```
     AHYMO PROGRAM (AHYMO_97) -                          - Version:  1997.02c
          RUN DATE (MON/DAY/YR) = 01/16/2014
          START TIME (HR:MIN:SEC) = 08:55:54     USER NO.=
AHYMO-I-9702a01000K21-AH
          INPUT FILE = C:\Projects\LONGFO~1\REVISE~3\TRAILS~4.TXT

     *
*                    TRAILS UNIT III DRAINAGE MASTER PLAN
*                  HYDROLOGIC MODEL--FULLY DEVELOPED CONDITIONS
*                              25 NOVEMBER 2013
*
*
*******************************************************************************
*
*       HYDROLOGIC MODEL FOR OFFSITE AND ONSITE BASINS
*       100-YEAR, 24-HOUR STORM:
*
*
*
*                   PRECIPITATION:
*                   P60 =   1.84"
*                   P360 =  2.20"
*                   P1440 = 2.66"
*
*
*
*******************************************************************************
*
START               TIME=0.0 HR  PUNCH CODE=0
*
*
*
RAINFALL            TYPE=2   RAIN QUARTER=0.0 IN
                                 RAIN ONE=1.84 IN  RAIN SIX=2.20 IN
```

RAIN DAY=2.66 IN DT=0.10 HRS

COMPUTED 24-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT = .100000 HOURS END TIME = 24.000000 HOURS

.0000	.0060	.0124	.0193	.0266	.0347	.0435
.0532	.0640	.0764	.0908	.1071	.1906	.4476
.9796	1.3314	1.5028	1.6393	1.7527	1.8488	1.9308
1.9485	1.9639	1.9776	1.9899	2.0013	2.0117	2.0215
2.0306	2.0393	2.0475	2.0553	2.0627	2.0698	2.0766
2.0832	2.0895	2.0956	2.1015	2.1072	2.1128	2.1182
2.1234	2.1285	2.1335	2.1383	2.1431	2.1477	2.1522
2.1566	2.1610	2.1652	2.1694	2.1734	2.1774	2.1814
2.1852	2.1890	2.1927	2.1964	2.2000	2.2039	2.2078
2.2117	2.2155	2.2193	2.2231	2.2268	2.2305	2.2342
2.2379	2.2416	2.2452	2.2488	2.2524	2.2559	2.2595
2.2630	2.2665	2.2700	2.2734	2.2768	2.2802	2.2836
2.2870	2.2903	2.2937	2.2970	2.3002	2.3035	2.3068
2.3100	2.3132	2.3164	2.3196	2.3227	2.3259	2.3290
2.3321	2.3352	2.3383	2.3413	2.3444	2.3474	2.3504
2.3534	2.3563	2.3593	2.3622	2.3652	2.3681	2.3710
2.3739	2.3767	2.3796	2.3824	2.3853	2.3881	2.3909
2.3937	2.3965	2.3992	2.4020	2.4047	2.4074	2.4101
2.4128	2.4155	2.4182	2.4208	2.4235	2.4261	2.4287
2.4314	2.4340	2.4365	2.4391	2.4417	2.4442	2.4468
2.4493	2.4518	2.4543	2.4568	2.4593	2.4618	2.4643
2.4667	2.4692	2.4716	2.4740	2.4765	2.4789	2.4813
2.4837	2.4860	2.4884	2.4908	2.4931	2.4955	2.4978
2.5001	2.5024	2.5047	2.5070	2.5093	2.5116	2.5139
2.5161	2.5184	2.5206	2.5229	2.5251	2.5273	2.5295
2.5317	2.5339	2.5361	2.5383	2.5404	2.5426	2.5448
2.5469	2.5490	2.5512	2.5533	2.5554	2.5575	2.5596
2.5617	2.5638	2.5659	2.5680	2.5700	2.5721	2.5741
2.5762	2.5782	2.5803	2.5823	2.5843	2.5863	2.5883
2.5903	2.5923	2.5943	2.5963	2.5982	2.6002	2.6022
2.6041	2.6061	2.6080	2.6099	2.6119	2.6138	2.6157
2.6176	2.6195	2.6214	2.6233	2.6252	2.6271	2.6290
2.6308	2.6327	2.6346	2.6364	2.6383	2.6401	2.6419
2.6438	2.6456	2.6474	2.6492	2.6510	2.6528	2.6546
2.6564	2.6582	2.6600				

```
SEDIMENT BULK         CODE=1  FACTOR=1.0
*
*
*S**************************************************************************
*S**********  COMPUTE ONSITE BASINS FROM THE TRAILS
*S**********
*
COMPUTE NM HYD      ID=50  HYD NO=OFFSITE1  DA=.1998 SQ MI
                                    %A=100  %B=0  %C=0 %D=0
                                    TP=-.66 HR  RAIN=-1
```

K = .733385HR TP = .660000HR K/TP RATIO = 1.111190 SHAPE CONSTANT, N = 3.182443
UNIT PEAK = 89.720 CFS UNIT VOLUME = .9999 B = 296.37 P60 = 1.8400
AREA = .199800 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=50 CODE=10

HYDROGRAPH FROM AREA OFFSITE1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	3.4	8.000	.6
12.000	.1	16.000	.0		
1.000	.0	5.000	2.2	9.000	.4
13.000	.1	17.000	.0		
2.000	37.0	6.000	1.4	10.000	.2
14.000	.0	18.000	.0		
3.000	12.5	7.000	.9	11.000	.1
15.000	.0				

RUNOFF VOLUME = .41534 INCHES = 4.4258 ACRE-FEET
PEAK DISCHARGE RATE = 37.00 CFS AT 2.000 HOURS BASIN AREA = .1998 SQ. MI.

*

ROUTE RESERVOIR ID=53 HYD=OFF.POND.1 INFLOW ID=50 CODE=5

OUTFLOW	STORAGE	DEPTH
0	0	0
3.85	0.037	1
5.44	0.218	2
6.66	0.610	3
7.69	1.150	4
8.60	1.759	5
9.42	2.439	6

* * * * * * * * * * * * * * * * *

TIME INFLOW ELEV VOLUME OUTFLOW

(HRS)	(CFS)	(FEET)	(AC-FT)	(CFS)
.00	.00	.00	.000	.00
.50	.00	.00	.000	.00
1.00	.00	.00	.000	.00
1.50	8.58	.90	.033	3.46
2.00	37.00	3.55	.909	7.23
2.50	24.72	5.21	1.905	8.78
3.00	12.51	5.76	2.273	9.22
3.50	6.32	5.75	2.267	9.21
4.00	3.43	5.47	2.081	8.99
4.50	2.73	5.12	1.842	8.70
5.00	2.18	4.72	1.591	8.35
5.50	1.74	4.30	1.334	7.97
6.00	1.38	3.87	1.078	7.55
6.50	1.10	3.40	.827	7.07
7.00	.88	2.94	.585	6.58
7.50	.70	2.36	.360	5.88
8.00	.56	1.67	.158	4.92
8.50	.44	.43	.016	1.65
9.00	.35	.10	.004	.39
9.50	.28	.08	.003	.30
10.00	.22	.06	.002	.24
10.50	.18	.05	.002	.19
11.00	.14	.04	.001	.15
11.50	.11	.03	.001	.12
12.00	.09	.02	.001	.10
12.50	.07	.02	.001	.08
13.00	.06	.02	.001	.06
13.50	.05	.01	.000	.05
14.00	.04	.01	.000	.04
14.50	.03	.01	.000	.03
15.00	.02	.01	.000	.02
15.50	.02	.01	.000	.02
16.00	.01	.00	.000	.02
16.50	.01	.00	.000	.01
17.00	.01	.00	.000	.01
17.50	.01	.00	.000	.01
18.00	.01	.00	.000	.01
18.50	.00	.00	.000	.00

PEAK DISCHARGE = 9.254 CFS - PEAK OCCURS AT HOUR 3.20
MAXIMUM WATER SURFACE ELEVATION = 5.798
MAXIMUM STORAGE = 2.3016 AC-FT INCREMENTAL TIME= .100000HRS

PRINT HYD ID=53 CODE=10

HYDROGRAPH FROM AREA OFF.POND.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	4.000	9.0	8.000	4.9
12.000	.1	16.000	.0			
	1.000	.0	5.000	8.3	9.000	.4
13.000	.1	17.000	.0			
	2.000	7.2	6.000	7.6	10.000	.2
14.000	.0	18.000	.0			
	3.000	9.2	7.000	6.6	11.000	.2
15.000	.0	19.000	.0			

RUNOFF VOLUME = .41533 INCHES = 4.4258 ACRE-FEET
PEAK DISCHARGE RATE = 9.25 CFS AT 3.200 HOURS BASIN AREA = .1998 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.0176

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.16	.89
.21	.17	.68	1.22
.31	.31	1.59	1.45
.42	.47	2.86	1.62
.52	.65	4.46	1.76
.63	.84	6.37	1.85
.73	1.04	8.53	1.93
.83	1.24	10.90	1.97
.94	1.45	13.44	2.00
1.04	1.66	16.09	2.00
1.15	1.86	18.78	2.00
1.25	2.07	21.46	2.00
1.35	2.27	24.05	2.00
1.46	2.46	26.48	2.00
1.56	2.63	28.65	2.00
1.67	2.80	30.46	2.00
1.77	2.94	31.75	2.00
1.88	3.06	32.28	2.00
2.00	3.14	32.28	2.00

ROUTE MCUNGE ID=54 HYD=RTE.OFF.POND INFLOW ID=53

DT=0.0 L=740 NS=0 SLOPE=0.0176

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 191 TABLE PTS= 19
DT= .100000 QMED= 4.63 CKMED= 10.1076
WIDTH MED= 1.76 NREACH= 1 DX= 740.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.111	.0	2.06	1.19	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.10	.1	.2	.082	.9	4.15	2.52	2.018	.003	.998	.338	-.336	.0	.999	.164	-.163
.21	.2	.7	.052	1.2	5.72	3.93	2.785	.008	.996	.473	-.469	.4	.997	.397	-.393
.31	.3	1.6	.041	1.5	7.25	5.06	3.526	.012	.995	.559	-.554	1.1	.995	.520	-.515
.42	.5	2.9	.034	1.6	8.53	6.02	4.151	.016	.994	.613	-.607	2.2	.994	.588	-.583
.52	.7	4.5	.030	1.8	9.63	6.85	4.683	.020	.993	.649	-.642	3.6	.993	.633	-.626
.63	.8	6.4	.027	1.9	10.55	7.58	5.135	.025	.992	.675	-.667	5.4	.992	.664	-.656
.73	1.0	8.5	.025	1.9	11.34	8.23	5.515	.030	.991	.694	-.685	7.4	.991	.686	-.677
.83	1.2	10.9	.023	2.0	11.98	8.79	5.827	.035	.990	.709	-.698	9.7	.990	.703	-.693
.94	1.4	13.4	.022	2.0	12.48	9.29	6.071	.041	.988	.719	-.707	12.2	.989	.715	-.704
1.04	1.7	16.1	.021	2.0	12.83	9.72	6.241	.048	.987	.726	-.712	14.7	.988	.723	-.711
1.15	1.9	18.8	.020	2.0	12.91	10.08	6.281	.056	.985	.727	-.712	17.4	.986	.728	-.713
1.25	2.1	21.5	.020	2.0	12.67	10.38	6.164	.065	.982	.723	-.705	20.1	.984	.726	-.710
1.35	2.3	24.1	.019	2.0	12.07	10.62	5.872	.076	.978	.712	-.690	22.7	.980	.719	-.699
1.46	2.5	26.5	.019	2.0	11.06	10.78	5.382	.092	.972	.691	-.663	25.3	.975	.704	-.679
1.56	2.6	28.7	.019	2.0	9.57	10.87	4.657	.115	.960	.653	-.614	27.6	.967	.676	-.643
1.67	2.8	30.5	.019	2.0	7.45	10.88	3.626	.157	.934	.582	-.516	29.6	.951	.626	-.577
1.77	2.9	31.8	.019	2.0	4.37	10.79	2.124	.279	.836	.412	-.248	31.1	.909	.525	-.434
1.88	3.1	32.3	.019	2.0	2.49	10.55	1.210	.498	.632	.262	.106	32.0	.646	.265	.089

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 4 TIMES.
AVERAGE NUMBER ITERATIONS = 1.1314
Equations solved using the Ponce correction to C2
*

