	25.97	20.84	16.85	13.94	11.81	10.20	8.99	8.08	7.38	6.83
17.25	DISCHG	6.38	6.02	5.73	5.49	5.29	5.14	5.02	4.93	4.86	4.81
18.00	DISCHG	4.77	4.74	4.69	4.61	4.53	4.44	4.36	4.30	4.26	4.27
18.75	DISCHG	4.32	4.38	4.45	4.51	4.56	4.58	4.58	4.54	4.50	4.46
19.50	DISCHG	4.42	4.37	4.32	4.26	4.19	4.13	4.08	4.02	3.97	3.90
20.25	DISCHG	3.83	3.75	3.68	3.62	3.58	3.58	3.61	3.67	3.74	3.81
21.00	DISCHG	3.87	3.91	3.90	3.87	3.80	3.73	3.67	3.57	3.38	3.07
21.75	DISCHG	2.66	2.20	1.76	1.37	1.03	0.77	0.57	0.43	0.32	0.24

RUNOFF VOLUME ABOVE BASEFLOW = 1.05 WATERSHED INCHES, 245.12 CFS-HRS, 20.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	251.82	(RUNOFF)
14.91	54.74	(RUNOFF)
15.94	82.06	(RUNOFF)
18.94	5.29	(RUNOFF)
20.90	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.17 WATERSHED INCHES, 293.53 CFS-HRS, 24.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	1.12
14.91	42.15	0.59
15.94	54.86	0.70
18.94	5.29	0.13
20.90	4.54	0.11

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	1.12
14.91	12.59	0.59
15.94	27.20	0.70

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 MIT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	117.97	(NULL)
14.91	42.15	(NULL)
15.94	54.86	(NULL)
18.94	5.29	(NULL)
20.90	4.54	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES, 215.99 CFS-HRS, 17.85 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	57.96	(RUNOFF)
12.42	11.51	(RUNOFF)
12.94	6.07	(RUNOFF)
14.87	12.58	(RUNOFF)
15.94	19.17	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.99 WATERSHED INCHES, 64.34 CFS-HRS, 5.32 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	175.92	(NULL)
14.90	54.72	(NULL)
15.94	74.03	(NULL)
18.94	6.48	(NULL)
20.90	5.59	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 280.34 CFS-HRS, 23.17 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.93	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	206.27	(NULL)
14.91	61.94	(NULL)
15.94	84.68	(NULL)
16.91	8.19	(NULL)
17.89	7.18	(NULL)
18.94	7.22	(NULL)
20.90	6.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.66 WATERSHED INCHES, 317.26 CFS-HRS, 26.22 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	119.10	1.07
14.91	34.05	0.52
15.94	48.12	0.63
18.94	4.20	0.11
20.90	3.61	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.40 CFS-HRS, 14.91 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	87.17	1.07
14.91	27.89	0.52
15.94	36.55	0.63
20.90	2.59	0.09

RUNOFF VOLUME ABOVE BASEFLOW = 2.29 WATERSHED INCHES, 136.86 CFS-HRS, 11.31 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	117.82	(NULL)
14.99	33.98	(NULL)
16.02	47.85	(NULL)
19.01	4.20	(NULL)
20.98	3.61	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.02 WATERSHED INCHES, 180.56 CFS-HRS, 14.92 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	133.85	(NULL)
14.91	12.59	(NULL)
15.94	27.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.15 WATERSHED INCHES, 77.75 CFS-HRS, 6.43 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	30.52	(RUNOFF)
14.93	7.23	(RUNOFF)
15.95	10.66	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 36.92 CFS-HRS, 3.05 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	164.22	(NULL)
14.92	19.81	(NULL)
15.94	37.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 114.46 CFS-HRS, 9.46 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	84.46	(NULL)
15.02	27.70	(NULL)
16.02	36.00	(NULL)
21.00	2.58	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.30 WATERSHED INCHES, 137.12 CFS-HRS, 11.33 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	243.05	(NULL)
14.95	47.17	(NULL)
15.95	72.71	(NULL)
19.00	3.71	(NULL)
20.98	3.20	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.71 WATERSHED INCHES, 251.58 CFS-HRS, 20.79 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	141.22	(RUNOFF)
14.97	35.18	(RUNOFF)
15.99	50.07	(RUNOFF)
20.98	3.05	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 184.64 CFS-HRS, 15.26 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	272.11	(NULL)
15.01	69.68	(NULL)
16.04	97.31	(NULL)
19.05	8.09	(NULL)
21.03	6.92	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.31 WATERSHED INCHES, 429.76 CFS-HRS, 35.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	10.62	(RUNOFF)
14.91	2.45	(RUNOFF)
15.94	3.65	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 12.34 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	10.62	1299.33
14.91	2.45	1299.08
15.94	3.65	1299.11

RUNOFF VOLUME ABOVE BASEFLOW = 3.83 WATERSHED INCHES, 12.34 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 MIT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	272.11	(NULL)
15.01	69.68	(NULL)
16.04	97.31	(NULL)
19.05	8.09	(NULL)
21.03	6.92	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

7.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.09	0.15	0.23
8.25	DISCHG	0.32	0.42	0.53	0.63	0.75	0.87	1.00	1.13	1.27	1.40
9.00	DISCHG	1.53	1.68	1.85	2.04	2.22	2.41	2.58	2.76	2.96	3.19
9.75	DISCHG	3.44	3.67	3.89	4.11	4.36	4.70	5.15	5.60	6.02	6.41
10.50	DISCHG	6.79	7.28	7.99	8.82	9.63	10.37	11.04	11.76	12.93	14.67
11.25	DISCHG	16.62	18.43	20.03	21.70	28.88	52.36	92.33	138.47	181.87	221.44
12.00	DISCHG	255.61	272.10	257.04	224.04	190.92	164.71	143.69	126.15	109.98	94.62
12.75	DISCHG	81.67	71.55	63.93	58.09	53.37	48.88	44.69	41.18	38.50	36.45
13.50	DISCHG	34.84	33.28	31.49	29.71	28.21	27.07	26.18	25.45	24.70	23.85
14.25	DISCHG	23.05	22.42	21.93	21.71	23.36	30.19	40.41	50.54	58.76	65.25
15.00	DISCHG	69.57	67.55	57.87	45.42	34.45	26.09	19.46	15.52	19.50	34.14
15.75	DISCHG	52.85	69.45	82.44	92.73	97.28	91.25	77.04	61.99	49.78	40.07
16.50	DISCHG	32.26	26.08	21.53	18.31	16.00	14.29	13.03	12.10	11.33	10.65
17.25	DISCHG	10.09	9.65	9.32	9.06	8.85	8.69	8.57	8.48	8.41	8.36
18.00	DISCHG	8.31	8.25	8.06	7.86	7.68	7.55	7.44	7.38	7.41	7.55
18.75	DISCHG	7.72	7.85	7.96	8.05	8.09	8.04	7.95	7.84	7.76	7.70
19.50	DISCHG	7.64	7.55	7.43	7.29	7.17	7.08	7.00	6.93	6.81	6.65
20.25	DISCHG	6.50	6.37	6.27	6.20	6.19	6.28	6.45	6.61	6.74	6.84
21.00	DISCHG	6.91	6.90	6.78	6.62	6.47	6.35	6.26	6.05	5.44	4.47
21.75	DISCHG	3.46	2.64	2.00	1.50	1.10	0.80	0.59	0.44	0.32	0.24

RUNOFF VOLUME ABOVE BASEFLOW = 1.29 WATERSHED INCHES, 429.76 CFS-HRS, 35.52 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	(NULL)
15.02	2.40	(NULL)
16.03	3.55	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.82 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	(DIVERT)
15.02	2.40	(DIVERT)
16.03	3.55	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 7.64 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	10.10	0.68
15.02	2.40	0.54
16.03	3.55	0.56

RUNOFF VOLUME ABOVE BASEFLOW = 5.10 WATERSHED INCHES, 12.33 CFS-HRS, 1.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.63	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
14.70	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT) * FIRST POINT OF FLAT PEAK
19.01	4.20	(DIVERT)
20.98	3.61	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 3.64 WATERSHED INCHES, 108.62 CFS-HRS, 8.98 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	0.79
14.99	15.98	0.28
16.02	29.85	0.40

RUNOFF VOLUME ABOVE BASEFLOW = 2.41 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	(NULL)
14.99	15.98	(NULL)
16.02	29.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.35 WATERSHED INCHES. 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.06	28.10	(NULL)
15.02	20.40	(NULL)
16.03	21.55	(NULL)
19.01	4.44	(NULL)
20.98	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.75 WATERSHED INCHES, 120.95 CFS-HRS, 10.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	99.82	(NULL)
14.99	15.98	(NULL)
16.02	29.85	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.35 WATERSHED INCHES, 72.00 CFS-HRS, 5.95 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	31.12	(RUNOFF)
14.92	7.28	(RUNOFF)
15.95	10.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.00 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	125.88	(NULL)
14.97	23.34	(NULL)
15.98	39.27	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES, 108.94 CFS-HRS, 9.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.11	125.47	(NULL)
15.04	23.28	(NULL)
16.06	39.18	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.18 WATERSHED INCHES, 109.07 CFS-HRS, 9.01 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	357.64	(NULL)
14.97	71.01	(NULL)
15.96	110.10	(NULL)
19.00	4.42	(NULL)
20.98	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.83 WATERSHED INCHES, 360.65 CFS-HRS, 29.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	34.96	(RUNOFF)
14.92	7.76	(RUNOFF)
15.94	11.50	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.16 WATERSHED INCHES, 41.86 CFS-HRS, 3.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION AUDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	392.48	(NULL)
14.96	78.91	(NULL)
15.96	121.55	(NULL)
18.98	5.17	(NULL)
20.97	4.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.86 WATERSHED INCHES, 402.50 CFS-HRS, 33.26 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.14	27.95	(NULL)
15.11	20.39	(NULL)
16.11	21.52	(NULL)
19.09	4.43	(NULL)
21.07	3.81	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.74 WATERSHED INCHES, 120.68 CFS-HRS, 9.97 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	62.23	(RUNOFF)
14.92	14.56	(RUNOFF)
15.95	21.60	(RUNOFF)
20.92	1.23	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 74.01 CFS-HRS, 6.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION AUDHYD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	88.29	(NULL)
14.94	34.69	(NULL)
15.96	42.64	(NULL)
19.00	5.83	(NULL)
20.99	5.02	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.74 WATERSHED INCHES, 194.69 CFS-HRS, 16.09 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	30.78	(RUNOFF)
14.94	7.26	(RUNOFF)
15.95	10.72	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 37.06 CFS-HRS, 3.06 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.99	119.06	(NULL)
14.94	41.95	(NULL)
15.95	53.36	(NULL)
18.99	6.54	(NULL)
20.98	5.63	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.02	0.04	0.07	0.09	0.12	0.15	0.18	0.23	0.27	0.31
7.50	DISCHG	0.35	0.40	0.44	0.48	0.53	0.59	0.65	0.72	0.79	0.88
8.25	DISCHG	1.01	1.15	1.27	1.38	1.48	1.58	1.70	1.84	1.97	2.09
9.00	DISCHG	2.20	2.31	2.45	2.64	2.87	3.06	3.21	3.34	3.50	3.68
9.75	DISCHG	3.95	4.21	4.41	4.58	4.77	5.05	5.46	6.09	6.59	6.93
10.50	DISCHG	7.20	7.59	8.13	9.05	10.14	10.91	11.44	11.93	12.92	14.31
11.25	DISCHG	16.74	18.95	20.38	21.41	28.18	50.52	75.21	91.42	103.42	112.57
12.00	DISCHG	118.80	106.29	77.47	58.68	49.11	44.25	41.97	40.51	37.00	33.38
12.75	DISCHG	31.47	30.50	30.04	29.82	29.39	28.30	27.44	26.04	24.64	23.97
13.50	DISCHG	23.68	23.21	22.48	21.22	19.89	19.15	18.84	18.69	18.37	17.95
14.25	DISCHG	17.24	16.67	16.39	16.29	18.43	24.78	34.75	39.43	41.14	41.92
15.00	DISCHG	41.64	35.74	27.50	22.76	14.34	6.33	2.45	2.23	11.24	26.25
15.75	DISCHG	44.68	50.07	52.21	53.15	49.48	38.10	29.42	25.00	17.89	11.95
16.50	DISCHG	9.16	8.03	7.63	7.50	7.47	7.45	7.45	7.43	7.33	7.18
17.25	DISCHG	6.91	6.70	6.60	6.56	6.54	6.54	6.54	6.54	6.54	6.54
18.00	DISCHG	6.34	6.46	6.33	6.08	5.84	5.71	5.65	5.65	5.75	5.91
18.75	DISCHG	6.18	6.39	6.50	6.54	6.52	6.44	6.30	6.11	6.00	5.95

19.50	DISCHG	5.92	5.87	5.79	5.63	5.49	5.41	5.38	5.35	5.27	5.16
20.25	DISCHG	4.96	4.82	4.75	4.72	4.76	4.88	5.10	5.37	5.53	5.61
21.00	DISCHG	5.63	5.56	5.42	5.17	4.93	4.80	4.75	4.60	4.04	3.20
21.75	DISCHG	1.81	0.79	0.31	0.10	0.03	0.00	0.00			

RUNOFF VOLUME ABOVE BASEFLOW = 2.36 WATERSHED INCHES, 231.74 CFS-HRS, 19.15 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.08	120.33	(RUNOFF)
15.01	30.16	(RUNOFF)
16.04	42.87	(RUNOFF)
21.02	2.80	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 171.77 CFS-HRS, 14.19 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	505.27	(NULL)
14.97	108.67	(NULL)
15.98	162.46	(NULL)
19.01	8.43	(NULL)
20.99	7.25	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.87 WATERSHED INCHES. 574.27 CFS-HRS, 47.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.34	1094.11	(NULL)
15.25	331.01	(NULL)
16.26	453.82	(NULL)
19.20	46.76	(NULL)
21.17	39.62	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.07	0.07	0.05	0.04	0.03	0.03	0.02	0.01
0.75	DISCHG	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.75	DISCHG	0.02	0.04	0.07	0.10	0.14	0.18	0.23	0.31	0.42	0.53
7.50	DISCHG	0.66	0.82	1.00	1.20	1.41	1.66	1.92	2.22	2.55	2.93
8.25	DISCHG	3.41	3.94	4.50	5.09	5.72	6.38	7.08	7.83	8.61	9.40
9.00	DISCHG	10.20	11.02	11.87	12.80	13.82	14.85	15.89	16.94	18.02	19.15
9.75	DISCHG	20.40	21.71	23.03	24.35	25.70	27.16	28.81	30.84	32.99	35.17
10.50	DISCHG	37.37	39.73	42.30	45.43	49.14	52.99	56.89	60.88	65.40	70.52
11.25	DISCHG	77.42	85.28	93.45	101.85	116.28	148.29	193.27	258.84	363.24	536.97
12.00	DISCHG	728.69	880.91	985.89	1055.57	1089.88	1089.71	1065.95	1027.92	979.26	924.26
12.75	DISCHG	865.99	804.72	721.53	637.86	563.93	490.52	427.37	376.09	334.22	300.40
13.50	DISCHG	273.33	251.57	234.01	219.00	207.49	198.36	190.12	182.59	175.62	169.21
14.25	DISCHG	162.93	157.03	151.69	146.94	145.00	148.47	159.64	174.18	195.74	223.38
15.00	DISCHG	253.76	288.97	316.07	330.97	319.01	286.21	246.20	207.22	185.10	179.62
15.75	DISCHG	192.51	212.71	247.77	299.52	359.46	406.55	441.43	453.50	432.30	390.11
16.50	DISCHG	341.50	294.01	250.99	213.39	185.29	165.22	147.91	132.62	119.26	107.73
17.25	DISCHG	97.74	89.23	82.06	76.05	71.04	66.90	63.49	60.68	58.38	56.50
18.00	DISCHG	54.96	53.63	52.47	51.28	50.08	48.97	47.97	47.08	46.39	45.91
18.75	DISCHG	45.77	45.82	45.99	46.23	46.47	46.68	46.76	46.68	46.52	46.33
19.50	DISCHG	46.11	45.84	45.52	45.08	44.56	44.03	43.51	43.01	42.49	41.94
20.25	DISCHG	41.26	40.55	39.86	39.22	38.68	38.29	38.13	38.25	38.48	38.80
21.00	DISCHG	39.14	39.42	39.61	39.55	39.31	38.98	38.62	38.11	37.13	35.63
21.75	DISCHG	32.90	29.70	26.37	23.07	19.93	17.04	14.42	12.09	10.04	8.27

RUNOFF VOLUME ABOVE BASEFLOW = 2.23 WATERSHED INCHES, 2490.68 CFS-HRS, 205.83 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 3 RECORD ID

EXECUTIVE CONTROL OPERATION COMPUT FROM XSECTION 10 TO XSECTION 115 RECORD ID
STARTING TIME = 0.00 RAIN DEPTH = 4.04 RAIN DURATION= 24.00 RAIN TABLE NO.= 2 ANT. MOIST. COND= 2
ALTERNATE NO.= 1 STORM NO.= 4 MAIN TIME INCREMENT = 0.08 HOURS

OPERATION RUNOFF CROSS SECTION 10

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	506.65	(RUNOFF)
15.12	114.87	(RUNOFF)
16.17	160.07	(RUNOFF)
19.18	14.36	(RUNOFF)
21.14	12.21	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.07 WATERSHED INCHES, 871.28 CFS-HRS, 72.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 81

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	336.11	1.54
15.12	71.59	0.75
16.17	102.27	0.85
19.18	6.68	0.32
21.14	5.52	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.90 CFS-HRS, 43.71 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	170.55	1.54
15.12	43.28	0.75
16.17	57.80	0.85
19.18	7.68	0.32
21.14	6.69	0.31

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.39 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 13 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 13

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	169.38	(NULL)
15.21	42.99	(NULL)
16.26	57.42	(NULL)
19.27	7.67	(NULL)
21.23	6.68	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.65 WATERSHED INCHES, 342.31 CFS-HRS, 28.29 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 15 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 15

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	335.07	(NULL)
15.20	71.35	(NULL)
16.25	101.89	(NULL)
19.26	6.68	(NULL)
21.23	5.51	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 528.85 CFS-HRS, 43.70 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 16

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	487.37	(RUNOFF)
14.99	110.26	(RUNOFF)
16.02	158.12	(RUNOFF)
19.01	11.23	(RUNOFF)
20.99	9.64	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.98 WATERSHED INCHES, 654.93 CFS-HRS, 54.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 17

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	(NULL)
15.03	145.49	(NULL)
16.04	201.05	(NULL)
19.06	18.74	(NULL)
21.04	16.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.18 WATERSHED INCHES, 997.24 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 82

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	3.76
15.03	145.49	1.43
16.04	201.05	1.71
19.06	18.74	0.61
21.04	16.14	0.56

RUNOFF VOLUME ABOVE BASEFLOW = 4.75 WATERSHED INCHES, 997.23 CFS-HRS, 82.41 ACRE-FEET; BASEFLOW = 0.00 CFS

*** ATT-KIN ROUTING COEFFICIENT VALUE (0.0001029) BELOW MINIMUM ACCEPTABLE. VALUE SET TO 0.001

OPERATION REACH CROSS SECTION 21

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 23 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 23

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	611.58	(NULL)
15.03	145.49	(NULL)
16.04	201.05	(NULL)
19.06	18.74	(NULL)
21.04	16.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.73 WATERSHED INCHES, 997.23 CFS-HRS. 82.41 ACRE-FEET: BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 25

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.12	881.32	(NULL)
15.07	208.12	(NULL)
16.09	280.78	(NULL)
19.10	25.29	(NULL)
21.07	21.52	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.81 WATERSHED INCHES, 1526.08 CFS-HRS, 126.12 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 26

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	1100.77	(RUNOFF)
14.97	257.44	(RUNOFF)
15.98	368.43	(RUNOFF)
17.89	25.63	(RUNOFF)
18.98	25.51	(RUNOFF)
20.97	21.96	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 1427.77 CFS-HRS, 117.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	1949.23	(NULL)
15.00	453.15	(NULL)
16.03	638.38	(NULL)
19.03	50.69	(NULL)
21.01	43.35	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.41 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.11	0.20	0.34
6.00	DISCHG	0.52	0.72	0.95	1.19	1.43	1.68	1.93	2.20	2.52	2.91
6.75	DISCHG	3.33	3.77	4.23	4.69	5.17	5.77	6.48	7.24	7.99	8.72

7.50	DISCHG	9.44	10.14	10.83	11.50	12.15	12.79	13.40	14.04	14.86	15.94
8.25	DISCHG	17.10	18.19	19.20	20.16	21.12	22.21	23.40	24.57	25.64	26.64
9.00	DISCHG	27.61	28.75	30.29	32.01	33.62	35.06	36.37	37.67	39.27	41.31
9.75	DISCHG	43.38	45.22	46.66	48.38	50.23	53.33	57.49	61.49	64.84	67.69
10.50	DISCHG	70.54	74.28	80.71	88.19	94.87	100.30	104.94	110.17	119.98	135.55
11.25	DISCHG	151.94	165.74	176.67	186.41	245.52	463.55	811.55	1162.91	1456.76	1697.54
12.00	DISCHG	1892.12	1937.75	1743.87	1449.26	1198.17	1024.94	899.55	798.04	698.16	593.01
12.75	DISCHG	503.83	437.57	394.47	361.12	333.68	305.70	278.00	255.57	239.51	228.00
13.50	DISCHG	217.09	209.84	197.80	185.69	176.25	169.72	164.90	160.84	155.97	150.07
14.25	DISCHG	144.73	140.79	138.07	136.44	149.85	203.72	281.03	350.07	398.76	433.73
15.00	DISCHG	455.13	431.02	350.00	259.90	189.78	141.54	105.52	87.84	135.17	260.88
15.75	DISCHG	394.92	476.69	567.73	620.14	634.04	567.14	451.77	346.77	273.79	221.24
16.50	DISCHG	181.16	149.49	124.85	106.61	93.71	84.54	77.89	72.92	68.61	64.68
17.25	DISCHG	61.42	58.99	57.22	55.89	54.87	54.07	53.44	52.96	52.61	52.34
18.00	DISCHG	52.09	51.41	50.08	48.65	47.53	46.76	46.20	45.93	46.39	47.53
18.75	DISCHG	48.68	49.52	50.11	50.54	50.66	50.20	49.41	48.70	48.22	47.87
19.50	DISCHG	47.56	47.01	46.09	45.13	44.39	43.88	43.51	43.10	42.29	41.15
20.25	DISCHG	40.10	39.34	38.81	38.43	38.49	39.33	40.59	41.68	42.44	42.99
21.00	DISCHG	43.34	43.08	42.04	40.83	39.88	39.23	38.72	37.40	32.89	25.57
21.75	DISCHG	18.77	13.88	10.45	7.86	5.86	4.28	3.10	2.27	1.69	1.26

RUNOFF VOLUME ABOVE BASEFLOW = 3.25 WATERSHED INCHES, 2953.85 CFS-HRS, 244.11 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RESVOR STRUCTURE 8

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	1268.96	13.72
15.11	394.11	3.43
16.15	530.96	4.42
19.18	49.67	0.56
21.15	42.10	0.48

RUNOFF VOLUME ABOVE BASEFLOW = 3.24 WATERSHED INCHES, 2951.69 CFS-HRS, 243.93 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 27 MUSKIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 27

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.28	1268.96	(NULL)
15.11	394.11	(NULL)
16.15	530.96	(NULL)
19.18	49.67	(NULL)
21.15	42.10	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.24 WATERSHED INCHES, 2951.69 CFS-HRS, 243.93 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 28

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	99.70	(RUNOFF)
14.97	23.22	(RUNOFF)
15.97	33.35	(RUNOFF)
20.96	1.95	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.81 WATERSHED INCHES, 126.83 CFS-HRS, 10.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 29

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	1313.25	(NULL)
15.10	412.23	(NULL)
16.13	553.23	(NULL)
19.15	51.83	(NULL)
21.12	43.92	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.22 WATERSHED INCHES, 3078.52 CFS-HRS, 254.41 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 34