PRINT HYD ID=54 CODE=0

HYDROGRAPH FROM AREA RTE.OFF.POND

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW

HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	4.000	9.0	8.000	5.0
12.000	.1	16.000	.0		
.100	.0	4.100	8.9	8.100	4.7
12.100	.1	16.100	.0		
.200	.0	4.200	8.9	8.200	4.4
12.200	.1	16.200	.0		
.300	.0	4.300	8.8	8.300	4.1
12.300	.1	16.300	.0		
.400	.0	4.400	8.8	8.400	3.6
12.400	.1	16.400	.0		
.500	.0	4.500	8.7	8.500	2.3
12.500	.1	16.500	.0		
.600	.0	4.600	8.7	8.600	.9
12.600	.1	16.600	.0		
.700	.0	4.700	8.6	8.700	.8
12.700	.1	16.700	.0		
.800	.0	4.800	8.5	8.800	.5
12.800	.1	16.800	.0		
.900	.0	4.900	8.4	8.900	.5
12.900	.1	16.900	.0		
1.000	.0	5.000	8.4	9.000	.4
13.000	.1	17.000	.0		
1.100	.0	5.100	8.3	9.100	.4
13.100	.1	17.100	.0		
1.200	.0	5.200	8.2	9.200	.3
13.200	.1	17.200	.0		
1.300	.0	5.300	8.1	9.300	.3
13.300	.1	17.300	.0		
1.400	.2	5.400	8.1	9.400	.3
13.400	.1	17.400	.0		
1.500	2.5	5.500	8.0	9.500	.3
13.500	.0	17.500	.0		
1.600	4.7	5.600	7.9	9.600	.3
13.600	.0	17.600	.0		
1.700	5.0	5.700	7.8	9.700	.3
13.700	.0	17.700	.0		
1.800	6.3	5.800	7.7	9.800	.3
13.800	.0	17.800	.0		
1.900	6.5	5.900	7.7	9.900	.3
13.900	.0	17.900	.0		
2.000	7.3	6.000	7.6	10.000	.2
14.000	.0	18.000	.0		
2.100	7.5	6.100	7.5	10.100	.2
14.100	.0	18.100	.0		
2.200	8.1	6.200	7.4	10.200	.2
14.200	.0	18.200	.0		
2.300	8.2	6.300	7.3	10.300	.2
14.300	.0	18.300	.0		
2.400	8.6	6.400	7.2	10.400	.2
14.400	.0	18.400	.0		
2.500	8.7	6.500	7.1	10.500	.2
14.500	.0	18.500	.0		
2.600	8.9	6.600	7.0	10.600	.2
14.600	.0	18.600	.0		
2.700	9.0	6.700	6.9	10.700	.2
14.700	.0	18.700	.0		
2.800	9.1	6.800	6.8	10.800	.2
14.800	.0	18.800	.0		
2.900	9.2	6.900	6.7	10.900	.2
14.900	.0	18.900	.0		
3.000	9.2	7.000	6.6	11.000	.2

```
15.000        .0          19.000        .0
         3.100       9.2           7.100       6.5          11.100        .1
15.100        .0          19.100        .0
         3.200       9.3           7.200       6.3          11.200        .1
15.200        .0          19.200        .0
         3.300       9.3           7.300       6.2          11.300        .1
15.300        .0          19.300        .0
         3.400       9.2           7.400       6.0          11.400        .1
15.400        .0          19.400        .0
         3.500       9.2           7.500       5.9          11.500        .1
15.500        .0          19.500        .0
         3.600       9.2           7.600       5.8          11.600        .1
15.600        .0          19.600        .0
         3.700       9.1           7.700       5.6          11.700        .1
15.700        .0          19.700        .0
         3.800       9.1           7.800       5.5          11.800        .1
15.800        .0
         3.900       9.1           7.900       5.3          11.900        .1
15.900        .0

         RUNOFF VOLUME =      .41537 INCHES     =       4.4262 ACRE-FEET
         PEAK DISCHARGE RATE =       9.26 CFS  AT   3.200 HOURS   BASIN AREA =
.1998 SQ. MI.


     *

     COMPUTE NM HYD      ID=21  HYD NO=BASIN.A1  DA=.02422 SQ MI

                                        %A=0  %B=12.5  %C=12.5 %D=75.0

                                        TP=-.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   71.878    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .018165 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   16.136    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .006055 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=21 CODE=10


                                        HYDROGRAPH FROM AREA BASIN.A1


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
```

HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
	.000	.0	5.000	.4	10.000	.4	
15.000	.3	20.000	.2				
	1.000	.0	6.000	.4	11.000	.3	
16.000	.3	21.000	.2				
	2.000	12.4	7.000	.4	12.000	.3	
17.000	.3	22.000	.2				
	3.000	.7	8.000	.4	13.000	.3	
18.000	.3	23.000	.2				
	4.000	.4	9.000	.4	14.000	.3	
19.000	.2	24.000	.2				

RUNOFF VOLUME = 2.02069 INCHES = 2.6102 ACRE-FEET
PEAK DISCHARGE RATE = 51.68 CFS AT 1.500 HOURS BASIN AREA = .0242 SQ. MI.

*

COMPUTE NM HYD ID=22 HYD NO=BASIN.A2 DA=.01331 SQ MI

%A=0 %B=33.0 %C=33.0 %D=34.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 17.907 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .004525 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 23.411 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .008785 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=22 CODE=10

HYDROGRAPH FROM AREA BASIN.A2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	5.000	.1	10.000	.1	
15.000	.1	20.000	.1				
	1.000	.0	6.000	.1	11.000	.1	
16.000	.1	21.000	.1				
	2.000	4.0	7.000	.1	12.000	.1	
17.000	.1	22.000	.1				
	3.000	.2	8.000	.1	13.000	.1	

```
18.000        .1         23.000        .1
         4.000        .1          9.000        .1         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     1.35259 INCHES     =         .9602 ACRE-FEET
         PEAK DISCHARGE RATE =      23.43 CFS  AT   1.500 HOURS   BASIN AREA =
.0133 SQ. MI.



     *

     *

     COMPUTE NM HYD      ID=23  HYD NO=BASIN.A3  DA=.00502 SQ MI

                                          %A=0  %B=5.0  %C=5.0 %D=90.0

                                          TP=-.133 HR  RAIN=-1


         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   17.878    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .004518 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


         K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
         UNIT PEAK =   1.3378    CFS   UNIT VOLUME =    .9989       B =   354.44
  P60 = 1.8400
         AREA =      .000502 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=23 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.A3


         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0          6.000        .1         11.000        .1
16.000        .1         21.000        .1
         2.000       3.0          7.000        .1         12.000        .1
17.000        .1         22.000        .1
         3.000        .2          8.000        .1         13.000        .1
18.000        .1         23.000        .1
         4.000        .1          9.000        .1         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     2.26512 INCHES     =         .6064 ACRE-FEET
         PEAK DISCHARGE RATE =      11.41 CFS  AT   1.500 HOURS   BASIN AREA =
```

.0050 SQ. MI.

*

*

COMPUTE NM HYD ID=24 HYD NO=BASIN.A4 DA=.01186 SQ MI

%A=0 %B=7.5 %C=7.5 %D=85.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 39.890 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .010081 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 4.7410 CFS UNIT VOLUME = 1.004 B = 354.44 P60 = 1.8400
AREA = .001779 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=24 CODE=10

HYDROGRAPH FROM AREA BASIN.A4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.2	20.000	.1		
1.000	.0	6.000	.2	11.000	.2
16.000	.2	21.000	.1		
2.000	6.7	7.000	.2	12.000	.2
17.000	.1	22.000	.1		
3.000	.4	8.000	.2	13.000	.2
18.000	.1	23.000	.1		
4.000	.2	9.000	.2	14.000	.2
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.18365 INCHES = 1.3812 ACRE-FEET
PEAK DISCHARGE RATE = 26.39 CFS AT 1.500 HOURS BASIN AREA = .0119 SQ. MI.

*

```
     *

     COMPUTE NM HYD      ID=25  HYD NO=BASIN.A5  DA=.01830 SQ MI
                                          %A=0  %B=17.0  %C=17.0 %D=66.0
                                          TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   47.792    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .012078 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   16.581    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .006222 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=25 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.A5

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .2         10.000        .2
15.000        .2         20.000        .2
         1.000        .0          6.000        .3         11.000        .2
16.000        .2         21.000        .2
         2.000       8.5          7.000        .3         12.000        .2
17.000        .2         22.000        .1
         3.000        .5          8.000        .3         13.000        .2
18.000        .2         23.000        .1
         4.000        .2          9.000        .3         14.000        .2
19.000        .2         24.000        .1

         RUNOFF VOLUME =     1.87404 INCHES     =       1.8290 ACRE-FEET
         PEAK DISCHARGE RATE =      37.55 CFS  AT   1.500 HOURS   BASIN AREA =
.0183 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=26  HYD NO=BASIN.A6  DA=.02652 SQ MI
                                          %A=0  %B=19.0  %C=19.0 %D=62.0
```

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 65.062 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .016442 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 26.856 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .010078 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=26 CODE=10

HYDROGRAPH FROM AREA BASIN.A6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.3	20.000	.2		
1.000	.0	6.000	.4	11.000	.3
16.000	.2	21.000	.2		
2.000	11.8	7.000	.4	12.000	.3
17.000	.2	22.000	.2		
3.000	.6	8.000	.4	13.000	.3
18.000	.2	23.000	.2		
4.000	.3	9.000	.3	14.000	.3
19.000	.2	24.000	.2		

RUNOFF VOLUME = 1.80886 INCHES = 2.5584 ACRE-FEET
PEAK DISCHARGE RATE = 53.44 CFS AT 1.500 HOURS BASIN AREA = .0265 SQ. MI.

*

*

COMPUTE NM HYD ID=27 HYD NO=BASIN.A7 DA=.01055 SQ MI

%A=0 %B=12.5 %C=12.5 %D=75.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 31.309 CFS UNIT VOLUME = 1.030 B = 526.28

```
  P60 = 1.8400
          AREA =      .007913 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   7.0288    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .002638 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=26 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.A6


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0           5.000        .3         10.000        .3
15.000        .3         20.000        .2
         1.000        .0           6.000        .4         11.000        .3
16.000        .2         21.000        .2
         2.000      11.8           7.000        .4         12.000        .3
17.000        .2         22.000        .2
         3.000        .6           8.000        .4         13.000        .3
18.000        .2         23.000        .2
         4.000        .3           9.000        .3         14.000        .3
19.000        .2         24.000        .2

         RUNOFF VOLUME =     1.80886 INCHES     =       2.5584 ACRE-FEET
         PEAK DISCHARGE RATE =      53.44 CFS  AT   1.500 HOURS   BASIN AREA =
.0265 SQ. MI.


     *

     ADD HYD                     ID=55 HYD=O1.A2 ID I=54 II=22

     PRINT HYD                   ID=55 CODE=10


                                                HYDROGRAPH FROM AREA O1.A2


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0           5.000        8.5         10.000        .3
15.000        .1         20.000        .1
         1.000        .0           6.000        7.7         11.000        .2
16.000        .1         21.000        .1
         2.000      11.3           7.000        6.7         12.000        .2
17.000        .1         22.000        .1
```

```
          3.000       9.4          8.000       5.1         13.000        .1
18.000        .1         23.000        .1
          4.000       9.1          9.000        .5         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =      .47390 INCHES     =       5.3862 ACRE-FEET
         PEAK DISCHARGE RATE =      25.89 CFS  AT   1.500 HOURS   BASIN AREA =
.2131 SQ. MI.


     *

     ADD HYD                      ID=56 HYD=O1A2.A1 ID I=55 II=21

     PRINT HYD                    ID=56 CODE=10

                                                HYDROGRAPH FROM AREA O1A2.A1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000       8.8         10.000        .7
15.000        .4         20.000        .3
          1.000       .0          6.000       8.1         11.000        .6
16.000        .4         21.000        .3
          2.000      23.7          7.000       7.2         12.000        .5
17.000        .3         22.000        .3
          3.000      10.1          8.000       5.5         13.000        .5
18.000        .3         23.000        .3
          4.000       9.5          9.000        .9         14.000        .4
19.000        .3         24.000        .3

         RUNOFF VOLUME =      .63175 INCHES     =       7.9964 ACRE-FEET
         PEAK DISCHARGE RATE =      77.57 CFS  AT   1.500 HOURS   BASIN AREA =
.2373 SQ. MI.


     *

     *

     ADD HYD                      ID=57 HYD=O1A2A1.A3 ID I=56 II=23

     PRINT HYD                    ID=57 CODE=10

                                                HYDROGRAPH FROM AREA O1A2A1.A3

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000       8.9         10.000        .8
15.000        .4         20.000        .4
          1.000       .0          6.000       8.2         11.000        .7
16.000        .4         21.000        .3
          2.000      26.7          7.000       7.3         12.000        .6
```