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(RUNOFF)
14.99	9.27	(RUNOFF)
16.02	13.28	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 53.95 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 33

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	39.71	(NULL)
14.99	9.27	(NULL)
16.02	13.28	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 0.44 WATERSHED INCHES, 53.95 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 100

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.03	39.71	(DIVERT)
14.99	9.27	(DIVERT)
16.02	13.28	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 0.44 WATERSHED INCHES, 53.94 CFS-HRS, 4.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION REACH CROSS SECTION 103

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.21	1313.25	(NULL)
15.10	412.23	(NULL)
16.13	553.23	(NULL)
19.13	51.83	(NULL)
21.12	43.92	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.22 WATERSHED INCHES, 3078.52 CFS-HRS, 254.41 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 104 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 104

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	1313.11	(NULL)
15.17	411.99	(NULL)
16.20	552.99	(NULL)
19.23	51.83	(NULL)
21.20	43.92	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.22 WATERSHED INCHES, 3077.74 CFS-HRS, 254.34 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 58

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	146.32	(RUNOFF)
15.00	34.47	(RUNOFF)
16.02	49.03	(RUNOFF)
21.00	3.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 198.67 CFS-HRS, 16.42 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 106

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.22	1410.39	(NULL)
15.15	437.84	(NULL)
16.18	586.80	(NULL)
19.20	55.23	(NULL)
21.17	46.79	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES. 3276.41 CFS-HRS, 270.76 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 105 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 105

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.31	1408.43	(NULL)
15.23	436.36	(NULL)
16.26	585.23	(NULL)
19.28	55.22	(NULL)
21.25	46.78	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.19 WATERSHED INCHES. 3275.80 CFS-HRS, 270.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 32

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.20	176.88	(RUNOFF)
15.12	42.40	(RUNOFF)
16.17	59.12	(RUNOFF)
19.18	5.33	(RUNOFF)
21.14	4.54	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 305.27 CFS-HRS, 25.23 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 35

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.16	209.86	(NULL)
15.07	50.32	(NULL)
16.13	70.24	(NULL)
19.14	6.28	(NULL)
21.11	5.35	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.36 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
6.75	DISCHG	0.03	0.06	0.09	0.13	0.17	0.22	0.28	0.34	0.41	0.49
7.50	DISCHG	0.56	0.64	0.72	0.80	0.87	0.95	1.03	1.10	1.19	1.28
8.25	DISCHG	1.39	1.50	1.62	1.73	1.85	1.97	2.09	2.22	2.35	2.47
9.00	DISCHG	2.60	2.73	2.87	3.03	3.20	3.37	3.54	3.71	3.89	4.07
9.75	DISCHG	4.28	4.49	4.70	4.91	5.13	5.38	5.70	6.07	6.46	6.85
10.50	DISCHG	7.23	7.65	8.15	8.75	9.42	10.11	10.78	11.47	12.30	13.39
11.25	DISCHG	14.74	16.24	17.76	19.31	23.13	33.12	51.73	79.13	111.22	144.32
12.00	DISCHG	173.36	199.28	209.59	204.97	189.52	169.11	148.06	128.09	110.35	95.42
12.75	DISCHG	83.10	72.58	63.75	56.44	50.47	45.52	41.40	37.92	34.97	32.50
13.50	DISCHG	30.43	28.70	27.12	25.67	24.32	23.10	22.07	21.21	20.47	19.82
14.25	DISCHG	19.20	18.62	18.10	17.78	18.22	20.39	24.59	30.33	36.73	42.89
15.00	DISCHG	47.93	50.28	48.98	44.21	37.52	30.47	23.78	18.46	16.40	19.57
15.75	DISCHG	27.22	37.63	46.70	59.08	66.93	70.22	67.95	61.38	52.84	44.00
16.50	DISCHG	35.79	28.71	23.21	19.19	16.25	14.03	12.36	11.11	10.15	9.38
17.25	DISCHG	8.77	8.27	7.86	7.53	7.27	7.05	6.89	6.76	6.67	6.60
18.00	DISCHG	6.54	6.49	6.42	6.33	6.21	6.09	5.98	5.89	5.84	5.86
18.75	DISCHG	5.92	6.00	6.10	6.18	6.25	6.28	6.27	6.22	6.17	6.11
19.50	DISCHG	6.05	5.98	5.91	5.83	5.74	5.66	5.58	5.51	5.43	5.34
20.25	DISCHG	5.24	5.13	5.04	4.96	4.90	4.89	4.94	5.02	5.12	5.21
21.00	DISCHG	5.29	5.34	5.34	5.28	5.20	5.10	5.01	4.88	4.63	4.20
21.75	DISCHG	3.63	3.01	2.41	1.87	1.41	1.05	0.78	0.59	0.44	0.33

RUNOFF VOLUME ABOVE BASEFLOW = 1.55 WATERSHED INCHES, 359.21 CFS-HRS, 29.69 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 36

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.15	(RUNOFF)
14.91	74.12	(RUNOFF)
15.94	111.03	(RUNOFF)
16.91	8.10	(RUNOFF)
17.89	7.09	(RUNOFF)
18.94	7.10	(RUNOFF)
20.90	6.11	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES. 419.11 CFS-HRS. 34.64 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 84

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	1.32
14.91	51.17	0.67
15.94	66.82	0.79
16.91	8.10	0.20
17.89	7.09	0.18
18.94	7.10	0.18
20.90	6.11	0.15

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES, 290.27 CFS-HRS, 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	1.32
14.91	22.95	0.67
15.94	44.21	0.79

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 39 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 39

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	153.51	(NULL)
14.91	51.17	(NULL)
15.94	66.82	(NULL)
16.91	8.10	(NULL)
17.89	7.09	(NULL)
18.94	7.10	(NULL)
20.90	6.11	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.28 WATERSHED INCHES. 290.27 CFS-HRS. 23.99 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 40

*** WARNING-MAIN TIME INCREMENT MAY BE TOO LARGE.
COMPUTED PEAK(82.70) AT XSECTION 40 EXCEEDS MAX. ADJACENT HYDROGRAPH COORDINATE BY 5 %.

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.96	82.70	(RUNOFF)
12.42	16.07	(RUNOFF)
12.74	8.42	(RUNOFF)
13.40	6.13	(RUNOFF)
14.89	17.24	(RUNOFF)
15.93	25.09	(RUNOFF)
21.41	1.22	(RUNOFF)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.05 SQ.MI.

6.00	DISCHG	0.00	0.00	0.01	0.02	0.04	0.05	0.07	0.08	0.10	0.11
6.75	DISCHG	0.13	0.14	0.16	0.17	0.20	0.24	0.26	0.28	0.30	0.32
7.50	DISCHG	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.48	0.56	0.60
8.25	DISCHG	0.63	0.66	0.68	0.70	0.74	0.80	0.83	0.86	0.88	0.91
9.00	DISCHG	0.94	1.03	1.11	1.15	1.19	1.22	1.25	1.29	1.43	1.50
9.75	DISCHG	1.54	1.57	1.61	1.64	1.83	2.11	2.22	2.29	2.34	2.39
10.50	DISCHG	2.45	2.97	3.35	3.49	3.58	3.66	3.74	4.09	5.48	6.07
11.25	DISCHG	6.33	6.50	6.65	6.85	24.20	52.93	64.41	70.45	74.59	77.74
12.00	DISCHG	78.68	43.81	21.76	17.02	16.05	15.90	15.96	14.91	10.22	8.69
12.75	DISCHG	8.37	8.31	8.31	8.33	7.52	6.43	6.17	6.12	6.12	6.12
13.50	DISCHG	6.08	5.33	4.90	4.80	4.79	4.79	4.79	4.68	4.28	4.15
14.25	DISCHG	4.13	4.12	4.12	4.15	9.08	15.21	16.67	17.02	17.13	17.18
15.00	DISCHG	16.54	6.67	1.41	0.29	0.05	0.00	0.00	3.99	18.76	23.53
15.75	DISCHG	24.65	24.96	25.08	25.07	15.69	5.03	2.54	1.99	1.88	1.87
16.50	DISCHG	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.83	1.69	1.65
17.25	DISCHG	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.65
18.00	DISCHG	1.63	1.49	1.43	1.41	1.41	1.41	1.41	1.46	1.60	1.64
18.75	DISCHG	1.65	1.65	1.65	1.65	1.57	1.50	1.49	1.49	1.49	1.49
19.50	DISCHG	1.48	1.39	1.35	1.35	1.35	1.35	1.35	1.31	1.21	1.19
20.25	DISCHG	1.18	1.18	1.18	1.18	1.29	1.39	1.41	1.42	1.42	1.42
21.00	DISCHG	1.40	1.26	1.20	1.19	1.18	1.18	1.18	0.87	0.22	0.05
21.75	DISCHG	0.01	0.00								

RUNOFF VOLUME ABOVE BASEFLOW = 2.90 WATERSHED INCHES, 93.44 CFS-HRS, 7.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 41

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	256.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 45 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 45

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	236.21	(NULL)
14.90	68.40	(NULL)
15.94	93.07	(NULL)
16.91	9.98	(NULL)
17.89	8.74	(NULL)
18.93	8.75	(NULL)
20.89	7.53	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.84 WATERSHED INCHES, 383.72 CFS-HRS, 31.71 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 97

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.95	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	280.55	(NULL)
14.91	78.33	(NULL)
15.94	107.75	(NULL)
16.91	11.09	(NULL)
17.89	9.71	(NULL)
18.94	9.75	(NULL)
20.90	8.37	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.67 WATERSHED INCHES, 437.82 CFS-HRS, 36.18 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 89

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	161.59	1.27
14.91	44.21	0.60
15.94	62.40	0.74
18.94	5.68	0.14
20.90	4.87	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 4.18 WATERSHED INCHES, 249.58 CFS-HRS, 20.63 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	118.96	1.27
14.91	34.14	0.60
15.94	45.35	0.74
18.94	4.07	0.14
20.90	3.49	0.12

RUNOFF VOLUME ABOVE BASEFLOW = 3.15 WATERSHED INCHES, 188.23 CFS-HRS, 15.56 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 2 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	160.55	(NULL)
14.99	44.15	(NULL)
16.01	62.17	(NULL)
19.01	5.68	(NULL)
20.98	4.87	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.19 WATERSHED INCHES, 249.91 CFS-HRS, 20.65 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 43 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	200.64	(NULL)
14.91	22.95	(NULL)
15.94	44.21	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.90 WATERSHED INCHES, 128.84 CFS-HRS, 10.65 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 95

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.51	(RUNOFF)
14.93	9.98	(RUNOFF)
15.95	14.70	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 54.10 CFS-HRS, 4.47 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ROUTED CROSS SECTION 43

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	245.01	(NULL)
14.91	32.92	(NULL)
15.94	58.89	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.10 WATERSHED INCHES, 182.93 CFS-HRS, 15.12 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 1 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	116.41	(NULL)
15.01	33.97	(NULL)
16.02	44.84	(NULL)
19.02	4.07	(NULL)
20.99	3.49	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.16 WATERSHED INCHES, 188.49 CFS-HRS, 15.58 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 90

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 91 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 91

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	354.79	(NULL)
14.94	66.52	(NULL)
15.94	102.42	(NULL)
18.99	5.03	(NULL)
20.97	4.33	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.53 WATERSHED INCHES, 371.43 CFS-HRS, 30.69 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 48

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.02	207.09	(RUNOFF)
14.97	48.56	(RUNOFF)
16.99	69.08	(RUNOFF)
18.99	4.84	(RUNOFF)
20.98	4.16	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 270.52 CFS-HRS. 22.36 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 51

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	402.13	(NULL)
15.01	96.23	(NULL)
16.04	134.27	(NULL)
19.05	11.08	(NULL)
21.03	9.46	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 1.91 WATERSHED INCHES, 629.73 CFS-HRS, 52.04 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 30

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.41	(RUNOFF)
14.90	3.37	(RUNOFF)
15.94	5.03	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 18.09 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 86

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	15.41	1299.48
14.90	3.37	1299.10
15.94	5.03	1299.16

RUNOFF VOLUME ABOVE BASEFLOW = 5.60 WATERSHED INCHES, 18.09 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 53 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 53

----- HYDROGRAPH CONTAINS NO FLOW -----

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 55

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	402.13	(NULL)
15.01	96.23	(NULL)
16.04	134.27	(NULL)
19.05	11.08	(NULL)
21.03	9.46	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.52 SQ.MI.

6.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06
6.75	DISCHG	0.11	0.17	0.24	0.31	0.40	0.51	0.63	0.76	0.90	1.04
7.50	DISCHG	1.17	1.31	1.45	1.58	1.72	1.85	1.98	2.11	2.28	2.48
8.25	DISCHG	2.70	2.92	3.12	3.32	3.52	3.73	3.97	4.20	4.42	4.63
9.00	DISCHG	4.84	5.07	5.37	5.70	6.03	6.33	6.61	6.89	7.21	7.60
9.75	DISCHG	8.01	8.40	8.75	9.08	9.47	10.06	10.83	11.61	12.31	12.94
10.50	DISCHG	13.53	14.32	15.51	16.92	18.27	19.44	20.48	21.61	23.49	26.35
11.25	DISCHG	29.52	32.41	34.88	37.42	48.84	86.04	148.04	217.37	280.14	335.44
12.00	DISCHG	381.73	402.08	377.39	327.53	278.04	238.87	207.49	181.40	157.58	135.18
12.75	DISCHG	116.36	101.69	90.64	82.16	75.32	68.85	62.84	57.82	53.98	51.05
13.50	DISCHG	48.73	46.51	43.96	41.44	39.33	37.71	36.45	35.42	34.35	33.16
14.25	DISCHG	32.04	31.14	30.46	30.14	32.41	41.85	55.98	69.97	81.29	90.19
15.00	DISCHG	96.10	93.26	79.87	62.69	47.54	36.01	26.85	21.42	26.97	47.27
15.75	DISCHG	73.16	96.09	113.96	128.07	134.23	125.85	106.22	85.44	68.60	55.21
16.50	DISCHG	44.44	35.91	29.64	25.19	22.01	19.65	17.91	16.63	15.57	14.63
17.25	DISCHG	13.86	13.25	12.79	12.43	12.15	11.92	11.75	11.63	11.53	11.46
18.00	DISCHG	11.40	11.28	11.05	10.77	10.53	10.34	10.20	10.11	10.16	10.35
18.75	DISCHG	10.57	10.76	10.91	11.02	11.08	11.02	10.88	10.74	10.63	10.54
19.50	DISCHG	10.46	10.34	10.16	9.97	9.81	9.68	9.59	9.49	9.32	9.10
20.25	DISCHG	8.89	8.71	8.58	8.48	8.46	8.59	8.82	9.04	9.21	9.36
21.00	DISCHG	9.45	9.44	9.27	9.05	8.85	8.69	8.56	8.27	7.44	6.11
21.75	DISCHG	4.73	3.61	2.74	2.05	1.51	1.10	0.81	0.60	0.44	0.33

RUNOFF VOLUME ABOVE BASEFLOW = 1.89 WATERSHED INCHES, 629.73 CFS-HRS, 52.04 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 57 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 57

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	(NULL)
15.01	3.33	(NULL)
16.02	4.94	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 5.60 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 4

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	(DIVERT)
15.01	3.33	(DIVERT)
16.02	4.94	(DIVERT)

RUNOFF VOLUME ABOVE BASEFLOW = 11.20 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 88

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

RUNOFF VOLUME ABOVE BASEFLOW = 0.00 WATERSHED INCHES, 0.00 CFS-HRS, 0.00 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 88

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	14.92	0.77
15.01	3.33	0.56
16.02	4.94	0.59

RUNOFF VOLUME ABOVE BASEFLOW = 7.47 WATERSHED INCHES, 18.07 CFS-HRS, 1.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION DIVERT CROSS SECTION 76

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)	
11.25	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
14.63	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
15.68	18.00*	(DIVERT)	* FIRST POINT OF FLAT PEAK
19.01	5.68	(DIVERT)	
20.98	4.87	(DIVERT)	

RUNOFF VOLUME ABOVE BASEFLOW = 4.50 WATERSHED INCHES, 134.35 CFS-HRS, 11.10 ACRE-FEET; BASEFLOW = 0.00 CFS

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	1.00
14.99	26.15	0.37
16.01	44.17	0.52

RUNOFF VOLUME ABOVE BASEFLOW = 3.88 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 2

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	(NULL)
14.99	26.15	(NULL)
16.01	44.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.77 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 1

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.05	32.92	(NULL)
15.01	21.33	(NULL)
16.02	22.94	(NULL)
19.01	6.00	(NULL)
20.98	5.15	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.72 WATERSHED INCHES, 152.42 CFS-HRS, 12.60 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 3 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.04	142.55	(NULL)
14.99	26.15	(NULL)
16.01	44.17	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.77 WATERSHED INCHES, 115.70 CFS-HRS, 9.56 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 96

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	45.28	(RUNOFF)
14.74	10.04	(RUNOFF)
15.94	14.89	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.21 CFS-HRS, 4.48 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 3

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.01	181.02	(NULL)
14.96	36.33	(NULL)
13.97	57.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.39 WATERSHED INCHES, 169.78 CFS-HRS, 14.03 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 47 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.09	180.99	(NULL)
15.04	36.32	(NULL)
16.04	57.29	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.39 WATERSHED INCHES, 169.77 CFS-HRS, 14.03 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 47

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	524.28	(NULL)
14.96	103.73	(NULL)
15.96	157.79	(NULL)
18.99	6.00	(NULL)
20.97	5.16	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.75 WATERSHED INCHES, 541.19 CFS-HRS, 44.72 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 46

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.97	49.35	(RUNOFF)
14.91	10.51	(RUNOFF)
15.94	15.36	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 3.09 WATERSHED INCHES, 59.77 CFS-HRS, 4.94 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 49

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	573.53	(NULL)
14.96	114.43	(NULL)
15.95	173.33	(NULL)
18.97	7.01	(NULL)
20.97	6.04	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.76 WATERSHED INCHES, 600.96 CFS-HRS, 49.66 ACRE-FEET; BASEFLOW = 0.00 CFS

*** WARNING REACH 63 ATT-KIN COEFF.(C) GREATER THAN 0.667, CONSIDER REDUCING MAIN TIME INCREMENT ***

OPERATION REACH CROSS SECTION 63

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.13	32.76	(NULL)
15.09	21.32	(NULL)
16.10	22.90	(NULL)
19.09	6.00	(NULL)
21.06	5.14	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 4.71 WATERSHED INCHES, 152.11 CFS-HRS, 12.57 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 64

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	90.56	(RUNOFF)
14.92	20.09	(RUNOFF)
15.94	29.78	(RUNOFF)
20.92	1.68	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 108.42 CFS-HRS, 8.96 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDMTD CROSS SECTION 65

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	121.06	(NULL)
14.94	41.12	(NULL)
15.95	52.15	(NULL)
17.90	7.92	(NULL)
19.00	7.91	(NULL)
20.98	6.80	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 3.67 WATERSHED INCHES, 260.54 CFS-HRS, 21.53 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 66

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	44.85	(RUNOFF)
14.93	10.01	(RUNOFF)
15.95	14.79	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.80 WATERSHED INCHES, 54.28 CFS-HRS, 4.49 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 67

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
11.98	165.90	(NULL)
14.94	51.14	(NULL)
15.95	66.93	(NULL)
17.90	8.90	(NULL)
18.99	8.89	(NULL)
20.98	7.64	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 0.14 SQ.MI.

5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.15	0.20
6.00	DISCHG	0.24	0.28	0.32	0.37	0.41	0.46	0.51	0.56	0.63	0.70
6.75	DISCHG	0.77	0.85	0.93	1.00	1.09	1.18	1.31	1.51	1.68	1.82
7.50	DISCHG	1.94	2.05	2.16	2.26	2.36	2.47	2.57	2.67	2.81	2.98
8.25	DISCHG	3.28	3.53	3.73	3.88	4.03	4.19	4.38	4.62	4.83	5.00
9.00	DISCHG	5.15	5.33	5.56	5.90	6.30	6.59	6.81	7.00	7.24	7.54
9.75	DISCHG	7.99	8.42	8.71	8.94	9.22	9.69	10.40	11.50	12.30	12.80
10.50	DISCHG	13.17	13.76	14.64	16.17	17.85	18.94	19.62	20.26	21.79	23.98
11.25	DISCHG	27.91	29.35	29.94	30.45	40.59	75.30	108.81	131.25	147.04	158.24
12.00	DISCHG	165.15	145.67	103.59	76.00	61.73	54.64	51.45	49.47	44.60	39.53
12.75	DISCHG	36.82	35.43	34.79	34.50	33.91	32.38	31.17	30.56	30.25	30.11
13.50	DISCHG	30.02	29.47	28.54	27.96	26.79	25.92	25.55	25.36	24.93	24.33
14.25	DISCHG	23.29	22.51	22.15	22.03	25.00	33.79	44.22	48.25	50.18	51.12
15.00	DISCHG	50.65	42.48	31.09	24.47	16.98	7.33	2.73	2.82	15.48	36.70
15.75	DISCHG	56.62	62.88	65.48	66.61	61.44	45.71	33.67	27.44	21.91	15.21
16.50	DISCHG	12.01	10.75	10.31	10.19	10.15	10.14	10.14	10.11	9.98	9.76
17.25	DISCHG	9.37	9.09	8.96	8.91	8.90	8.89	8.89	8.89	8.89	8.89
18.00	DISCHG	8.89	8.78	8.60	8.24	7.91	7.74	7.67	7.68	7.81	8.03
18.75	DISCHG	8.43	8.71	8.84	8.89	8.86	8.75	8.55	8.28	8.13	8.07
19.50	DISCHG	8.04	7.96	7.85	7.63	7.43	7.33	7.29	7.26	7.15	6.99
20.25	DISCHG	6.71	6.52	6.43	6.40	6.46	6.63	6.93	7.31	7.52	7.61
21.00	DISCHG	7.64	7.54	7.35	6.98	6.66	6.49	6.43	6.23	5.47	4.29
21.75	DISCHG	2.30	0.95	0.35	0.12	0.03	0.00				

RUNOFF VOLUME ABOVE BASEFLOW = 3.48 WATERSHED INCHES, 314.82 CFS-HRS, 26.02 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION RUNOFF CROSS SECTION 72

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.07	177.39	(RUNOFF)
15.01	41.65	(RUNOFF)
16.04	59.16	(RUNOFF)
19.04	4.47	(RUNOFF)
21.02	3.83	(RUNOFF)

RUNOFF VOLUME ABOVE BASEFLOW = 2.79 WATERSHED INCHES, 251.70 CFS-HRS, 20.80 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 73

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.00	740.75	(NULL)
14.97	155.51	(NULL)
15.97	229.48	(NULL)
19.01	11.48	(NULL)
20.99	9.86	(NULL)

RUNOFF VOLUME ABOVE BASEFLOW = 2.78 WATERSHED INCHES, 852.66 CFS-HRS, 70.46 ACRE-FEET; BASEFLOW = 0.00 CFS

OPERATION ADDHYD CROSS SECTION 115

PEAK TIME(HRS)	PEAK DISCHARGE(CFS)	PEAK ELEVATION(FEET)
12.29	1470.28	(NULL)
15.22	460.69	(NULL)
16.25	614.18	(NULL)
19.19	63.64	(NULL)
21.16	53.87	(NULL)

TIME(HRS) FIRST HYDROGRAPH POINT = 0.00 HOURS TIME INCREMENT = 0.08 HOURS DRAINAGE AREA = 1.73 SQ.MI.