17.000 .4 22.000 .3
3.000 10.2 8.000 5.6 13.000 .5
18.000 .4 23.000 .3
4.000 9.5 9.000 1.0 14.000 .5
19.000 .4 24.000 .3

RUNOFF VOLUME = .66558 INCHES = 8.6028 ACRE-FEET
PEAK DISCHARGE RATE = 88.97 CFS AT 1.500 HOURS BASIN AREA = .2424 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.007

DIA=4.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	.63	1.78
.42	.69	2.74	2.44
.63	1.25	6.36	2.91
.83	1.90	11.44	3.25
1.04	2.60	17.87	3.51
1.25	3.36	25.49	3.71
1.46	4.15	34.15	3.85
1.67	4.96	43.66	3.94
1.88	5.79	53.83	3.99
2.08	6.62	64.42	4.00
2.29	7.45	75.21	4.00
2.50	8.27	85.93	4.00
2.71	9.06	96.31	4.00
2.92	9.82	106.03	4.00
3.13	10.54	114.73	4.00
3.34	11.20	121.97	4.00
3.54	11.77	127.15	4.00
3.75	12.24	129.28	

4.00

4.00 12.57 129.28

4.00

ROUTE MCUNGE ID=58 HYD=RTE.O1A2A1.A3 INFLOW ID=57

DT=0.0 L=1000 NS=0 SLOPE=0.007

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 250 TABLE PTS= 19
DT= .100000 QMED= 44.49 CKMED= 12.2740
WIDTH MED= 3.95 NREACH= 1 DX= 1000.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.150	.0	2.78	1.19	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.21	.2	.6	.110	1.8	4.15	2.52	1.495	.012	.990	.202	-.193	.1	.995	.018	-.012
.42	.7	2.7	.071	2.4	5.73	3.94	2.063	.028	.982	.353	-.335	1.5	.984	.268	-.252
.63	1.3	6.4	.055	2.9	7.26	5.07	2.612	.043	.976	.453	-.429	4.4	.979	.407	-.385
.83	1.9	11.4	.046	3.2	8.54	6.03	3.075	.059	.972	.516	-.488	8.8	.974	.487	-.461
1.04	2.6	17.9	.040	3.5	9.64	6.86	3.469	.075	.967	.560	-.527	14.5	.969	.540	-.509
1.25	3.4	25.5	.037	3.7	10.57	7.59	3.804	.093	.962	.592	-.554	21.6	.964	.577	-.542
1.46	4.1	34.2	.034	3.9	11.35	8.24	4.085	.112	.957	.615	-.572	29.7	.960	.605	-.564
1.67	5.0	43.7	.032	3.9	11.99	8.80	4.317	.132	.952	.633	-.585	38.8	.954	.625	-.580
1.88	5.8	53.8	.030	4.0	12.49	9.30	4.498	.154	.945	.646	-.592	48.7	.949	.641	-.589
2.08	6.6	64.4	.029	4.0	12.84	9.73	4.624	.179	.938	.655	-.594	59.1	.942	.652	-.594
2.29	7.5	75.2	.028	4.0	12.93	10.09	4.653	.208	.929	.659	-.588	69.8	.934	.658	-.592
2.50	8.3	85.9	.027	4.0	12.68	10.39	4.566	.242	.917	.656	-.572	80.5	.924	.658	-.582
2.71	9.1	96.3	.026	4.0	12.08	10.63	4.350	.285	.899	.645	-.544	91.1	.909	.652	-.561
2.92	9.8	106.0	.026	4.0	11.08	10.79	3.987	.342	.872	.625	-.496	101.2	.887	.637	-.524
3.13	10.5	114.7	.026	4.0	9.58	10.89	3.450	.428	.825	.590	-.415	110.4	.853	.610	-.463
3.34	11.2	122.0	.025	4.0	7.46	10.90	2.686	.584	.727	.532	-.258	118.4	.789	.566	-.355
3.54	11.8	127.2	.026	4.0	4.37	10.80	1.573	1.039	.425	.446	.129	124.6	.638	.494	-.131
3.75	12.2	129.3	.026	4.0	2.49	10.56	.897	1.854	.011	.467	.522	128.2	.033	.461	.505

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 4 OCCURRED 1 TIMES.
AVERAGE NUMBER ITERATIONS = 1.1630

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.150	.0	2.78	1.19	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000

```
 .000   .000       .0   1.000   .000   .000
          .21      .2      .6    .110    1.8     2.83   2.52    1.018   .018   .982
 .018   .000       .1    .994   .006   .000
          .42      .7     2.7    .071    2.4     2.93   3.94    1.055   .055   .948
 .052   .000      1.5    .966   .034   .000
          .63     1.3     6.4    .055    2.9     3.06   5.07    1.102   .102   .907
 .093   .000      4.4    .927   .073   .000
          .83     1.9    11.4    .046    3.2     3.21   6.03    1.157   .157   .865
 .135   .000      8.8    .885   .115   .000
         1.04     2.6    17.9    .040    3.5     3.38   6.86    1.215   .215   .823
 .177   .000     14.5    .843   .157   .000
         1.25     3.4    25.5    .037    3.7     3.55   7.59    1.277   .277   .783
 .217   .000     21.6    .802   .198   .000
         1.46     4.1    34.2    .034    3.9     3.72   8.24    1.340   .340   .746
 .254   .000     29.7    .764   .236   .000
         1.67     5.0    43.7    .032    3.9     3.90   8.80    1.405   .405   .712
 .288   .000     38.8    .728   .272   .000
         1.88     5.8    53.8    .030    4.0     4.09   9.30    1.471   .471   .680
 .320   .000     48.7    .695   .305   .000
         2.08     6.6    64.4    .029    4.0     4.27   9.73    1.538   .538   .650
 .350   .000     59.1    .664   .336   .000
         2.29     7.5    75.2    .028    4.0     4.45  10.09    1.603   .603   .624
 .376   .000     69.8    .637   .363   .000
         2.50     8.3    85.9    .027    4.0     4.62  10.39    1.664   .664   .601
 .399   .000     80.5    .612   .388   .000
         2.71     9.1    96.3    .026    4.0     4.78  10.63    1.720   .720   .581
 .419   .000     91.1    .591   .409   .000
         2.92     9.8   106.0    .026    4.0     4.92  10.79    1.770   .770   .565
 .435   .000    101.2    .573   .427   .000
         3.13    10.5   114.7    .026    4.0     5.04  10.89    1.813   .813   .551
 .449   .000    110.4    .558   .442   .000
         3.34    11.2   122.0    .025    4.0     5.13  10.90    1.848   .848   .541
 .459   .000    118.4    .546   .454   .000
         3.54    11.8   127.2    .026    4.0     4.37  10.80    1.573  1.039   .425
 .446   .129    124.6    .537   .463   .000
         3.75    12.2   129.3    .026    4.0     2.49  10.56     .897  1.854   .011
 .467   .522    128.2    .033   .461   .505
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       7 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0815
     Equations solved with two passes: first using the Ponce correction to C1,
second using the Fread correction to C1, C2 and C3
     *

     PRINT HYD            ID=58 CODE=0

                                                  HYDROGRAPH FROM AREA RTE.O1A2A1.A3

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           5.100       8.9         10.200        .8
15.300        .5         20.400        .4
          .100        .0           5.200       8.8         10.300        .8
15.400        .4         20.500        .4
          .200        .0           5.300       8.8         10.400        .7
15.500        .4         20.600        .4
          .300        .0           5.400       8.7         10.500        .7
15.600        .4         20.700        .4
          .400        .0           5.500       8.6         10.600        .7
15.700        .4         20.800        .3
```

.500	.0	5.600	8.6	10.700	.7
15.800	.4	20.900	.3		
.600	.0	5.700	8.5	10.800	.7
15.900	.4	21.000	.3		
.700	.0	5.800	8.4	10.900	.7
16.000	.4	21.100	.3		
.800	.0	5.900	8.4	11.000	.7
16.100	.4	21.200	.3		
.900	.0	6.000	8.3	11.100	.7
16.200	.4	21.300	.3		
1.000	.0	6.100	8.2	11.200	.7
16.300	.4	21.400	.3		
1.100	.0	6.200	8.1	11.300	.7
16.400	.4	21.500	.3		
1.200	.7	6.300	8.0	11.400	.6
16.500	.4	21.600	.3		
1.300	9.5	6.400	7.9	11.500	.6
16.600	.4	21.700	.3		
1.400	39.7	6.500	7.8	11.600	.6
16.700	.4	21.800	.3		
1.500	80.9	6.600	7.7	11.700	.6
16.800	.4	21.900	.3		
1.600	79.7	6.700	7.7	11.800	.6
16.900	.4	22.000	.3		
1.700	58.0	6.800	7.6	11.900	.6
17.000	.4	22.100	.3		
1.800	42.4	6.900	7.5	12.000	.6
17.100	.4	22.200	.3		
1.900	34.7	7.000	7.4	12.100	.6
17.200	.4	22.300	.3		
2.000	29.3	7.100	7.2	12.200	.6
17.300	.4	22.400	.3		
2.100	25.1	7.200	7.1	12.300	.6
17.400	.4	22.500	.3		
2.200	18.4	7.300	6.9	12.400	.6
17.500	.4	22.600	.3		
2.300	14.4	7.400	6.8	12.500	.6
17.600	.4	22.700	.3		
2.400	12.8	7.500	6.7	12.600	.6
17.700	.4	22.800	.3		
2.500	12.0	7.600	6.5	12.700	.5
17.800	.4	22.900	.3		
2.600	11.4	7.700	6.4	12.800	.5
17.900	.4	23.000	.3		
2.700	11.0	7.800	6.3	12.900	.5
18.000	.4	23.100	.3		
2.800	10.7	7.900	6.1	13.000	.5
18.100	.4	23.200	.3		
2.900	10.5	8.000	5.9	13.100	.5
18.200	.4	23.300	.3		
3.000	10.3	8.100	5.6	13.200	.5
18.300	.4	23.400	.3		
3.100	10.2	8.200	5.2	13.300	.5
18.400	.4	23.500	.3		
3.200	10.1	8.300	5.0	13.400	.5
18.500	.4	23.600	.3		
3.300	10.1	8.400	4.7	13.500	.5
18.600	.4	23.700	.3		
3.400	10.0	8.500	4.1	13.600	.5
18.700	.4	23.800	.3		
3.500	9.9	8.600	2.8	13.700	.5
18.800	.4	23.900	.3		
3.600	9.9	8.700	1.5	13.800	.5

18.900	.4	24.000	.3				
	3.700	9.8	8.800	1.3		13.900	.5
19.000	.4	24.100	.3				
	3.800	9.7	8.900	1.1		14.000	.5
19.100	.4	24.200	.2				
	3.900	9.7	9.000	1.0		14.100	.5
19.200	.4	24.300	.1				
	4.000	9.6	9.100	1.0		14.200	.5
19.300	.4	24.400	.0				
	4.100	9.5	9.200	.9		14.300	.5
19.400	.4	24.500	.0				
	4.200	9.5	9.300	.9		14.400	.5
19.500	.4	24.600	.0				
	4.300	9.4	9.400	.9		14.500	.5
19.600	.4	24.700	.0				
	4.400	9.3	9.500	.9		14.600	.5
19.700	.4	24.800	.0				
	4.500	9.3	9.600	.9		14.700	.5
19.800	.4	24.900	.0				
	4.600	9.2	9.700	.8		14.800	.5
19.900	.4	25.000	.0				
	4.700	9.2	9.800	.8		14.900	.5
20.000	.4	25.100	.0				
	4.800	9.1	9.900	.8		15.000	.5
20.100	.4	25.200	.0				
	4.900	9.0	10.000	.8		15.100	.4
20.200	.4	25.300	.0				
	5.000	9.0	10.100	.8		15.200	.5
20.300	.4						

RUNOFF VOLUME = .66299 INCHES = 8.5693 ACRE-FEET
PEAK DISCHARGE RATE = 80.93 CFS AT 1.500 HOURS BASIN AREA = .2424 SQ. MI.

```
*
*
ADD HYD                    ID=59 HYD=A1TOA5 ID I=58 II=25
PRINT HYD                  ID=59 CODE=10
```

HYDROGRAPH FROM AREA A1TOA5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	8.6	12.000	.8
18.000 .6	24.000 .5				
1.000	.0	7.000	7.6	13.000	.7
19.000 .5	25.000 .0				
2.000	37.9	8.000	6.2	14.000	.7
20.000 .5					
3.000	10.8	9.000	1.3	15.000	.6
21.000 .5					
4.000	9.8	10.000	1.0	16.000	.6
22.000 .5					
5.000	9.2	11.000	.9	17.000	.6

23.000 .5

RUNOFF VOLUME = .74801 INCHES = 10.3983 ACRE-FEET
PEAK DISCHARGE RATE = 118.48 CFS AT 1.500 HOURS BASIN AREA = .2607 SQ. MI.