0.00	DISCHG	0.00	0.00	0.08	0.07	0.05	0.04	0.03	0.02	0.02	0.01
0.75	DISCHG	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.25	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.75	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	DISCHG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.25	DISCHG	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.11	0.16	0.22
6.00	DISCHG	0.29	0.38	0.49	0.63	0.80	1.00	1.21	1.45	1.72	2.01
6.75	DISCHG	2.34	2.71	3.11	3.56	4.04	4.56	5.14	5.83	6.56	7.31
7.50	DISCHG	8.09	8.89	9.71	10.54	11.39	12.23	13.06	13.90	14.76	15.65
8.25	DISCHG	16.71	17.84	18.98	20.13	21.29	22.49	23.72	25.05	26.39	27.72
9.00	DISCHG	29.03	30.37	31.74	33.28	34.98	36.68	38.39	40.09	41.83	43.63

9.75	DISCHG	45.67	47.80	49.93	52.02	54.15	56.47	59.13	62.53	66.08	69.64
10.50	DISCHG	73.21	77.01	81.13	86.24	92.25	98.44	104.65	110.95	118.08	126.15
11.25	DISCHG	137.28	147.96	159.52	171.83	194.00	243.97	310.81	428.52	629.98	872.44
12.00	DISCHG	1099.66	1250.51	1367.12	1457.37	1469.86	1446.31	1417.42	1386.91	1350.00	1308.62
12.75	DISCHG	1235.56	1151.39	1061.50	973.23	888.75	810.43	716.62	627.19	552.44	477.86
13.50	DISCHG	417.91	372.68	338.53	312.36	290.05	270.85	254.68	241.34	230.24	220.93
14.25	DISCHG	213.56	207.47	201.81	196.63	195.05	200.79	214.00	233.45	264.83	318.56
15.00	DISCHG	374.03	416.96	447.03	460.56	441.24	391.59	333.55	278.48	240.98	223.82
15.75	DISCHG	241.26	274.83	342.56	429.37	510.28	570.69	607.34	612.26	585.17	534.40
16.50	DISCHG	467.50	399.36	338.57	286.24	242.02	205.39	181.99	164.67	149.61	136.47
17.25	DISCHG	124.91	114.95	106.50	99.38	93.41	88.44	84.33	80.94	78.15	75.86
18.00	DISCHG	73.99	72.36	70.90	69.35	67.78	66.32	64.99	63.82	62.92	62.30
18.75	DISCHG	62.17	62.29	62.56	62.91	63.26	63.54	63.64	63.50	63.28	63.00
19.50	DISCHG	62.69	62.31	61.86	61.24	60.50	59.77	59.06	58.38	57.66	56.91
20.25	DISCHG	55.96	54.98	54.05	53.17	52.44	51.92	51.73	51.94	52.29	52.74
21.00	DISCHG	53.23	53.61	53.87	53.75	53.38	52.91	52.40	51.69	50.34	48.23
21.75	DISCHG	44.32	39.83	35.24	30.73	26.46	22.53	19.01	15.89	13.16	10.81

RUNOFF VOLUME ABOVE BASEFLOW = 3.22 WATERSHED INCHES, 5540.62 CFS-HRS, 296.73 ACRE-FEET; BASEFLOW = 0.00 CFS

EXECUTIVE CONTROL OPERATION ENDCMP COMPUTATIONS COMPLETED FOR PASS 4 RECORD ID

EXECUTIVE CONTROL OPERATION ENDJOB RECORD ID

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	1.44	24.00	0.62	---	12.24	93.78	213.1
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	1.44	24.00	0.47	0.70	12.24	57.73	195.8
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	1.44	24.00	0.91	0.70	12.24	36.05	248.3
XSECTION 13	REACH	0.15	2	2	0.08	0.0	1.44	24.00	0.91	---	12.37	34.85	240.0
XSECTION 15	REACH	0.29	2	2	0.08	0.0	1.44	24.00	0.47	---	12.36	55.54	188.4
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	1.44	24.00	0.57	---	12.07	88.30	259.7
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	1.44	24.00	0.67	---	12.10	111.59	230.0
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	1.44	24.00	1.00	1.26	12.10	111.59	343.3
XSECTION 21	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	1.44	24.00	1.00	---	12.10	111.59	343.3
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	1.44	24.00	0.75	---	12.16	149.25	240.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	177.74	225.0
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	1.44	24.00	0.60	---	12.08	318.72	226.1
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	1.44	24.00	0.60	2.41	12.27	237.99	168.8
XSECTION 27	REACH	1.41	2	2	0.08	0.0	1.44	24.00	0.60	---	12.27	237.99	168.8
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	1.44	24.00	0.49	---	12.04	16.27	232.4
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	1.44	24.00	0.60	---	12.26	246.85	166.8
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.09	6.21	206.9
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	1.44	24.00	0.08	---	12.09	6.21	32.7
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	1.44	24.00	0.08	---	12.09	6.21	32.7
XSECTION 103	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	1.44	24.00	0.60	---	12.26	246.85	166.8
XSECTION 104	REACH	1.48	2	2	0.08	0.0	1.44	24.00	0.60	---	12.38	240.75	162.7
XSECTION 38	RUNOFF	0.11	2	2	0.08	0.0	1.44	24.00	0.48	---	12.08	22.90	208.1
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	1.44	24.00	0.59	---	12.36	251.77	158.4
XSECTION 105	REACH	1.59	2	2	0.08	0.0	1.44	24.00	0.59	---	12.49	245.32	154.3
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	1.44	24.00	0.48	---	12.26	26.16	153.9
XSECTION 33	ADDHYD	0.36	2	2	0.08	0.0	1.44	24.00	0.27	---	12.22	30.88	85.7
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	1.44	24.00	0.62	---	11.98	73.18	348.5
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	1.15	0.67	11.98	50.73	483.1

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 65	DIVERT	0.10	2	2	0.08	0.0	1.44	24.00	0.09	0.67	11.98	22.45	213.8
XSECTION 37	REACH	0.10	2	2	0.08	0.0	1.44	24.00	1.15	---	11.98	50.73	483.1
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	1.44	24.00	0.53	---	11.97	15.57	311.3
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 45	REACH	0.16	2	2	0.08	0.0	1.44	24.00	0.95	---	11.98	66.28	427.6
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	1.44	24.00	0.88	---	11.98	73.48	397.2
XSECTION 87	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.99	0.57	11.98	41.19	445.3
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	1.44	24.00	0.76	0.57	11.98	32.29	349.1
XSECTION 2	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.99	---	12.07	39.53	427.4
XSECTION 43	REACH	0.10	2	2	0.08	0.0	1.44	24.00	0.09	---	12.06	20.98	199.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.01	7.34	244.7
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	1.44	24.00	0.18	---	12.06	28.04	207.7
XSECTION 1	REACH	0.09	2	2	0.08	0.0	1.44	24.00	0.76	---	12.08	29.87	323.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.06	57.76	253.9
XSECTION 91	REACH	0.23	2	2	0.08	0.0	1.44	24.00	0.41	---	12.15	55.97	246.0
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	1.44	24.00	0.48	---	12.06	33.45	223.0
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	1.44	24.00	0.33	---	12.10	60.56	118.7
XSECTION 50	RUNOFF	0.01	2	2	0.08	0.0	1.44	24.00	0.48	---	11.99	2.62	261.9
XSECTION 66	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.97	1299.08	11.99	2.62	523.9
XSECTION 33	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 53	ADDHYD	0.52	2	2	0.08	0.0	1.44	24.00	0.33	---	12.10	60.56	117.6
XSECTION 37	REACH	0.00	2	2	0.08	0.0	1.44	24.00	0.97	---	12.19	2.16	432.9
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	1.93	---	12.19	2.16	865.9
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 68	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	1.44	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	1.44	24.00	1.29	0.54	12.19	2.16	577.3
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	1.75	---	15.83*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	1.44	24.00	0.24	0.33	12.07	21.53	465.6
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	1.44	24.00	0.24	---	12.07	21.53	453.4
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	1.44	24.00	1.71	---	12.19	20.16	403.3
XSECTION 3	REACH	0.05	2	2	0.08	0.0	1.44	24.00	0.23	---	12.15	20.31	427.5
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	7.56	251.9
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	1.44	24.00	0.33	---	12.13	24.87	320.9

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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 1													
XSECTION 47	REACH	0.08	2	2	0.08	0.0	1.44	24.00	0.33	---	12.22	23.39	301.8
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	1.44	24.00	0.39	---	12.16	77.40	253.8
XSECTION 48	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.62	---	11.99	9.99	333.1
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	1.44	24.00	0.41	---	12.15	82.58	246.5
XSECTION 63	REACH	0.05	2	2	0.08	0.0	1.44	24.00	1.71	---	12.27	20.12	402.4
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	1.44	24.00	0.48	---	12.00	15.11	251.9
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	1.44	24.00	1.04	---	12.01	33.97	308.8
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	1.44	24.00	0.49	---	12.01	7.44	248.0
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	1.44	24.00	0.92	---	12.01	41.40	295.7
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	1.44	24.00	0.48	---	12.12	27.42	195.9
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	1.44	24.00	0.43	---	12.15	109.75	231.1
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	1.44	24.00	0.61	---	12.48	267.39	154.6
ALTERNATE 1 STORM 2													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	2.53	24.00	1.58	---	12.21	257.50	585.2
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	2.53	24.00	1.36	1.05	12.21	168.36	571.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	2.53	24.00	2.02	1.05	12.21	89.14	613.9
XSECTION 13	REACH	0.15	2	2	0.08	0.0	2.53	24.00	2.02	---	12.31	87.77	604.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	2.53	24.00	1.36	---	12.31	166.55	564.9
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	2.53	24.00	1.51	---	12.05	246.12	723.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	2.53	24.00	1.66	---	12.08	308.10	635.0
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	2.53	24.00	2.48	2.24	12.08	308.10	947.7
XSECTION 21	REACH	0.16	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	2.53	24.00	2.48	---	12.08	308.10	947.7
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	2.53	24.00	1.95	---	12.13	436.26	703.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	2.53	24.00	1.37	---	12.03	534.30	676.3
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	2.53	24.00	1.62	---	12.06	954.00	676.7
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	2.53	24.00	1.62	6.23	12.23	738.35	523.7
XSECTION 27	REACH	1.41	2	2	0.08	0.0	2.53	24.00	1.62	---	12.23	738.35	523.7
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	2.53	24.00	1.37	---	12.02	48.54	693.4
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	2.53	24.00	1.61	---	12.19	765.09	517.0
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.36	---	12.06	19.16	638.7
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	2.53	24.00	0.22	---	12.06	19.16	100.8
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	2.53	24.00	0.21	---	12.06	19.16	100.8
XSECTION 103	REACH	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	**********