*

*

****

DIVIDE HYD ID=59 Q=8.26 ID I=61 HYD NO=BYPASS.A5

ID II=62 HYD NO=SURGE.A5

PRINT HYD ID=61 CODE=10

HYDROGRAPH FROM AREA BYPASS.A5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	8.3	12.000	.8
18.000	.6	24.000	.5		
1.000	.0	7.000	7.6	13.000	.7
19.000	.5	25.000	.0		
2.000	8.3	8.000	6.2	14.000	.7
20.000	.5				
3.000	8.3	9.000	1.3	15.000	.6
21.000	.5				
4.000	8.3	10.000	1.0	16.000	.6
22.000	.5				
5.000	8.3	11.000	.9	17.000	.6
23.000	.5				

RUNOFF VOLUME = .74801 INCHES = 5.6527 ACRE-FEET
PEAK DISCHARGE RATE = 8.26 CFS AT 1.300 HOURS BASIN AREA = .1417 SQ. MI.

PRINT HYD ID=62 CODE=10

HYDROGRAPH FROM AREA SURGE.A5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.000	29.6	4.000	1.6
6.000	.3				
1.000	.0	3.000	2.5	5.000	.9

RUNOFF VOLUME = .74801 INCHES = 4.7456 ACRE-FEET
PEAK DISCHARGE RATE = 110.22 CFS AT 1.500 HOURS BASIN AREA =

.1190 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=60 HYD=POND.A5 INFLOW ID=62 CODE=5

OUTFLOW		STORAGE	DEPTH
0.0		0.0	5511
2.67	0.35		5512
3.78	1.03		5513
4.80	1.94		5514
5.74	3.15		5515
6.62	4.61		5516

* * * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5511.00	.000	.00
.50	.00	5511.00	.000	.00
1.00	.00	5511.00	.000	.00
1.50	110.22	5513.03	1.055	3.81
2.00	29.61	5515.22	3.471	5.93
2.50	4.96	5515.42	3.770	6.11
3.00	2.54	5515.35	3.660	6.05
3.50	1.95	5515.24	3.503	5.95
4.00	1.58	5515.12	3.332	5.85
4.50	1.26	5515.00	3.151	5.74
5.00	.95	5514.85	2.963	5.59
5.50	.62	5514.68	2.767	5.44
6.00	.31	5514.52	2.565	5.29
6.50	.00	5514.34	2.355	5.12
7.00	.00	5514.17	2.147	4.96
7.50	.00	5514.00	1.945	4.80
8.00	.00	5513.79	1.751	4.59
8.50	.00	5513.59	1.566	4.38
9.00	.00	5513.39	1.389	4.18
9.50	.00	5513.21	1.220	3.99
10.00	.00	5513.03	1.059	3.81
10.50	.00	5512.82	.906	3.58
11.00	.00	5512.61	.763	3.34
11.50	.00	5512.41	.629	3.13
12.00	.00	5512.23	.504	2.92
12.50	.00	5512.06	.388	2.73
13.00	.00	5511.81	.284	2.17

13.50	.00	5511.59	.207	1.58
14.00	.00	5511.43	.151	1.15
14.50	.00	5511.31	.110	.84
15.00	.00	5511.23	.080	.61
15.50	.00	5511.17	.059	.45
16.00	.00	5511.12	.043	.33
16.50	.00	5511.09	.031	.24
17.00	.00	5511.06	.023	.17
17.50	.00	5511.05	.017	.13
18.00	.00	5511.03	.012	.09
18.50	.00	5511.03	.009	.07
19.00	.00	5511.02	.006	.05
19.50	.00	5511.01	.005	.04
20.00	.00	5511.01	.003	.03
20.50	.00	5511.01	.003	.02
21.00	.00	5511.01	.002	.01
21.50	.00	5511.00	.001	.01
22.00	.00	5511.00	.001	.01
22.50	.00	5511.00	.001	.01
23.00	.00	5511.00	.001	.00

PEAK DISCHARGE = 6.116 CFS - PEAK OCCURS AT HOUR 2.40
MAXIMUM WATER SURFACE ELEVATION = 5515.428
MAXIMUM STORAGE = 3.7744 AC-FT INCREMENTAL TIME= .100000HRS

```
PRINT HYD          ID=60 CODE=10
```

HYDROGRAPH FROM AREA POND.A5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	5.3	12.000	2.9
1.000	.0	7.000	5.0	13.000	2.2
2.000	5.9	8.000	4.6	14.000	1.2
3.000	6.0	9.000	4.2	15.000	.6
4.000	5.8	10.000	3.8	16.000	.3
5.000	5.6	11.000	3.3	17.000	.2

TIME HRS	FLOW CFS
18.000	.1
19.000	.0
20.000	.0
21.000	.0
22.000	.0
23.000	.0

RUNOFF VOLUME = .74801 INCHES = 4.7456 ACRE-FEET
PEAK DISCHARGE RATE = 6.12 CFS AT 2.400 HOURS BASIN AREA = .1190 SQ. MI.

```
*
*
ADD HYD                    ID=59 HYD=TOTALA5 ID I=61 II=60
PRINT HYD                  ID=59 CODE=10
```

HYDROGRAPH FROM AREA TOTALA5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	13.5	12.000	3.7
18.000	.6	24.000	.5		
1.000	.0	7.000	12.6	13.000	2.9
19.000	.6	25.000	.0		
2.000	14.2	8.000	10.8	14.000	1.8
20.000	.5				
3.000	14.3	9.000	5.5	15.000	1.3
21.000	.5				
4.000	14.1	10.000	4.9	16.000	.9
22.000	.5				
5.000	13.9	11.000	4.3	17.000	.8
23.000	.5				

RUNOFF VOLUME = .74800 INCHES = 10.3982 ACRE-FEET
PEAK DISCHARGE RATE = 14.38 CFS AT 2.400 HOURS BASIN AREA = .2607 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.013

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.14	.89
.21	.17	.59	1.22
.31	.31	1.37	1.45
.42	.47	2.46	1.62
.52	.65	3.83	1.76
.63	.84	5.47	1.85
.73	1.04	7.33	1.93
.83	1.24	9.37	1.97
.94	1.45	11.55	2.00
1.04	1.66	13.83	2.00
1.15	1.86	16.14	2.00

```
                                        1.25        2.07        18.44
2.00
                                        1.35        2.27        20.67
2.00
                                        1.46        2.46        22.76
2.00
                                        1.56        2.63        24.62
2.00
                                        1.67        2.80        26.18
2.00
                                        1.77        2.94        27.29
2.00
                                        1.88        3.06        27.75
2.00
                                        2.00        3.14        27.75
2.00
     ROUTE MCUNGE         ID=61 HYD=RTE.A4 INFLOW ID=24

                          DT=0.0  L=900 NS=0  SLOPE=0.013

                          MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0


          INFLOW END= 249             TABLE PTS= 19
          DT=  .100000                QMED=       13.20  CKMED=     10.9126
          WIDTH MED=        2.00      NREACH=  1         DX=      900.00

       DEPTH   AREA      Q    TRAVEL  WIDTH     ck      VEL      C       D      C1
  C2     C3     Q-M      C1-M   C2-M   C3-M
         (FT)  (SQ FT)  (CFS)  TIME(HR) (FT)     (FPS)   (FPS)
                (CFS)
           .00     .0       .0    .157     .0     2.50   1.02    1.000   .000  1.000
 .000   .000       .0   1.000   .000   .000
           .10     .1       .1    .115     .9     3.56   2.17    1.426   .004   .997
 .177  -.174       .0   1.000   .028  -.027
           .21     .2       .6    .074    1.2     4.92   3.38    1.968   .008   .994
 .328  -.322       .3    .995   .242  -.237
           .31     .3      1.4    .057    1.5     6.23   4.35    2.492   .013   .993
 .429  -.422       .9    .993   .383  -.376
           .42     .5      2.5    .048    1.6     7.33   5.18    2.933   .018   .991
 .494  -.485      1.9    .992   .464  -.456
           .52     .7      3.8    .042    1.8     8.27   5.89    3.309   .023   .990
 .538  -.528      3.1    .990   .518  -.508
           .63     .8      5.5    .038    1.9     9.07   6.52    3.628   .028   .988
 .570  -.559      4.6    .989   .556  -.545
           .73    1.0      7.3    .035    1.9     9.74   7.07    3.897   .033   .986
 .594  -.581      6.4    .987   .584  -.571
           .83    1.2      9.4    .033    2.0    10.29   7.56    4.118   .039   .985
 .612  -.597      8.3    .986   .605  -.590
           .94    1.4     11.6    .031    2.0    10.73   7.98    4.290   .046   .983
 .625  -.608     10.4    .984   .620  -.604
          1.04    1.7     13.8    .030    2.0    11.03   8.35    4.411   .054   .980
 .634  -.614     12.7    .982   .631  -.612
          1.15    1.9     16.1    .029    2.0    11.10   8.67    4.439   .062   .977
 .636  -.614     15.0    .979   .636  -.615
          1.25    2.1     18.4    .028    2.0    10.89   8.92    4.356   .072   .973
 .632  -.605     17.3    .976   .635  -.611
          1.35    2.3     20.7    .027    2.0    10.37   9.12    4.150   .085   .967
 .618  -.585     19.6    .971   .626  -.597
          1.46    2.5     22.8    .027    2.0     9.51   9.27    3.804   .102   .958
 .592  -.551     21.7    .964   .608  -.571
          1.56    2.6     24.6    .027    2.0     8.23   9.35    3.291   .128   .942
 .547  -.489     23.7    .952   .574  -.526
```

```
        1.67    2.8     26.2    .027    2.0     6.41   9.35    2.562   .175   .907
 .465  -.371    25.4    .929   .515  -.445
        1.77    2.9     27.3    .027    2.0     3.75   9.27    1.501   .311   .779
 .289  -.068    26.7    .872   .402  -.274
        1.88    3.1     27.7    .028    2.0     2.14   9.07     .855   .555   .540
 .170   .290    27.5    .555   .171   .274
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   4 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0543
       DEPTH   AREA      Q    TRAVEL  WIDTH     ck      VEL      C       D      C1
  C2     C3     Q-M      C1-M   C2-M   C3-M
        (FT)  (SQ FT)  (CFS)  TIME(HR) (FT)     (FPS)   (FPS)
                (CFS)
          .00     .0       .0    .157     .0     2.50   1.02    1.000   .000  1.000
 .000   .000       .0   1.000   .000   .000
          .10     .1       .1    .115     .9     2.51   2.17    1.005   .005   .995
 .005   .000       .0    .998   .002   .000
          .21     .2       .6    .074    1.2     2.54   3.38    1.016   .016   .984
 .016   .000       .3    .990   .010   .000
          .31     .3      1.4    .057    1.5     2.58   4.35    1.031   .031   .970
 .030   .000       .9    .977   .023   .000
          .42     .5      2.5    .048    1.6     2.62   5.18    1.049   .049   .953
 .047   .000      1.9    .961   .039   .000
          .52     .7      3.8    .042    1.8     2.67   5.89    1.070   .070   .935
 .065   .000      3.1    .944   .056   .000
          .63     .8      5.5    .038    1.9     2.73   6.52    1.092   .092   .915
 .085   .000      4.6    .925   .075   .000
          .73    1.0      7.3    .035    1.9     2.79   7.07    1.117   .117   .896
 .104   .000      6.4    .905   .095   .000
          .83    1.2      9.4    .033    2.0     2.86   7.56    1.142   .142   .875
 .125   .000      8.3    .885   .115   .000
          .94    1.4     11.6    .031    2.0     2.92   7.98    1.169   .169   .855
 .145   .000     10.4    .865   .135   .000
         1.04    1.7     13.8    .030    2.0     2.99   8.35    1.197   .197   .835
 .165   .000     12.7    .845   .155   .000
         1.15    1.9     16.1    .029    2.0     3.06   8.67    1.225   .225   .816
 .184   .000     15.0    .826   .174   .000
         1.25    2.1     18.4    .028    2.0     3.13   8.92    1.252   .252   .799
 .201   .000     17.3    .807   .193   .000
         1.35    2.3     20.7    .027    2.0     3.19   9.12    1.277   .277   .783
 .217   .000     19.6    .791   .209   .000
         1.46    2.5     22.8    .027    2.0     3.25   9.27    1.299   .299   .770
 .230   .000     21.7    .776   .224   .000
         1.56    2.6     24.6    .027    2.0     3.30   9.35    1.319   .319   .758
 .242   .000     23.7    .764   .236   .000
         1.67    2.8     26.2    .027    2.0     3.34   9.35    1.335   .335   .749
 .251   .000     25.4    .753   .247   .000
         1.77    2.9     27.3    .027    2.0     3.37   9.27    1.346   .346   .743
 .257   .000     26.7    .746   .254   .000
         1.88    3.1     27.7    .028    2.0     2.14   9.07     .855   .555   .540
 .170   .290     27.5    .555   .171   .274
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       5 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0407
     Equations solved with two passes: first using the Ponce correction to C1,
second using the Fread correction to C1, C2 and C3
     *

     PRINT HYD            ID=61 CODE=0


                                                HYDROGRAPH FROM AREA RTE.A4

          TIME      FLOW           TIME      FLOW           TIME      FLOW
```

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.100	.2	10.200	.2
15.300	.2	20.400	.1		
.100	.0	5.200	.2	10.300	.2
15.400	.2	20.500	.1		
.200	.0	5.300	.2	10.400	.2
15.500	.2	20.600	.1		
.300	.0	5.400	.2	10.500	.2
15.600	.2	20.700	.1		
.400	.0	5.500	.2	10.600	.2
15.700	.2	20.800	.1		
.500	.0	5.600	.2	10.700	.2
15.800	.2	20.900	.1		
.600	.0	5.700	.2	10.800	.2
15.900	.2	21.000	.1		
.700	.0	5.800	.2	10.900	.2
16.000	.2	21.100	.1		
.800	.0	5.900	.2	11.000	.2
16.100	.2	21.200	.1		
.900	.0	6.000	.2	11.100	.2
16.200	.2	21.300	.1		
1.000	.0	6.100	.2	11.200	.2
16.300	.2	21.400	.1		
1.100	.0	6.200	.2	11.300	.2
16.400	.1	21.500	.1		
1.200	.2	6.300	.2	11.400	.2
16.500	.1	21.600	.1		
1.300	3.0	6.400	.3	11.500	.2
16.600	.1	21.700	.1		
1.400	11.8	6.500	.2	11.600	.2
16.700	.1	21.800	.1		
1.500	24.6	6.600	.2	11.700	.2
16.800	.1	21.900	.1		
1.600	24.5	6.700	.2	11.800	.2
16.900	.1	22.000	.1		
1.700	17.1	6.800	.2	11.900	.2
17.000	.1	22.100	.1		
1.800	12.1	6.900	.2	12.000	.2
17.100	.1	22.200	.1		
1.900	9.6	7.000	.2	12.100	.2
17.200	.1	22.300	.1		
2.000	7.9	7.100	.2	12.200	.2
17.300	.1	22.400	.1		
2.100	6.4	7.200	.2	12.300	.2
17.400	.1	22.500	.1		
2.200	3.9	7.300	.2	12.400	.2
17.500	.1	22.600	.1		
2.300	2.2	7.400	.2	12.500	.2
17.600	.1	22.700	.1		
2.400	1.5	7.500	.2	12.600	.2
17.700	.1	22.800	.1		
2.500	1.1	7.600	.2	12.700	.2
17.800	.1	22.900	.1		
2.600	.9	7.700	.2	12.800	.2
17.900	.1	23.000	.1		
2.700	.7	7.800	.2	12.900	.2
18.000	.1	23.100	.1		
2.800	.6	7.900	.2	13.000	.2
18.100	.1	23.200	.1		
2.900	.5	8.000	.2	13.100	.2
18.200	.1	23.300	.1		

```
          3.000        .4          8.100        .2         13.200        .2
18.300        .1         23.400        .1
          3.100        .4          8.200        .2         13.300        .2
18.400        .1         23.500        .1
          3.200        .3          8.300        .2         13.400        .2
18.500        .1         23.600        .1
          3.300        .3          8.400        .2         13.500        .2
18.600        .1         23.700        .1
          3.400        .3          8.500        .2         13.600        .2
18.700        .1         23.800        .1
          3.500        .2          8.600        .2         13.700        .2
18.800        .1         23.900        .1
          3.600        .2          8.700        .2         13.800        .2
18.900        .1         24.000        .1
          3.700        .2          8.800        .2         13.900        .2
19.000        .1         24.100        .1
          3.800        .2          8.900        .2         14.000        .2
19.100        .1         24.200        .1
          3.900        .2          9.000        .2         14.100        .2
19.200        .1         24.300        .0
          4.000        .2          9.100        .2         14.200        .2
19.300        .1         24.400        .0
          4.100        .2          9.200        .2         14.300        .2
19.400        .1         24.500        .0
          4.200        .2          9.300        .2         14.400        .2
19.500        .1         24.600        .0
          4.300        .2          9.400        .2         14.500        .2
19.600        .1         24.700        .0
          4.400        .2          9.500        .2         14.600        .2
19.700        .1         24.800        .0
          4.500        .2          9.600        .2         14.700        .2
19.800        .1         24.900        .0
          4.600        .2          9.700        .2         14.800        .2
19.900        .1         25.000        .0
          4.700        .2          9.800        .2         14.900        .2
20.000        .1         25.100        .0
          4.800        .2          9.900        .2         15.000        .2
20.100        .1
          4.900        .2         10.000        .2         15.100        .2
20.200        .1
          5.000        .2         10.100        .2         15.200        .2
20.300        .1

          RUNOFF VOLUME =     2.16943 INCHES     =       1.3722 ACRE-FEET
          PEAK DISCHARGE RATE =      24.62 CFS  AT   1.500 HOURS   BASIN AREA =
.0119 SQ. MI.


     *

     *

     ADD HYD                      ID=62 HYD=RTE.A4.A6 ID I=61 II=26

     PRINT HYD                    ID=62 CODE=10

                                                HYDROGRAPH FROM AREA RTE.A4.A6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
```

HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	6.000	.6	12.000	.5
18.000	.4	24.000	.3		
1.000	.0	7.000	.6	13.000	.5
19.000	.4	25.000	.0		
2.000	19.7	8.000	.6	14.000	.4
20.000	.3				
3.000	1.0	9.000	.6	15.000	.4
21.000	.3				
4.000	.5	10.000	.5	16.000	.4
22.000	.3				
5.000	.5	11.000	.5	17.000	.4
23.000	.3				

RUNOFF VOLUME = 1.92024 INCHES = 3.9306 ACRE-FEET
PEAK DISCHARGE RATE = 78.06 CFS AT 1.500 HOURS BASIN AREA = .0384 SQ. MI.

*

*

ADD HYD ID=63 HYD=RTEA4A6.PONDA5 ID I=62 II=59

PRINT HYD ID=63 CODE=10

HYDROGRAPH FROM AREA RTEA4A6.PONDA5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	14.2	12.000	4.2
18.000	1.0	24.000	.8		
1.000	.0	7.000	13.2	13.000	3.4
19.000	.9	25.000	.0		
2.000	33.9	8.000	11.4	14.000	2.3
20.000	.9				
3.000	15.3	9.000	6.0	15.000	1.7
21.000	.9				
4.000	14.6	10.000	5.4	16.000	1.3
22.000	.8				
5.000	14.4	11.000	4.8	17.000	1.1
23.000	.8				

RUNOFF VOLUME = .89846 INCHES = 14.3287 ACRE-FEET
PEAK DISCHARGE RATE = 90.13 CFS AT 1.500 HOURS BASIN AREA = .2990 SQ. MI.

*

*

****

DIVIDE HYD ID=63 Q=8.26 ID I=61 HYD NO=BYPASS.A6

ID II=62 HYD NO=SURGE.A6

PRINT HYD ID=61 CODE=10

HYDROGRAPH FROM AREA BYPASS.A6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	8.3	12.000	4.2
1.000	.0	7.000	8.3	13.000	3.4
2.000	8.3	8.000	8.3	14.000	2.3
3.000	8.3	9.000	6.0	15.000	1.7
4.000	8.3	10.000	5.4	16.000	1.3
5.000	8.3	11.000	4.8	17.000	1.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
18.000	1.0	24.000	.8		
19.000	.9	25.000	.0		
20.000	.9				
21.000	.9				
22.000	.8				
23.000	.8				

RUNOFF VOLUME = .89846 INCHES = 8.0280 ACRE-FEET
PEAK DISCHARGE RATE = 8.26 CFS AT 1.300 HOURS BASIN AREA = .1675 SQ. MI.

PRINT HYD ID=62 CODE=10

HYDROGRAPH FROM AREA SURGE.A6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.000	25.6	4.000	6.4
1.000	.0	3.000	7.1	5.000	6.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
6.000	5.9	8.000	3.1		
7.000	5.0				

RUNOFF VOLUME = .89846 INCHES = 6.3008 ACRE-FEET
PEAK DISCHARGE RATE = 81.87 CFS AT 1.500 HOURS BASIN AREA = .1315 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=64 HYD=POND.A6 INFLOW ID=62 CODE=5

OUTFLOW STORAGE DEPTH

0	0	5500
2.67	0.30	5501
3.78	0.85	5502
4.80	1.57	5503
5.74	2.47	5504
6.62	3.52	5505
7.46	4.72	5506
20.0	6.06	5507