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	2.53	24.00	1.61	---	12.19	765.09	517.0
XSECTION 104	REACH	1.48	2	2	0.08	0.0	2.53	24.00	1.61	---	12.29	762.65	515.3
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	2.53	24.00	1.37	---	12.06	70.59	641.7
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	2.53	24.00	1.59	---	12.26	809.95	509.4
XSECTION 105	REACH	1.59	2	2	0.08	0.0	2.53	24.00	1.59	---	12.35	800.91	503.8
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	2.53	24.00	1.36	---	12.22	83.91	493.6
XSECTION 33	ADDHYD	0.36	2	2	0.08	0.0	2.53	24.00	0.76	---	12.18	99.45	276.2
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	2.53	24.00	1.59	---	11.97	186.91	890.0
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	2.49	0.99	11.97	94.57	900.7
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	2.53	24.00	0.70	0.99	11.97	92.34	879.4
XSECTION 39	REACH	0.10	2	2	0.08	0.0	2.53	24.00	2.49	---	11.97	94.57	900.7
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	2.53	24.00	1.44	---	11.97	42.38	847.6
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5
XSECTION 43	REACH	0.16	2	2	0.08	0.0	2.53	24.00	2.15	---	11.97	136.95	883.5
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	2.53	24.00	2.02	---	11.97	158.61	857.4
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	2.30	0.93	11.97	91.75	991.9
XSECTION 75	DIVERT	0.09	2	2	0.08	0.0	2.53	24.00	1.75	0.93	11.97	66.87	722.9
XSECTION 2	REACH	0.09	2	2	0.08	0.0	2.53	24.00	2.30	---	12.05	90.35	976.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	2.53	24.00	0.70	---	11.97	92.34	879.4
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	21.83	727.8
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	2.53	24.00	0.85	---	11.97	114.03	844.6
XSECTION 1	REACH	0.09	2	2	0.08	0.0	2.53	24.00	1.75	---	12.06	64.15	693.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 91	REACH	0.23	2	2	0.08	0.0	2.53	24.00	1.21	---	11.98	173.43	762.3
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	2.53	24.00	1.37	---	12.04	101.46	676.4
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	2.53	24.00	0.94	---	12.08	192.08	376.5
XSECTION 50	RUNOFF	0.01	2	2	0.08	0.0	2.53	24.00	1.37	---	11.98	7.64	764.0
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 99	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	2.74	1299.24	11.98	7.64	1527.9
XSECTION 53	REACH	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	2.53	24.00	0.93	---	12.08	192.08	372.9
XSECTION 57	REACH	0.00	2	2	0.08	0.0	2.53	24.00	2.74	---	12.07	7.11	1421.7
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	5.48	---	12.07	7.11	2843.5
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 2													
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	2.53	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	2.53	24.00	3.65	0.63	12.07	7.11	1895.7
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	3.03	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	2.53	24.00	1.57	0.66	12.05	72.35	1564.2
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	2.53	24.00	1.53	---	12.05	72.35	1523.1
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	2.53	24.00	3.08	---	12.07	25.11	502.2
XSECTION 3	REACH	0.05	2	2	0.08	0.0	2.53	24.00	1.53	---	12.05	72.35	1523.1
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.31	743.6
XSECTION 5	ADDHYD	0.08	2	2	0.08	0.0	2.53	24.00	1.47	---	12.04	93.14	1201.8
XSECTION 47	REACH	0.08	2	2	0.08	0.0	2.53	24.00	1.47	---	12.12	92.23	1190.0
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	2.53	24.00	1.28	---	12.00	253.56	831.3
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.59	---	11.98	25.86	861.9
XSECTION 49	ADDHYD	0.34	2	2	0.08	0.0	2.53	24.00	1.31	---	12.00	279.28	833.7
XSECTION 63	REACH	0.05	2	2	0.08	0.0	2.53	24.00	3.08	---	12.16	24.97	499.4
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	44.62	743.6
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	2.53	24.00	2.15	---	11.99	68.01	618.3
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	2.53	24.00	1.37	---	11.99	22.04	734.8
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	2.53	24.00	1.98	---	11.99	90.05	643.2
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	2.53	24.00	1.36	---	12.09	85.19	608.5
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	2.53	24.00	1.32	---	12.01	358.62	755.0
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	2.53	24.00	1.63	---	12.34	839.42	485.2
ALTERNATE 1 STORM 3													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	3.12	24.00	2.15	---	12.20	353.46	803.3
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	3.12	24.00	1.90	1.24	12.20	232.97	790.2
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	3.12	24.00	2.65	1.24	12.20	120.49	829.8
XSECTION 13	REACH	0.15	2	2	0.08	0.0	3.12	24.00	2.65	---	12.30	119.17	820.7
XSECTION 15	REACH	0.29	2	2	0.08	0.0	3.12	24.00	1.90	---	12.29	231.43	785.0
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	3.12	24.00	2.07	---	12.04	338.96	996.9
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	3.12	24.00	2.25	---	12.07	424.58	875.1
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	3.12	24.00	3.35	2.82	12.07	424.58	1306.1
XSECTION 21	REACH	0.16	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	3.12	24.00	3.35	---	12.07	424.58	1306.1
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	3.12	24.00	2.66	---	12.13	606.97	979.2
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	3.12	24.00	1.91	---	12.02	750.58	950.1
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	3.12	24.00	2.24	---	12.06	1334.91	946.8

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
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A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	3.12	24.00	2.24	9.02	12.25	961.23	681.8
XSECTION 27	REACH	1.41	2	2	0.08	0.0	3.12	24.00	2.24	---	12.25	961.23	681.8
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	3.12	24.00	1.92	---	12.01	68.09	972.6
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.22	993.60	671.4
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.90	---	12.06	27.00	900.1
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	3.12	24.00	0.30	---	12.06	27.00	142.0
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	3.12	24.00	0.30	---	12.06	27.00	142.0
XSECTION 103	REACH	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.22	993.60	671.4
XSECTION 104	REACH	1.48	2	2	0.08	0.0	3.12	24.00	2.22	---	12.30	992.50	670.7
XSECTION 58	RUNOFF	0.11	2	2	0.08	0.0	3.12	24.00	1.91	---	12.05	99.48	904.4
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	3.12	24.00	2.20	---	12.26	1051.62	661.4
XSECTION 105	REACH	1.59	2	2	0.08	0.0	3.12	24.00	2.20	---	12.35	1046.81	658.4
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	3.12	24.00	1.90	---	12.21	119.26	701.6
XSECTION 35	ADDHYD	0.36	2	2	0.08	0.0	3.12	24.00	1.05	---	12.17	141.44	392.8
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	3.12	24.00	2.17	---	11.97	251.82	1199.2
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	3.19	1.12	11.97	117.97	1123.5
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	3.12	24.00	1.15	1.12	11.97	133.85	1274.8
XSECTION 39	REACH	0.10	2	2	0.08	0.0	3.12	24.00	3.19	---	11.97	117.97	1123.5
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	3.12	24.00	1.99	---	11.97	57.96	1159.2
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 43	REACH	0.16	2	2	0.08	0.0	3.12	24.00	2.80	---	11.97	175.92	1135.0
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	3.12	24.00	2.66	---	11.97	206.27	1115.0
XSECTION 87	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	3.02	1.07	11.97	119.10	1287.6
XSECTION 73	DIVERT	0.09	2	2	0.08	0.0	3.12	24.00	2.29	1.07	11.97	87.17	942.4
XSECTION 2	REACH	0.09	2	2	0.08	0.0	3.12	24.00	3.02	---	12.05	117.82	1273.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	3.12	24.00	1.15	---	11.97	133.85	1274.8
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.99	30.52	1017.2
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	3.12	24.00	1.31	---	11.97	164.22	1216.5
XSECTION 1	REACH	0.09	2	2	0.08	0.0	3.12	24.00	2.30	---	12.05	84.46	913.0
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 91	REACH	0.23	2	2	0.08	0.0	3.12	24.00	1.71	---	11.98	243.05	1068.4
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	3.12	24.00	1.91	---	12.03	141.22	941.5
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	3.12	24.00	1.31	---	12.08	272.11	533.4

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SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 3													
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	3.12	24.00	1.91	---	11.97	10.62	1062.2
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 79	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	3.83	1299.33	11.97	10.62	2124.4
XSECTION 53	REACH	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 55	ADDHYD	0.52	2	2	0.08	0.0	3.12	24.00	1.29	---	12.08	272.11	528.3
XSECTION 57	REACH	0.00	2	2	0.08	0.0	3.12	24.00	3.82	---	12.06	10.10	2019.8
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	7.64	---	12.06	10.10	4039.5
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	3.12	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	3.12	24.00	5.10	0.68	12.06	10.10	2693.0
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	3.64	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	3.12	24.00	2.41	0.79	12.05	99.82	2158.2
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	3.12	24.00	2.35	---	12.05	99.82	2101.4
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	3.12	24.00	3.75	---	12.06	28.10	562.0
XSECTION 3	REACH	0.05	2	2	0.08	0.0	3.12	24.00	2.35	---	12.05	99.82	2101.4
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	31.12	1037.2
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	3.12	24.00	2.18	---	12.03	125.88	1624.2
XSECTION 47	REACH	0.08	2	2	0.08	0.0	3.12	24.00	2.18	---	12.11	125.47	1619.0
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	3.12	24.00	1.83	---	11.99	357.64	1172.6
XSECTION 48	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	2.16	---	11.98	34.96	1165.4
XSECTION 47	ADDHYD	0.34	2	2	0.08	0.0	3.12	24.00	1.86	---	11.99	392.48	1171.6
XSECTION 63	REACH	0.03	2	2	0.08	0.0	3.12	24.00	3.74	---	12.14	27.95	558.9
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	62.23	1037.2
XSECTION 63	ADDHYD	0.11	2	2	0.08	0.0	3.12	24.00	2.74	---	11.99	88.29	802.6
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	3.12	24.00	1.91	---	11.98	30.78	1026.0
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	3.12	24.00	2.56	---	11.99	119.06	850.4
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	3.12	24.00	1.90	---	12.08	120.33	859.5
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	3.12	24.00	1.87	---	12.00	505.27	1063.7
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	3.12	24.00	2.23	---	12.34	1094.11	632.5
ALTERNATE 1 STORM 4													
XSECTION 10	RUNOFF	0.44	2	2	0.08	0.0	4.04	24.00	3.07	---	12.20	506.65	1151.5
XSECTION 81	DIVERT	0.29	2	2	0.08	0.0	4.04	24.00	2.78	1.54	12.20	336.11	1140.1
XSECTION 80	DIVERT	0.15	2	2	0.08	0.0	4.04	24.00	3.65	1.54	12.20	170.55	1174.6
XSECTION 13	REACH	0.15	2	2	0.08	0.0	4.04	24.00	3.65	---	12.29	169.38	1166.5
XSECTION 15	REACH	0.29	2	2	0.08	0.0	4.04	24.00	2.78	---	12.28	335.07	1136.6

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	MAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 16	RUNOFF	0.34	2	2	0.08	0.0	4.04	24.00	2.98	---	12.04	487.37	1433.4
XSECTION 17	ADDHYD	0.49	2	2	0.08	0.0	4.04	24.00	3.18	---	12.07	611.58	1260.5
XSECTION 82	DIVERT	0.16	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 83	DIVERT	0.33	2	2	0.08	0.0	4.04	24.00	4.75	3.76	12.07	611.58	1881.3
XSECTION 21	REACH	0.16	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 23	REACH	0.33	2	2	0.08	0.0	4.04	24.00	4.75	---	12.07	611.58	1881.3
XSECTION 25	ADDHYD	0.62	2	2	0.08	0.0	4.04	24.00	3.81	---	12.12	881.32	1421.8
XSECTION 26	RUNOFF	0.79	2	2	0.08	0.0	4.04	24.00	2.80	---	12.02	1100.77	1393.4
XSECTION 27	ADDHYD	1.41	2	2	0.08	0.0	4.04	24.00	3.25	---	12.05	1949.23	1382.5
STRUCTURE 8	RESVOR	1.41	2	2	0.08	0.0	4.04	24.00	3.24	13.72	12.28	1268.96	900.0
XSECTION 27	REACH	1.41	2	2	0.08	0.0	4.04	24.00	3.24	---	12.28	1268.96	900.0
XSECTION 28	RUNOFF	0.07	2	2	0.08	0.0	4.04	24.00	2.81	---	12.00	99.70	1424.2
XSECTION 29	ADDHYD	1.48	2	2	0.08	0.0	4.04	24.00	3.22	---	12.21	1313.25	887.4
XSECTION 34	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	12.05	39.71	1323.8
XSECTION 33	ADDHYD	0.19	2	2	0.08	0.0	4.04	24.00	0.44	---	12.05	39.71	208.9
XSECTION 100	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	**********
XSECTION 102	DIVERT	0.19	2	2	0.08	0.0	4.04	24.00	0.44	---	12.05	39.71	208.9
XSECTION 103	REACH	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	**********
XSECTION 104	ADDHYD	1.48	2	2	0.08	0.0	4.04	24.00	3.22	---	12.21	1313.25	887.4
XSECTION 104	REACH	1.48	2	2	0.08	0.0	4.04	24.00	3.22	---	12.29	1313.11	887.3
XSECTION 38	RUNOFF	0.11	2	2	0.08	0.0	4.04	24.00	2.80	---	12.04	146.32	1330.2
XSECTION 106	ADDHYD	1.59	2	2	0.08	0.0	4.04	24.00	3.19	---	12.22	1410.39	887.1
XSECTION 105	REACH	1.59	2	2	0.08	0.0	4.04	24.00	3.19	---	12.31	1408.43	885.9
XSECTION 32	RUNOFF	0.17	2	2	0.08	0.0	4.04	24.00	2.78	---	12.20	176.88	1040.5
XSECTION 33	ADDHYD	0.36	2	2	0.08	0.0	4.04	24.00	1.55	---	12.16	209.86	582.8
XSECTION 36	RUNOFF	0.21	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	354.15	1686.4
XSECTION 84	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	4.28	1.32	11.97	153.51	1462.0
XSECTION 85	DIVERT	0.10	2	2	0.08	0.0	4.04	24.00	1.90	1.32	11.97	200.64	1910.9
XSECTION 39	REACH	0.10	2	2	0.08	0.0	4.04	24.00	4.28	---	11.97	153.51	1462.0
XSECTION 40	RUNOFF	0.05	2	2	0.08	0.0	4.04	24.00	2.90	---	11.96	82.70	1654.0
XSECTION 41	ADDHYD	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 43	REACH	0.16	2	2	0.08	0.0	4.04	24.00	3.84	---	11.97	236.21	1523.9
XSECTION 97	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 45	ADDHYD	0.19	2	2	0.08	0.0	4.04	24.00	3.67	---	11.97	280.55	1516.5
XSECTION 89	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	4.18	1.27	11.97	161.59	1746.9
XSECTION 73	DIVERT	0.09	2	2	0.08	0.0	4.04	24.00	3.15	1.27	11.97	118.96	1286.0