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5500.00	.000	.00
.50	.00	5500.00	.000	.00
1.00	.00	5500.00	.000	.00
1.50	81.87	5502.15	.959	3.93
2.00	25.62	5504.19	2.668	5.91
2.50	8.93	5504.51	3.010	6.19
3.00	7.09	5504.58	3.075	6.25
3.50	6.59	5504.60	3.097	6.27
4.00	6.38	5504.61	3.106	6.27
4.50	6.25	5504.61	3.107	6.27
5.00	6.12	5504.60	3.104	6.27
5.50	6.01	5504.60	3.095	6.26
6.00	5.90	5504.58	3.083	6.25
6.50	5.66	5504.57	3.066	6.24
7.00	4.98	5504.53	3.029	6.21
7.50	4.10	5504.47	2.961	6.15
8.00	3.09	5504.37	2.859	6.07
8.50	1.10	5504.22	2.700	5.93
9.00	.00	5503.99	2.464	5.73
9.50	.00	5503.74	2.232	5.49
10.00	.00	5503.49	2.010	5.26
10.50	.00	5503.25	1.797	5.04
11.00	.00	5503.03	1.593	4.82
11.50	.00	5502.76	1.399	4.56
12.00	.00	5502.51	1.216	4.30
12.50	.00	5502.27	1.044	4.05
13.00	.00	5502.04	.881	3.82
13.50	.00	5501.78	.729	3.54
14.00	.00	5501.52	.589	3.25
14.50	.00	5501.29	.460	2.99
15.00	.00	5501.07	.341	2.75
15.50	.00	5500.79	.238	2.12
16.00	.00	5500.55	.164	1.46
16.50	.00	5500.38	.114	1.01
17.00	.00	5500.26	.079	.70
17.50	.00	5500.18	.055	.49
18.00	.00	5500.13	.038	.34
18.50	.00	5500.09	.026	.23
19.00	.00	5500.06	.018	.16
19.50	.00	5500.04	.013	.11
20.00	.00	5500.03	.009	.08

```
      20.50        .00   5500.02       .006       .05
      21.00        .00   5500.01       .004       .04
      21.50        .00   5500.01       .003       .03
      22.00        .00   5500.01       .002       .02
      22.50        .00   5500.00       .001       .01
      23.00        .00   5500.00       .001       .01
      23.50        .00   5500.00       .001       .01
      24.00        .00   5500.00       .000       .00
 PEAK DISCHARGE =        6.274 CFS - PEAK OCCURS AT HOUR    4.40
 MAXIMUM WATER SURFACE ELEVATION =     5504.607
 MAXIMUM STORAGE =        3.1075 AC-FT      INCREMENTAL TIME=     .100000HRS

*

PRINT HYD           ID=64 CODE=10

                                          HYDROGRAPH FROM AREA POND.A6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000         .0          6.000       6.3         12.000       4.3
18.000        .3          24.000        .0
         1.000         .0          7.000       6.2         13.000       3.8
19.000        .2          25.000        .0
         2.000        5.9          8.000       6.1         14.000       3.3
20.000        .1
         3.000        6.2          9.000       5.7         15.000       2.8
21.000        .0
         4.000        6.3         10.000       5.3         16.000       1.5
22.000        .0
         5.000        6.3         11.000       4.8         17.000        .7
23.000        .0

         RUNOFF VOLUME =      .89846 INCHES     =       6.3008 ACRE-FEET
         PEAK DISCHARGE RATE =       6.27 CFS  AT   4.400 HOURS   BASIN AREA =
.1315 SQ. MI.


*

*

ADD HYD                     ID=66 HYD=TOTALA6 ID I=61 II=64

PRINT HYD                   ID=66 CODE=10

                                          HYDROGRAPH FROM AREA TOTALA6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000         .0          6.000      14.5         12.000       8.5
18.000        1.4         24.000        .8
         1.000         .0          7.000      14.5         13.000       7.2
19.000        1.1         25.000        .0
```

```
          2.000      14.2          8.000      14.3         14.000       5.5
20.000       1.0
          3.000      14.5          9.000      11.8         15.000       4.4
21.000        .9
          4.000      14.5         10.000      10.6         16.000       2.8
22.000        .8
          5.000      14.5         11.000       9.6         17.000       1.8
23.000        .8

         RUNOFF VOLUME =      .89845 INCHES     =      14.3286 ACRE-FEET
         PEAK DISCHARGE RATE =      14.53 CFS  AT   4.400 HOURS   BASIN AREA =
.2990 SQ. MI.


     *

     *

     ADD HYD                      ID=65 HYD=PONDA6.A7 ID I=66 II=27

     PRINT HYD                    ID=65 CODE=10

                                                HYDROGRAPH FROM AREA PONDA6.A7

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           6.000      14.7         12.000       8.7
18.000       1.5         24.000        .9
          1.000        .0           7.000      14.7         13.000       7.3
19.000       1.2         25.000        .0
          2.000      19.6           8.000      14.5         14.000       5.7
20.000       1.1
          3.000      14.8           9.000      11.9         15.000       4.5
21.000       1.0
          4.000      14.7          10.000      10.8         16.000       2.9
22.000        .9
          5.000      14.7          11.000       9.7         17.000       2.0
23.000        .9

         RUNOFF VOLUME =      .93669 INCHES     =      15.4656 ACRE-FEET
         PEAK DISCHARGE RATE =      34.71 CFS  AT   1.500 HOURS   BASIN AREA =
.3096 SQ. MI.


     *

     *

     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.021

                                          DIA=2.0  N=0.013

                                       RATING CURVE PIPE SECTION  1.0
                                           WATER       FLOW        FLOW        MAX
                                         SURFACE       AREA        RATE
WIDTH
```

ELEV	SQ FT	CFS	FT
.00	.00	.00	.00
.10	.06	.17	.89
.21	.17	.75	1.22
.31	.31	1.74	1.45
.42	.47	3.12	1.62
.52	.65	4.87	1.76
.63	.84	6.95	1.85
.73	1.04	9.32	1.93
.83	1.24	11.91	1.97
.94	1.45	14.68	2.00
1.04	1.66	17.57	2.00
1.15	1.86	20.51	2.00
1.25	2.07	23.44	2.00
1.35	2.27	26.27	2.00
1.46	2.46	28.92	2.00
1.56	2.63	31.30	2.00
1.67	2.80	33.27	2.00
1.77	2.94	34.68	2.00
1.88	3.06	35.26	2.00
2.00	3.14	35.26	2.00

ROUTE MCUNGE ID=66 HYD=RTE.A6.A7 INFLOW ID=65

DT=0.0 L=520 NS=0 SLOPE=0.021

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=66 CODE=0

HYDROGRAPH FROM AREA RTE.A6.A7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.200	14.7	10.400	10.4
15.600	3.5	20.800	1.0		
.100	.0	5.300	14.7	10.500	10.2

15.700	3.4	20.900	1.0			
	.200	.0	5.400	14.7	10.600	10.1
15.800	3.2	21.000	1.0			
	.300	.0	5.500	14.7	10.700	10.0
15.900	3.1	21.100	1.0			
	.400	.0	5.600	14.7	10.800	9.9
16.000	2.9	21.200	1.0			
	.500	.0	5.700	14.7	10.900	9.8
16.100	2.8	21.300	1.0			
	.600	.0	5.800	14.7	11.000	9.7
16.200	2.7	21.400	1.0			
	.700	.0	5.900	14.7	11.100	9.6
16.300	2.6	21.500	1.0			
	.800	.0	6.000	14.7	11.200	9.5
16.400	2.5	21.600	.9			
	.900	.0	6.100	14.7	11.300	9.4
16.500	2.4	21.700	.9			
	1.000	.0	6.200	14.7	11.400	9.3
16.600	2.3	21.800	.9			
	1.100	.6	6.300	14.7	11.500	9.2
16.700	2.2	21.900	.9			
	1.200	10.2	6.400	14.7	11.600	9.1
16.800	2.1	22.000	.9			
	1.300	16.5	6.500	14.7	11.700	9.0
16.900	2.0	22.100	.9			
	1.400	31.3	6.600	14.7	11.800	8.9
17.000	2.0	22.200	.9			
	1.500	34.7	6.700	14.7	11.900	8.8
17.100	1.9	22.300	.9			
	1.600	28.6	6.800	14.7	12.000	8.7
17.200	1.8	22.400	.9			
	1.700	24.0	6.900	14.7	12.100	8.6
17.300	1.8	22.500	.9			
	1.800	21.9	7.000	14.7	12.200	8.5
17.400	1.7	22.600	.9			
	1.900	20.6	7.100	14.6	12.300	8.4
17.500	1.7	22.700	.9			
	2.000	19.6	7.200	14.6	12.400	8.3
17.600	1.6	22.800	.9			
	2.100	17.5	7.300	14.6	12.500	8.2
17.700	1.6	22.900	.9			
	2.200	16.2	7.400	14.6	12.600	8.1
17.800	1.5	23.000	.9			
	2.300	15.7	7.500	14.6	12.700	7.9
17.900	1.5	23.100	.9			
	2.400	15.4	7.600	14.6	12.800	7.7
18.000	1.5	23.200	.9			
	2.500	15.2	7.700	14.6	12.900	7.5
18.100	1.4	23.300	.9			
	2.600	15.1	7.800	14.5	13.000	7.3
18.200	1.4	23.400	.9			
	2.700	15.0	7.900	14.5	13.100	7.1
18.300	1.4	23.500	.9			
	2.800	14.9	8.000	14.5	13.200	6.9
18.400	1.3	23.600	.9			
	2.900	14.8	8.100	14.5	13.300	6.8
18.500	1.3	23.700	.9			
	3.000	14.8	8.200	14.5	13.400	6.6
18.600	1.3	23.800	.9			
	3.100	14.8	8.300	14.4	13.500	6.4
18.700	1.3	23.900	.9			
	3.200	14.7	8.400	14.4	13.600	6.2
18.800	1.2	24.000	.9			

```
         3.300      14.7          8.500      14.4         13.700       6.1
18.900       1.2          24.100         .7
         3.400      14.7          8.600      14.0         13.800       5.9
19.000       1.2          24.200         .3
         3.500      14.7          8.700      12.7         13.900       5.8
19.100       1.2          24.300         .1
         3.600      14.7          8.800      12.4         14.000       5.7
19.200       1.2          24.400         .1
         3.700      14.7          8.900      12.0         14.100       5.5
19.300       1.2          24.500         .1
         3.800      14.7          9.000      11.9         14.200       5.4
19.400       1.1          24.600         .0
         3.900      14.7          9.100      11.8         14.300       5.3
19.500       1.1          24.700         .0
         4.000      14.7          9.200      11.7         14.400       5.2
19.600       1.1          24.800         .0
         4.100      14.7          9.300      11.5         14.500       5.1
19.700       1.1          24.900         .0
         4.200      14.7          9.400      11.4         14.600       5.0
19.800       1.1          25.000         .0
         4.300      14.7          9.500      11.3         14.700       4.8
19.900       1.1          25.100         .0
         4.400      14.7          9.600      11.2         14.800       4.7
20.000       1.1          25.200         .0
         4.500      14.7          9.700      11.1         14.900       4.6
20.100       1.1          25.300         .0
         4.600      14.7          9.800      11.0         15.000       4.5
20.200       1.0          25.400         .0
         4.700      14.7          9.900      10.9         15.100       4.5
20.300       1.0          25.500         .0
         4.800      14.7         10.000      10.8         15.200       4.4
20.400       1.0          25.600         .0
         4.900      14.7         10.100      10.7         15.300       4.1
20.500       1.0          25.700         .0
         5.000      14.7         10.200      10.6         15.400       3.9
20.600       1.0          25.800         .0
         5.100      14.7         10.300      10.5         15.500       3.7
20.700       1.0          25.900         .0

         RUNOFF VOLUME =      .93669 INCHES     =      15.4656 ACRE-FEET
         PEAK DISCHARGE RATE =      34.71 CFS  AT   1.500 HOURS   BASIN AREA =
.3096 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=25  HYD NO=BASIN.D1  DA=.01816 SQ MI

                                      %A=0  %B=19.0  %C=19.0 %D=62.0

                                        TP=-.133 HR  RAIN=-1


         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   44.552    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .011259 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
```

.100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 18.390 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
AREA = .006901 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=25 CODE=10

HYDROGRAPH FROM AREA BASIN.D1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.2	20.000	.1		
1.000	.0	6.000	.3	11.000	.2
16.000	.2	21.000	.1		
2.000	8.1	7.000	.3	12.000	.2
17.000	.2	22.000	.1		
3.000	.4	8.000	.3	13.000	.2
18.000	.2	23.000	.1		
4.000	.2	9.000	.2	14.000	.2
19.000	.2	24.000	.1		

RUNOFF VOLUME = 1.80886 INCHES = 1.7519 ACRE-FEET
PEAK DISCHARGE RATE = 36.60 CFS AT 1.500 HOURS BASIN AREA = .0182 SQ. MI.

*

ADD HYD ID=67 HYD=A6.A7.D1 ID I=66 II=25

PRINT HYD ID=67 CODE=10

HYDROGRAPH FROM AREA A6.A7.D1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	15.0	12.000	8.9
18.000	1.6	24.000	1.0		
1.000	.0	7.000	14.9	13.000	7.5
19.000	1.4	25.000	.0		
2.000	27.6	8.000	14.8	14.000	5.8
20.000	1.2				
3.000	15.2	9.000	12.2	15.000	4.7
21.000	1.1				
4.000	14.9	10.000	11.0	16.000	3.1
22.000	1.1				

```
          5.000      14.9         11.000       9.9         17.000       2.1
23.000       1.0

         RUNOFF VOLUME =      .98502 INCHES     =      17.2175 ACRE-FEET
         PEAK DISCHARGE RATE =      71.31 CFS  AT   1.500 HOURS   BASIN AREA =
.3277 SQ. MI.


     *

     *

     ************************************************************

     DIVIDE HYD                   ID=67 Q=11.07 ID I=61  HYD NO=BYPASS.AD1

                                                          ID II=62 HYD NO=SURGE.D1

     PRINT HYD                    ID=61 CODE=10

                                                  HYDROGRAPH FROM AREA BYPASS.AD1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          6.000      11.1         12.000       8.9
18.000       1.6         24.000       1.0
         1.000        .0          7.000      11.1         13.000       7.5
19.000       1.4         25.000        .0
         2.000      11.1          8.000      11.1         14.000       5.8
20.000       1.2
         3.000      11.1          9.000      11.1         15.000       4.7
21.000       1.1
         4.000      11.1         10.000      11.0         16.000       3.1
22.000       1.1
         5.000      11.1         11.000       9.9         17.000       2.1
23.000       1.0

         RUNOFF VOLUME =      .98502 INCHES     =      12.7010 ACRE-FEET
         PEAK DISCHARGE RATE =      11.07 CFS  AT   1.200 HOURS   BASIN AREA =
.2418 SQ. MI.


     PRINT HYD                    ID=62 CODE=10

                                                  HYDROGRAPH FROM AREA SURGE.D1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          2.000      16.6         4.000       3.8
6.000       3.9          8.000       3.7
         1.000        .0          3.000       4.2         5.000       3.8
7.000       3.9          9.000       1.1
```

RUNOFF VOLUME = .98502 INCHES = 4.5165 ACRE-FEET
PEAK DISCHARGE RATE = 60.24 CFS AT 1.500 HOURS BASIN AREA = .0860 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=68 HYD=POND.D1 INFLOW ID=62 CODE=6.3

OUTFLOW	STORAGE	DEPTH
0	0	5471
5.20	2.47	5472
6.60	3.52	5473
7.90	4.72	5474
18.0	6.06	5475

* * * * * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5471.00	.000	.00
.60	.00	5471.00	.000	.00
1.20	2.03	5471.00	.008	.02
1.80	23.44	5471.69	1.696	3.57
2.40	5.80	5471.86	2.120	4.46
3.00	4.16	5471.86	2.132	4.49
3.60	3.89	5471.85	2.108	4.44
4.20	3.83	5471.84	2.081	4.38
4.80	3.84	5471.83	2.055	4.33
5.40	3.86	5471.82	2.032	4.28
6.00	3.89	5471.82	2.014	4.24
6.60	3.90	5471.81	1.998	4.21
7.20	3.83	5471.80	1.982	4.17
7.80	3.73	5471.79	1.963	4.13
8.40	3.58	5471.79	1.941	4.09
9.00	1.10	5471.75	1.855	3.90
9.60	.37	5471.69	1.704	3.59
10.20	.00	5471.62	1.540	3.24
10.80	.00	5471.56	1.387	2.92
11.40	.00	5471.51	1.250	2.63
12.00	.00	5471.46	1.126	2.37
12.60	.00	5471.41	1.014	2.14
13.20	.00	5471.37	.914	1.92
13.80	.00	5471.33	.823	1.73
14.40	.00	5471.30	.742	1.56
15.00	.00	5471.27	.668	1.41
15.60	.00	5471.24	.602	1.27
16.20	.00	5471.22	.542	1.14
16.80	.00	5471.20	.488	1.03

17.40	.00	5471.18	.440	.93
18.00	.00	5471.16	.396	.83
18.60	.00	5471.14	.357	.75
19.20	.00	5471.13	.322	.68
19.80	.00	5471.12	.290	.61
20.40	.00	5471.11	.261	.55
21.00	.00	5471.10	.235	.50
21.60	.00	5471.09	.212	.45
22.20	.00	5471.08	.191	.40
22.80	.00	5471.07	.172	.36
23.40	.00	5471.06	.155	.33
24.00	.00	5471.06	.140	.29
24.60	.00	5471.05	.126	.26
25.20	.00	5471.05	.113	.24
25.80	.00	5471.04	.102	.21
26.40	.00	5471.04	.092	.19
27.00	.00	5471.03	.083	.17
27.60	.00	5471.03	.075	.16
28.20	.00	5471.03	.067	.14
28.80	.00	5471.02	.061	.13
29.40	.00	5471.02	.055	.11
30.00	.00	5471.02	.049	.10
30.60	.00	5471.02	.044	.09
31.20	.00	5471.02	.040	.08
31.80	.00	5471.01	.036	.08
32.40	.00	5471.01	.032	.07
33.00	.00	5471.01	.029	.06

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
33.60	.00	5471.01	.026	.06
34.20	.00	5471.01	.024	.05
34.80	.00	5471.01	.021	.04
35.40	.00	5471.01	.019	.04
36.00	.00	5471.01	.017	.04
36.60	.00	5471.01	.016	.03
37.20	.00	5471.01	.014	.03
37.80	.00	5471.00	.013	.03
38.40	.00	5471.00	.011	.02
39.00	.00	5471.00	.010	.02
39.60	.00	5471.00	.009	.02
40.20	.00	5471.00	.008	.02
40.80	.00	5471.00	.008	.02
41.40	.00	5471.00	.007	.01
42.00	.00	5471.00	.006	.01
42.60	.00	5471.00	.005	.01
43.20	.00	5471.00	.005	.01
43.80	.00	5471.00	.004	.01
44.40	.00	5471.00	.004	.01
45.00	.00	5471.00	.004	.01
45.60	.00	5471.00	.003	.01
46.20	.00	5471.00	.003	.01
46.80	.00	5471.00	.003	.01
47.40	.00	5471.00	.002	.01
48.00	.00	5471.00	.002	.00

PEAK DISCHARGE = 4.495 CFS - PEAK OCCURS AT HOUR 2.70
MAXIMUM WATER SURFACE ELEVATION = 5471.864
MAXIMUM STORAGE = 2.1353 AC-FT INCREMENTAL TIME= .300000HRS

PRINT HYD ID=68 CODE=10

HYDROGRAPH FROM AREA POND.D1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	2.4	24.000	.3
36.000	.0	48.000	.0		
3.000	4.5	15.000	1.4	27.000	.2
39.000	.0	51.000	.0		
6.000	4.2	18.000	.8	30.000	.1
42.000	.0	54.000	.0		
9.000	3.9	21.000	.5	33.000	.1
45.000	.0				

RUNOFF VOLUME = .98529 INCHES = 4.5177 ACRE-FEET
PEAK DISCHARGE RATE = 4.50 CFS AT 2.700 HOURS BASIN AREA = .0860 SQ. MI.

*

*

ADD HYD ID=67 HYD=TOTALD1 ID I=61 II=68

PRINT HYD ID=67 CODE=10

HYDROGRAPH FROM AREA TOTALD1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	11.2	24.000	1.3
36.000	.0	48.000	.0		
1.000	.0	13.000	9.5	25.000	.3
37.000	.0	49.000	.0		
2.000	15.1	14.000	7.5	26.000	.2
38.000	.0	50.000	.0		
3.000	15.6	15.000	6.1	27.000	.2
39.000	.0	51.000	.0		
4.000	15.5	16.000	4.3	28.000	.1
40.000	.0	52.000	.0		
5.000	15.4	17.000	3.1	29.000	.1
41.000	.0	53.000	.0		
6.000	15.3	18.000	2.5	30.000	.1
42.000	.0	54.000	.0		
7.000	15.3	19.000	2.1	31.000	.1
43.000	.0	55.000	.0		
8.000	15.2	20.000	1.8	32.000	.1
44.000	.0	56.000	.0		
9.000	15.0	21.000	1.6	33.000	.1
45.000	.0				
10.000	14.4	22.000	1.5	34.000	.1
46.000	.0				
11.000	12.8	23.000	1.4	35.000	.0
47.000	.0				

RUNOFF VOLUME = .98506 INCHES = 17.2182 ACRE-FEET
PEAK DISCHARGE RATE = 15.57 CFS AT 2.700 HOURS BASIN AREA = .3277 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.018

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.16	.89
.21	.17	.69	1.22
.31	.31	1.61	1.45
.42	.47	2.89	1.62
.52	.65	4.51	1.76
.63	.84	6.44	1.85
.73	1.04	8.62	1.93
.83	1.24	11.03	1.97
.94	1.45	13.59	2.00
1.04	1.66	16.27	2.00
1.15	1.86	18.99	2.00
1.25	2.07	21.70	2.00
1.35	2.27	24.32	2.00
1.46	2.46	26.78	2.00
1.56	2.63	28.98	2.00
1.67	2.80	30.80	2.00
1.77	2.94	32.11	2.00
1.88	3.06	32.65	2.00
2.00	3.14	32.65	2.00

ROUTE MCUNGE ID=69 HYD=RTE.D1 INFLOW ID=67

DT=0.0 L=1470 NS=0 SLOPE=0.018

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 565 TABLE PTS= 19
DT= .100000 QMED= 7.78 CKMED= 11.0919
WIDTH MED= 1.90 NREACH= 1 DX= 1470.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.218	.0	4.08	1.20	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.10	.1	.2	.160	.9	4.19	2.55	1.027	.002	.998	.014	-.013	.0	1.000	.002	-.002
.21	.2	.7	.103	1.2	5.79	3.98	1.418	.004	.997	.174	-.171	.4	.997	.082	-.079
.31	.3	1.6	.080	1.5	7.33	5.12	1.795	.006	.996	.286	-.282	1.1	.996	.234	-.230
.42	.5	2.9	.067	1.6	8.63	6.09	2.113	.008	.995	.359	-.354	2.2	.995	.325	-.321
.52	.7	4.5	.059	1.8	9.73	6.93	2.384	.010	.994	.411	-.405	3.7	.995	.387	-.382
.63	.8	6.4	.053	1.9	10.67	7.67	2.614	.012	.993	.448	-.442	5.4	.994	.431	-.425
.73	1.0	8.6	.049	1.9	11.46	8.32	2.808	.015	.992	.477	-.469	7.5	.993	.464	-.457
.83	1.2	11.0	.046	2.0	12.11	8.89	2.966	.017	.991	.498	-.489	9.8	.992	.489	-.481
.94	1.4	13.6	.043	2.0	12.62	9.40	3.091	.020	.990	.514	-.504	12.3	.991	.507	-.498
1.04	1.7	16.3	.042	2.0	12.97	9.83	3.177	.024	.989	.524	-.513	14.9	.989	.520	-.510
1.15	1.9	19.0	.040	2.0	13.06	10.20	3.198	.027	.987	.527	-.514	17.6	.988	.527	-.515
1.25	2.1	21.7	.039	2.0	12.81	10.50	3.138	.032	.985	.520	-.505	20.3	.986	.525	-.511
1.35	2.3	24.3	.038	2.0	12.21	10.74	2.990	.038	.981	.503	-.485	23.0	.983	.514	-.497
1.46	2.5	26.8	.037	2.0	11.19	10.90	2.740	.045	.976	.472	-.448	25.5	.979	.491	-.470
1.56	2.6	29.0	.037	2.0	9.68	11.00	2.371	.057	.967	.416	-.383	27.9	.972	.449	-.422
1.67	2.8	30.8	.037	2.0	7.54	11.01	1.846	.077	.947	.316	-.263	29.9	.960	.377	-.337
1.77	2.9	32.1	.037	2.0	4.41	10.91	1.081	.137	.876	.099	.025	31.5	.928	.240	-.168
1.88	3.1	32.6	.038	2.0	3.33	10.67	.815	.185	.815	.000	.185	32.4	.845	.049	.106

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 3 TIMES.
AVERAGE NUMBER ITERATIONS = 1.2115
Equations solved using the Ponce correction to C2
*

PRINT HYD ID=69 CODE=0

HYDROGRAPH FROM AREA RTE.D1

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW

HRS	CFS	HRS	CFS	HRS	CFS
	.000	.0	11.400	12.2	22.800	1.4
34.200	.1	45.600	.0			
	.100	.0	11.500	12.0	22.900	1.4
34.300	.0	45.700	.0			
	.200	.0	11.600	11.9	23.000	1.4
34.400	.0	45.800	.0			
	.300	.0	11.700	11.7	23.100	1.4
34.500	.0	45.900	.0			
	.400	.0	11.800	11.6	23.200	1.4
34.600	.0	46.000	.0			
	.500	.0	11.900	11.4	23.300	1.4
34.700	.0	46.100	.0			
	.600	.0	12.000	11.3	23.400	1.3
34.800	.0	46.200	.0			
	.700	.0	12.100	11.1	23.500	1.3
34.900	.0	46.300	.0			
	.800	.0	12.200	11.0	23.600	1.3
35.000	.0	46.400	.0			
	.900	.0	12.300	10.9	23.700	1.3
35.100	.0	46.500	.0			
	1.000	.0	12.400	10.7	23.800	1.3
35.200	.0	46.600	.0			
	1.100	.0	12.500	10.6	23.900	1.3
35.300	.0	46.700	.0			
	1.200	5.3	12.600	10.4	24.000	1.3
35.400	.0	46.800	.0			
	1.300	14.2	12.700	10.3	24.100	1.2
35.500	.0	46.900	.0			
	1.400	10.7	12.800	10.1	24.200	.9
35.600	.0	47.000	.0			
	1.500	13.3	12.900	9.8	24.300	.6
35.700	.0	47.100	.0			
	1.600	12.9	13.000	9.6	24.400	.4
35.800	.0	47.200	.0			
	1.700	14.0	13.100	9.4	24.500	.4
35.900	.0	47.300	.0			
	1.800	14.4	13.200	9.1	24.600	.3
36.000	.0	47.400	.0			
	1.900	14.9	13.300	8.9	24.700	.3
36.100	.0	47.500	.0			
	2.000	15.0	13.400	8.7	24.800	.3
36.200	.0	47.600	.0			
	2.100	15.3	13.500	8.5	24.900	.3
36.300	.0	47.700	.0			
	2.200	15.4	13.600	8.3	25.000	.3
36.400	.0	47.800	.0			
	2.300	15.4	13.700	8.1	25.100	.3
36.500	.0	47.900	.0			
	2.400	15.5	13.800	7.9	25.200	.2
36.600	.0	48.000	.0			
	2.500	15.5	13.900	7.7	25.300	.2
36.700	.0	48.100	.0			
	2.600	15.5	14.000	7.6	25.400	.2
36.800	.0	48.200	.0			
	2.700	15.6	14.100	7.4	25.500	.2
36.900	.0	48.300	.0			
	2.800	15.6	14.200	7.2	25.600	.2
37.000	.0	48.400	.0			
	2.900	15.6	14.300	7.1	25.700	.2
37.100	.0	48.500	.0			
	3.000	15.6	14.400	7.0	25.800	.2