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 2	REACH	0.09	2	2	0.08	0.0	4.04	24.00	4.19	---	12.04	160.55	1735.7
XSECTION 43	REACH	0.10	2	2	0.08	0.0	4.04	24.00	1.90	---	11.97	200.64	1910.9
XSECTION 95	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.79	---	11.98	44.51	1483.6
XSECTION 43	ADDHYD	0.13	2	2	0.08	0.0	4.04	24.00	2.10	---	11.97	245.01	1814.9
XSECTION 1	REACH	0.09	2	2	0.08	0.0	4.04	24.00	3.16	---	12.05	116.41	1258.5
XSECTION 90	ADDHYD	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 91	REACH	0.23	2	2	0.08	0.0	4.04	24.00	2.53	---	11.97	354.79	1559.5
XSECTION 48	RUNOFF	0.15	2	2	0.08	0.0	4.04	24.00	2.79	---	12.02	207.09	1380.6
XSECTION 51	ADDHYD	0.51	2	2	0.08	0.0	4.04	24.00	1.91	---	12.07	402.13	788.3
XSECTION 30	RUNOFF	0.01	2	2	0.08	0.0	4.04	24.00	2.80	---	11.97	15.41	1540.8
XSECTION 86	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 77	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	5.60	1299.48	11.97	15.41	3081.6
XSECTION 53	REACH	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 53	ADDHYD	0.52	2	2	0.08	0.0	4.04	24.00	1.89	---	12.07	402.13	780.7
XSECTION 57	REACH	0.00	2	2	0.08	0.0	4.04	24.00	5.60	---	12.05	14.92	2983.5
XSECTION 4	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	11.20	---	12.05	14.92	5966.9
XSECTION 5	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 6	DIVERT	0.00	2	2	0.08	0.0	4.04	24.00	0.00	---	0.00	0.00	0.0
XSECTION 88	ADDHYD	0.00	2	2	0.08	0.0	4.04	24.00	7.47	0.77	12.05	14.92	3978.0
XSECTION 76	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	4.50	---	15.68*	18.00*	389.2
XSECTION 77	DIVERT	0.05	2	2	0.08	0.0	4.04	24.00	3.88	1.00	12.04	142.55	3082.1
XSECTION 2	ADDHYD	0.05	2	2	0.08	0.0	4.04	24.00	3.77	---	12.04	142.55	3001.0
XSECTION 1	ADDHYD	0.05	2	2	0.08	0.0	4.04	24.00	4.72	---	12.05	32.92	658.3
XSECTION 3	REACH	0.05	2	2	0.08	0.0	4.04	24.00	3.77	---	12.04	142.55	3001.0
XSECTION 96	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	45.28	1509.4
XSECTION 3	ADDHYD	0.08	2	2	0.08	0.0	4.04	24.00	3.39	---	12.01	181.02	2335.8
XSECTION 47	REACH	0.08	2	2	0.08	0.0	4.04	24.00	3.39	---	12.09	180.99	2335.4
XSECTION 47	ADDHYD	0.31	2	2	0.08	0.0	4.04	24.00	2.75	---	11.98	524.28	1718.9
XSECTION 46	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	3.09	---	11.97	49.35	1645.1
XSECTION 47	ADDHYD	0.34	2	2	0.08	0.0	4.04	24.00	2.78	---	11.98	573.53	1712.0
XSECTION 63	REACH	0.05	2	2	0.08	0.0	4.04	24.00	4.71	---	12.13	32.76	655.2
XSECTION 64	RUNOFF	0.06	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	90.56	1509.4
XSECTION 65	ADDHYD	0.11	2	2	0.08	0.0	4.04	24.00	3.67	---	11.98	121.06	1100.6
XSECTION 66	RUNOFF	0.03	2	2	0.08	0.0	4.04	24.00	2.80	---	11.98	44.85	1494.9
XSECTION 67	ADDHYD	0.14	2	2	0.08	0.0	4.04	24.00	3.48	---	11.98	165.90	1185.0

SUMMARY TABLE 1 - SELECTED RESULTS OF STANDARD AND EXECUTIVE CONTROL INSTRUCTIONS IN THE ORDER PERFORMED
(A STAR(*) AFTER THE PEAK DISCHARGE TIME AND RATE (CFS) VALUES INDICATES A FLAT TOP HYDROGRAPH
A QUESTION MARK(?) INDICATES A HYDROGRAPH WITH PEAK AS LAST POINT.)

SECTION/ STRUCTURE ID	STANDARD CONTROL OPERATION	DRAINAGE AREA (SQ MI)	RAIN TABLE #	ANTEC MOIST COND	MAIN TIME INCREM (HR)	PRECIPITATION BEGIN (HR)	PRECIPITATION AMOUNT (IN)	PRECIPITATION DURATION (HR)	RUNOFF AMOUNT (IN)	PEAK DISCHARGE ELEVATION (FT)	PEAK DISCHARGE TIME (HR)	PEAK DISCHARGE RATE (CFS)	PEAK DISCHARGE RATE (CSM)
ALTERNATE 1 STORM 4													
XSECTION 72	RUNOFF	0.14	2	2	0.08	0.0	4.04	24.00	2.79	---	12.07	177.39	1267.1
XSECTION 73	ADDHYD	0.48	2	2	0.08	0.0	4.04	24.00	2.78	---	12.00	740.75	1559.5
XSECTION 115	ADDHYD	1.73	2	2	0.08	0.0	4.04	24.00	3.22	---	12.29	1470.28	849.9

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS									PEAK	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION						TRAVEL TIME	
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO O/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE 1 STORM 1																			
13	2640	36	12.2	35	12.4	---	---	0	0.91	0.08	1	1.50	1.60	0.012	0.967	334	0.58	0.15	0.09
13	2900	38	12.2	35	12.4	---	---	0	0.47	0.08	1	1.50	1.60	0.020	0.962	308	0.61	0.15	0.09
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1130	111	12.1	111	12.1	---	---	0	1.00	0.08	0	1.50	1.60	0.002	1.000	95	1.00?	0.00	0.00
27	2000	237	12.3	237	12.3	---	---	0	0.60	0.08	0	1.50	1.60	0.003	1.000	125	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	245	12.2	241	12.4	---	---	0	0.60	0.08	1	0.500	1.57	0.008	0.982	255	0.69?	0.15	0.07
105	2000	252	12.4	245	12.5	---	---	0	0.59	0.08	1	0.400	1.58	0.010	0.972	297	0.62	0.15	0.08
37	800	50	12.0	50	12.0	---	---	0	1.15	0.08	0	1.50	1.60	0.003	1.000	89	1.00?	0.00	0.00
45	1300	66	12.0	66	12.0	73	12.0	0	0.95	0.08	0	1.50	1.60	0.006	1.000	131	1.00?	0.00	0.00
2	1300	41	12.0	39	12.1	---	---	0	0.99	0.08	1	1.60	1.38	0.022	0.967	241	0.72?	0.08	0.07
43	1500	22	12.0	21	12.1	28	12.1	0	0.09	0.08	1	1.50	1.60	0.195	0.948	228	0.74?	0.08	0.06
1	1050	32	12.0	30	12.1	---	---	0	0.76	0.08	1	0.430	1.52	0.035	0.932	368	0.54	0.08	0.10
91	1100	58	12.1	56	12.2	---	---	0	0.41	0.08	1	0.500	1.65	0.019	0.972	206	0.79?	0.08	0.06
53	2800	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
57	1500	3	12.0	2	12.2	---	---	0	0.97	0.08	1	1.50	1.60	0.069	0.813	508	0.42	0.08	0.15
3	500	21	12.1	20	12.2	25	12.2	0	0.23	0.08	1	0.190	1.70	0.138	0.946	221	0.76?	0.08	0.06
47	800	25	12.2	23	12.2	---	---	0	0.33	0.08	1	0.430	1.56	0.069	0.951	279	0.65	0.08	0.08
63	1350	20	12.2	20	12.3	---	---	0	1.71	0.08	1	1.50	1.60	0.005	0.999	212	0.78?	0.15	0.06
ALTERNATE 1 STORM 2																			
13	2640	89	12.2	88	12.3	---	---	0	2.02	0.08	1	1.50	1.60	0.008	0.985	238	0.72?	0.08	0.07
13	2900	168	12.2	167	12.3	---	---	0	1.36	0.08	1	1.50	1.60	0.011	0.990	206	0.79?	0.08	0.06
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1130	308	12.1	308	12.1	---	---	0	2.48	0.08	0	1.50	1.60	0.001	1.000	65	1.00?	0.00	0.00
27	2000	738	12.2	738	12.2	---	---	0	1.62	0.08	0	1.50	1.60	0.002	1.000	82	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	763	12.2	762	12.3	---	---	0	1.61	0.08	1	0.500	1.57	0.006	0.999	169	0.89?	0.08	0.05
105	2000	806	12.2	800	12.4	---	---	0	1.59	0.08	1	0.400	1.58	0.007	0.993	194	0.82?	0.15	0.05
37	800	93	12.0	93	12.0	---	---	0	2.49	0.08	0	1.50	1.60	0.002	1.000	71	1.00?	0.00	0.00
45	1300	134	12.0	134	12.0	156	12.0	0	2.15	0.08	0	1.50	1.60	0.003	1.000	101	1.00?	0.00	0.00
2	1300	90	12.0	89	12.1	---	---	0	2.30	0.08	1	1.60	1.38	0.015	0.991	194	0.82?	0.08	0.05
43	1500	90	12.0	90	12.0	112	12.0	0	0.70	0.08	0	1.50	1.60	0.031	1.000	135	1.00?	0.00	0.00

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK	
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION								
ASSC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	TRAVEL STOR-AGE (HR)	TIME KINE-MATIC (HR)
ALTERNATE 1 STORM 2																				
1	1050	66	12.0	64	12.1	---	---	0	1.75	0.08	1	0.430	1.52	0.020	0.973	288	0.64	0.08	0.08
71	1100	172	12.0	172	12.0	---	---	0	1.21	0.08	0	0.500	1.65	0.009	1.000	133	1.00?	0.00	0.00
33	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.009	0.000	133	1.00?	0.00	0.00
37	1300	8	12.0	7	12.1	---	---	0	2.74	0.08	1	1.50	1.60	0.038	0.942	341	0.57	0.08	0.10
3	500	71	12.1	71	12.1	90	12.1	0	1.53	0.08	0	0.190	1.70	0.019	1.000	135	1.00?	0.00	0.00
47	800	90	12.1	90	12.2	---	---	0	1.47	0.08	1	0.430	1.56	0.025	0.998	175	0.87?	0.08	0.05
63	1350	25	12.1	25	12.2	---	---	0	3.08	0.08	1	1.50	1.60	0.002	0.994	196	0.82?	0.08	0.05
ALTERNATE 1 STORM 3																				
13	2640	120	12.2	119	12.3	---	---	0	2.65	0.08	1	1.50	1.60	0.007	0.991	213	0.78?	0.08	0.06
15	2900	232	12.2	231	12.3	---	---	0	1.90	0.08	1	1.50	1.60	0.009	0.996	182	0.85?	0.08	0.05
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	425	12.1	425	12.1	---	---	0	3.35	0.08	0	1.50	1.60	0.001	1.000	58	1.00?	0.00	0.00
27	2000	959	12.2	959	12.2	---	---	0	2.24	0.08	0	1.50	1.60	0.001	1.000	74	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	994	12.2	992	12.3	---	---	0	2.22	0.08	1	0.500	1.57	0.004	0.999	154	0.94?	0.08	0.04
105	2000	1047	12.2	1045	12.4	---	---	0	2.20	0.08	1	0.400	1.58	0.005	0.998	176	0.87?	0.15	0.05
37	800	116	12.0	116	12.0	---	---	0	3.19	0.08	0	1.50	1.60	0.001	1.000	65	1.00?	0.00	0.00
45	1300	171	12.0	171	12.0	202	12.0	0	2.80	0.08	0	1.50	1.60	0.003	1.000	92	1.00?	0.00	0.00
2	1300	116	12.0	116	12.1	---	---	0	3.02	0.08	1	1.60	1.38	0.014	0.995	181	0.85?	0.08	0.05
43	1300	130	12.0	130	12.0	160	12.0	0	1.14	0.08	0	1.50	1.60	0.020	1.000	117	1.00?	0.00	0.00
1	1050	65	12.0	64	12.1	---	---	0	2.29	0.08	1	0.430	1.52	0.017	0.982	263	0.68?	0.08	0.07
71	1100	241	12.0	241	12.0	---	---	0	1.71	0.08	0	0.500	1.65	0.007	1.000	117	1.00?	0.00	0.00
33	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.007	0.000	117	1.00?	0.00	0.00
37	1500	10	12.0	10	12.1	---	---	0	3.83	0.08	1	1.50	1.60	0.031	0.964	302	0.62	0.08	0.08
3	500	98	12.1	98	12.1	125	12.0	0	2.35	0.08	0	0.190	1.70	0.013	1.000	118	1.00?	0.00	0.00
47	800	125	12.0	125	12.1	---	---	0	2.18	0.08	1	0.430	1.56	0.019	0.995	156	0.93?	0.08	0.04
63	1350	28	12.1	28	12.2	---	---	0	3.75	0.08	1	1.50	1.60	0.002	0.995	188	0.84?	0.08	0.05
ALTERNATE 1 STORM 4																				
13	2640	170	12.2	169	12.3	---	---	0	3.65	0.08	1	1.50	1.60	0.006	0.996	187	0.84?	0.08	0.05
15	2900	335	12.2	334	12.3	---	---	0	2.78	0.08	1	1.50	1.60	0.007	0.999	159	0.92?	0.08	0.04
21	2640	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
23	1150	611	12.1	611	12.1	---	---	0	4.75	0.08	0	1.50	1.60	0.001	1.000	50	1.00?	0.00	0.00

SUMMARY TABLE 2 - SELECTED MODIFIED ATT-KIN REACH ROUTINGS IN ORDER OF STANDARD EXECUTIVE CONTROL INSTRUCTIONS
(A STAR(*) AFTER VOLUME ABOVE BASE(IN) INDICATES A HYDROGRAPH TRUNCATED AT A VALUE EXCEEDING BASE + 10% OF PEAK
A QUESTION MARK(?) AFTER COEFF.(C) INDICATES PARAMETERS OUTSIDE ACCEPTABLE LIMITS, SEE PREVIOUS WARNINGS)

		HYDROGRAPH INFORMATION							ROUTING PARAMETERS										PEAK
		INFLOW		OUTFLOW		OUTFLOW+ INTERV.AREA						Q AND A EQUATION							TRAVEL TIME
XSEC ID	REACH LENGTH (FT)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	PEAK (CFS)	TIME (HR)	BASE-FLOW (CFS)	VOLUME ABOVE BASE (IN)	MAIN TIME INCR (HR)	ITER-ATION #	COEFF (X)	POWER (M)	LENGTH FACTOR (K*)	PEAK RATIO Q/I (Q*)	S/Q @PEAK (K) (SEC)	ATT-KIN COEFF (C)	STOR-AGE (HR)	KINE-MATIC (HR)
ALTERNATE		1	STORM	4															
27	2000	1269	12.3	1269	12.3	---	---	0	3.24	0.08	0	1.50	1.60	0.001	1.000	67	1.00?	0.00	0.00
103	850	0	0.0	0	0.0	---	---	0	0.00	0.08	0	0.000	0.00	0.000	0.000	0	0.00	0.00	0.00
104	1900	1313	12.2	1313	12.3	---	---	0	3.22	0.08	1	0.500	1.57	0.003	1.000	139	0.99?	0.08	0.04
105	2000	1410	12.2	1408	12.3	---	---	0	3.19	0.08	1	0.400	1.58	0.004	0.998	158	0.92?	0.08	0.04
39	800	150	12.0	150	12.0	---	---	0	4.28	0.08	0	1.50	1.60	0.001	1.000	59	1.00?	0.00	0.00
45	1300	229	12.0	229	12.0	273	12.0	0	3.84	0.08	0	1.50	1.60	0.002	1.000	82	1.00?	0.00	0.00
2	1300	157	12.0	157	12.1	---	---	0	4.18	0.08	1	1.60	1.38	0.012	0.998	166	0.90?	0.08	0.05
43	1500	194	12.0	194	12.0	238	12.0	0	1.90	0.08	0	1.50	1.60	0.013	1.000	101	1.00?	0.00	0.00
1	1050	116	12.0	115	12.1	---	---	0	3.15	0.08	1	0.430	1.52	0.014	0.990	237	0.73?	0.08	0.07
91	1100	350	12.0	350	12.0	---	---	0	2.53	0.08	0	0.500	1.65	0.006	1.000	101	1.00?	0.00	0.00
53	2800	0	12.0	0	12.0	---	---	0	0.00	0.08	0	1.50	1.60	0.006	0.000	101	1.00?	0.00	0.00
57	1500	15	12.0	15	12.1	---	---	0	5.60	0.08	1	1.50	1.60	0.024	0.981	263	0.68?	0.08	0.07
73	500	139	12.1	139	12.1	181	12.0	0	3.77	0.08	0	0.190	1.70	0.008	1.000	102	1.00?	0.00	0.00
47	800	181	12.0	181	12.1	---	---	0	3.39	0.08	1	0.430	1.56	0.013	1.000	136	1.00?	0.08	0.04
63	1350	33	12.1	33	12.2	---	---	0	4.72	0.08	1	1.50	1.60	0.001	0.997	177	0.87?	0.08	0.05

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
STRUCTURE 8	1.41				
ALTERNATE 1		237.99	738.35	961.23	1268.96
XSECTION 1	0.05				
ALTERNATE 1		20.16	25.11	28.10	32.92
XSECTION 2	0.05				
ALTERNATE 1		21.53	72.35	99.82	142.55
XSECTION 3	0.08				
ALTERNATE 1		24.87	93.14	125.88	181.02
XSECTION 4	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 5	0.00				
XSECTION 6	0.00				
XSECTION 10	0.44				
ALTERNATE 1		93.78	257.50	353.46	506.65
XSECTION 13	0.15				
ALTERNATE 1		34.85	87.77	119.17	169.38
XSECTION 15	0.29				
ALTERNATE 1		55.54	166.55	231.43	335.07
XSECTION 16	0.34				
ALTERNATE 1		88.30	246.12	338.96	487.37
XSECTION 17	0.49				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 21	0.16				
XSECTION 23	0.33				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 25	0.62				
ALTERNATE 1		149.25	436.26	606.97	881.32

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 26	0.79				
ALTERNATE 1		177.74	534.30	750.58	1100.77
XSECTION 27	1.41				
ALTERNATE 1		237.99	738.35	961.23	1268.96
XSECTION 28	0.07				
ALTERNATE 1		16.27	48.54	68.09	99.70
XSECTION 29	1.48				
ALTERNATE 1		246.85	765.09	993.60	1313.25
XSECTION 30	0.01				
ALTERNATE 1		2.62	7.64	10.62	15.41
XSECTION 32	0.17				
ALTERNATE 1		26.16	83.91	119.26	176.88
XSECTION 33	0.19				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 34	0.03				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 35	0.36				
ALTERNATE 1		30.88	99.45	141.44	209.86
XSECTION 36	0.21				
ALTERNATE 1		73.18	186.91	251.82	354.15
XSECTION 39	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 40	0.05				
ALTERNATE 1		15.57	42.38	57.96	82.70
XSECTION 41	0.16				
ALTERNATE 1		66.28	136.95	175.92	236.21
XSECTION 43	0.13				
ALTERNATE 1		28.04	114.03	164.22	245.01

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 45	0.19				
ALTERNATE 1		73.48	158.61	206.27	280.55
XSECTION 46	0.03				
ALTERNATE 1		9.99	25.86	34.96	49.35
XSECTION 47	0.31				
ALTERNATE 1		77.40	253.56	357.64	524.28
XSECTION 48	0.15				
ALTERNATE 1		33.45	101.46	141.22	207.09
XSECTION 49	0.34				
ALTERNATE 1		82.58	279.28	392.48	573.53
XSECTION 51	0.51				
ALTERNATE 1		60.56	192.08	272.11	402.13
XSECTION 53	0.00				
XSECTION 55	0.52				
ALTERNATE 1		60.56	192.08	272.11	402.13
XSECTION 57	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 58	0.11				
ALTERNATE 1		22.90	70.59	99.48	146.32
XSECTION 63	0.05				
ALTERNATE 1		20.12	24.97	27.95	32.76
XSECTION 64	0.06				
ALTERNATE 1		15.11	44.62	62.23	90.56
XSECTION 65	0.11				
ALTERNATE 1		33.97	68.01	88.29	121.06
XSECTION 66	0.03				
ALTERNATE 1		7.44	22.04	30.78	44.85

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 67	0.14				
ALTERNATE 1		41.40	90.05	119.06	165.90
XSECTION 72	0.14				
ALTERNATE 1		27.42	85.19	120.33	177.39
XSECTION 73	0.48				
ALTERNATE 1		109.75	358.62	505.27	740.75
XSECTION 75	0.09				
ALTERNATE 1		32.29	66.87	87.17	118.96
XSECTION 76	0.05				
ALTERNATE 1		18.00	18.00	18.00	18.00
XSECTION 77	0.05				
ALTERNATE 1		21.53	72.35	99.82	142.55
XSECTION 80	0.15				
ALTERNATE 1		36.05	89.14	120.49	170.55
XSECTION 81	0.29				
ALTERNATE 1		57.73	168.36	232.97	336.11
XSECTION 82	0.16				
XSECTION 83	0.33				
ALTERNATE 1		111.59	308.10	424.58	611.58
XSECTION 84	0.10				
ALTERNATE 1		50.73	94.57	117.97	153.51
XSECTION 85	0.10				
ALTERNATE 1		22.45	92.34	133.85	200.64
XSECTION 86	0.00				
XSECTION 88	0.00				
ALTERNATE 1		2.16	7.11	10.10	14.92
XSECTION 89	0.09				

SUMMARY TABLE 3 - DISCHARGE (CFS) AT XSECTIONS AND STRUCTURES FOR ALL STORMS AND ALTERNATES

XSECTION/ STRUCTURE ID	DRAINAGE AREA (SQ MI)	STORM NUMBERS..... 1	2	3	4
XSECTION 89	0.09				
ALTERNATE 1		41.19	91.75	119.10	161.59
XSECTION 90	0.23				
ALTERNATE 1		57.76	173.43	243.05	354.79
XSECTION 91	0.23				
ALTERNATE 1		55.97	173.43	243.05	354.79
XSECTION 95	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 96	0.03				
ALTERNATE 1		7.56	22.31	31.12	45.28
XSECTION 97	0.03				
ALTERNATE 1		7.34	21.83	30.52	44.51
XSECTION 99	0.00				
ALTERNATE 1		2.62	7.64	10.62	15.41
XSECTION 100	0.00				
XSECTION 102	0.19				
ALTERNATE 1		6.21	19.16	27.00	39.71
XSECTION 103	0.00				
XSECTION 104	1.48				
ALTERNATE 1		240.75	762.65	992.50	1313.11
XSECTION 105	1.59				
ALTERNATE 1		245.32	800.91	1046.81	1408.43
XSECTION 106	1.59				
ALTERNATE 1		251.77	809.95	1051.62	1410.39
XSECTION 115	1.73				
ALTERNATE 1		267.39	839.42	1094.11	1470.28