37.200	.0	48.600	.0				
	3.100	15.6	14.500	6.8	25.900	.2	
37.300	.0	48.700	.0				
	3.200	15.5	14.600	6.7	26.000	.2	
37.400	.0	48.800	.0				
	3.300	15.5	14.700	6.6	26.100	.2	
37.500	.0	48.900	.0				
	3.400	15.5	14.800	6.4	26.200	.2	
37.600	.0	49.000	.0				
	3.500	15.5	14.900	6.3	26.300	.2	
37.700	.0	49.100	.0				
	3.600	15.5	15.000	6.2	26.400	.2	
37.800	.0	49.200	.0				
	3.700	15.5	15.100	6.1	26.500	.2	
37.900	.0	49.300	.0				
	3.800	15.5	15.200	6.0	26.600	.2	
38.000	.0	49.400	.0				
	3.900	15.5	15.300	5.8	26.700	.2	
38.100	.0	49.500	.0				
	4.000	15.5	15.400	5.5	26.800	.2	
38.200	.0	49.600	.0				
	4.100	15.5	15.500	5.3	26.900	.2	
38.300	.0	49.700	.0				
	4.200	15.5	15.600	5.0	27.000	.2	
38.400	.0	49.800	.0				
	4.300	15.4	15.700	4.9	27.100	.2	
38.500	.0	49.900	.0				
	4.400	15.4	15.800	4.7	27.200	.2	
38.600	.0	50.000	.0				
	4.500	15.4	15.900	4.5	27.300	.2	
38.700	.0	50.100	.0				
	4.600	15.4	16.000	4.3	27.400	.2	
38.800	.0	50.200	.0				
	4.700	15.4	16.100	4.2	27.500	.2	
38.900	.0	50.300	.0				
	4.800	15.4	16.200	4.0	27.600	.2	
39.000	.0	50.400	.0				
	4.900	15.4	16.300	3.9	27.700	.2	
39.100	.0	50.500	.0				
	5.000	15.4	16.400	3.8	27.800	.2	
39.200	.0	50.600	.0				
	5.100	15.4	16.500	3.7	27.900	.2	
39.300	.0	50.700	.0				
	5.200	15.4	16.600	3.6	28.000	.1	
39.400	.0	50.800	.0				
	5.300	15.4	16.700	3.4	28.100	.1	
39.500	.0	50.900	.0				
	5.400	15.4	16.800	3.3	28.200	.1	
39.600	.0	51.000	.0				
	5.500	15.3	16.900	3.2	28.300	.1	
39.700	.0	51.100	.0				
	5.600	15.3	17.000	3.2	28.400	.1	
39.800	.0	51.200	.0				
	5.700	15.3	17.100	3.1	28.500	.1	
39.900	.0	51.300	.0				
	5.800	15.3	17.200	3.0	28.600	.1	
40.000	.0	51.400	.0				
	5.900	15.3	17.300	2.9	28.700	.1	
40.100	.0	51.500	.0				
	6.000	15.3	17.400	2.8	28.800	.1	
40.200	.0	51.600	.0				
	6.100	15.3	17.500	2.8	28.900	.1	
40.300	.0	51.700	.0				

6.200	15.3	17.600	2.7	29.000	.1
40.400	.0	51.800	.0		
6.300	15.3	17.700	2.7	29.100	.1
40.500	.0	51.900	.0		
6.400	15.3	17.800	2.6	29.200	.1
40.600	.0	52.000	.0		
6.500	15.3	17.900	2.5	29.300	.1
40.700	.0	52.100	.0		
6.600	15.3	18.000	2.5	29.400	.1
40.800	.0	52.200	.0		
6.700	15.3	18.100	2.4	29.500	.1
40.900	.0	52.300	.0		
6.800	15.3	18.200	2.4	29.600	.1
41.000	.0	52.400	.0		
6.900	15.3	18.300	2.3	29.700	.1
41.100	.0	52.500	.0		
7.000	15.3	18.400	2.3	29.800	.1
41.200	.0	52.600	.0		
7.100	15.2	18.500	2.3	29.900	.1
41.300	.0	52.700	.0		
7.200	15.2	18.600	2.2	30.000	.1
41.400	.0	52.800	.0		
7.300	15.2	18.700	2.2	30.100	.1
41.500	.0	52.900	.0		
7.400	15.2	18.800	2.1	30.200	.1
41.600	.0	53.000	.0		
7.500	15.2	18.900	2.1	30.300	.1
41.700	.0	53.100	.0		
7.600	15.2	19.000	2.1	30.400	.1
41.800	.0	53.200	.0		
7.700	15.2	19.100	2.1	30.500	.1
41.900	.0	53.300	.0		
7.800	15.2	19.200	2.0	30.600	.1
42.000	.0	53.400	.0		
7.900	15.2	19.300	2.0	30.700	.1
42.100	.0	53.500	.0		
8.000	15.2	19.400	2.0	30.800	.1
42.200	.0	53.600	.0		
8.100	15.2	19.500	1.9	30.900	.1
42.300	.0	53.700	.0		
8.200	15.2	19.600	1.9	31.000	.1
42.400	.0	53.800	.0		
8.300	15.2	19.700	1.9	31.100	.1
42.500	.0	53.900	.0		
8.400	15.2	19.800	1.9	31.200	.1
42.600	.0	54.000	.0		
8.500	15.1	19.900	1.8	31.300	.1
42.700	.0	54.100	.0		
8.600	15.1	20.000	1.8	31.400	.1
42.800	.0	54.200	.0		
8.700	15.1	20.100	1.8	31.500	.1
42.900	.0	54.300	.0		
8.800	15.1	20.200	1.8	31.600	.1
43.000	.0	54.400	.0		
8.900	15.0	20.300	1.8	31.700	.1
43.100	.0	54.500	.0		
9.000	15.0	20.400	1.7	31.800	.1
43.200	.0	54.600	.0		
9.100	14.9	20.500	1.7	31.900	.1
43.300	.0	54.700	.0		
9.200	14.9	20.600	1.7	32.000	.1
43.400	.0	54.800	.0		
9.300	14.8	20.700	1.7	32.100	.1

```
43.500        .0         54.900        .0
         9.400      14.8          20.800       1.7          32.200        .1
43.600        .0         55.000        .0
         9.500      14.7          20.900       1.6          32.300        .1
43.700        .0         55.100        .0
         9.600      14.7          21.000       1.6          32.400        .1
43.800        .0         55.200        .0
         9.700      14.6          21.100       1.6          32.500        .1
43.900        .0         55.300        .0
         9.800      14.6          21.200       1.6          32.600        .1
44.000        .0         55.400        .0
         9.900      14.5          21.300       1.6          32.700        .1
44.100        .0         55.500        .0
        10.000      14.4          21.400       1.6          32.800        .1
44.200        .0         55.600        .0
        10.100      14.3          21.500       1.6          32.900        .1
44.300        .0         55.700        .0
        10.200      14.1          21.600       1.5          33.000        .1
44.400        .0         55.800        .0
        10.300      13.9          21.700       1.5          33.100        .1
44.500        .0         55.900        .0
        10.400      13.8          21.800       1.5          33.200        .1
44.600        .0         56.000        .0
        10.500      13.6          21.900       1.5          33.300        .1
44.700        .0         56.100        .0
        10.600      13.4          22.000       1.5          33.400        .1
44.800        .0         56.200        .0
        10.700      13.3          22.100       1.5          33.500        .1
44.900        .0         56.300        .0
        10.800      13.1          22.200       1.5          33.600        .1
45.000        .0         56.400        .0
        10.900      13.0          22.300       1.5          33.700        .1
45.100        .0         56.500        .0
        11.000      12.8          22.400       1.4          33.800        .1
45.200        .0
        11.100      12.7          22.500       1.4          33.900        .1
45.300        .0
        11.200      12.5          22.600       1.4          34.000        .1
45.400        .0
        11.300      12.3          22.700       1.4          34.100        .1
45.500        .0

        RUNOFF VOLUME =      .98519 INCHES     =      17.2205 ACRE-FEET
        PEAK DISCHARGE RATE =      15.57 CFS  AT   2.800 HOURS   BASIN AREA =
.3277 SQ. MI.


     *

     *

     ****HERITAGE UNIT 1****

     *

     COMPUTE NM HYD      ID=25  HYD NO=BASIN.D2  DA=.03456 SQ MI

                                      %A=0  %B=28.5  %C=28.5 %D=43.0

                                        TP=-.133 HR  RAIN=-1
```

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 58.804 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .014861 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 52.498 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .019699 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

```
     PRINT HYD           ID=25 CODE=10
```

HYDROGRAPH FROM AREA BASIN.D2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.2	20.000	.2		
1.000	.0	6.000	.3	11.000	.3
16.000	.2	21.000	.2		
2.000	12.0	7.000	.4	12.000	.3
17.000	.2	22.000	.2		
3.000	.6	8.000	.3	13.000	.3
18.000	.2	23.000	.2		
4.000	.3	9.000	.3	14.000	.2
19.000	.2	24.000	.2		

RUNOFF VOLUME = 1.49925 INCHES = 2.7634 ACRE-FEET
PEAK DISCHARGE RATE = 63.65 CFS AT 1.500 HOURS BASIN AREA = .0346 SQ. MI.

```
     *
     ADD HYD                     ID=70 HYD=PONDD1.D2 ID I=69 II=25
     PRINT HYD                   ID=70 CODE=10
```

HYDROGRAPH FROM AREA PONDD1.D2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	11.5	24.000	1.5
36.000	.0	48.000	.0		
1.000	.0	13.000	9.8	25.000	.3

```
37.000        .0         49.000        .0
         2.000      27.0          14.000       7.8          26.000        .2
38.000        .0         50.000        .0
         3.000      16.2          15.000       6.4          27.000        .2
39.000        .0         51.000        .0
         4.000      15.8          16.000       4.6          28.000        .1
40.000        .0         52.000        .0
         5.000      15.7          17.000       3.4          29.000        .1
41.000        .0         53.000        .0
         6.000      15.7          18.000       2.7          30.000        .1
42.000        .0         54.000        .0
         7.000      15.6          19.000       2.3          31.000        .1
43.000        .0         55.000        .0
         8.000      15.5          20.000       2.0          32.000        .1
44.000        .0         56.000        .0
         9.000      15.3          21.000       1.8          33.000        .1
45.000        .0
        10.000      14.7          22.000       1.7          34.000        .1
46.000        .0
        11.000      13.1          23.000       1.6          35.000        .0
47.000        .0

         RUNOFF VOLUME =     1.03422 INCHES     =      19.9838 ACRE-FEET
         PEAK DISCHARGE RATE =      76.93 CFS  AT   1.500 HOURS   BASIN AREA =
.3623 SQ. MI.


     *

     *

     *****UNIVERSE BLVD*****

     *

     COMPUTE NM HYD      ID=26  HYD NO=BASIN.D3  DA=.00580 SQ MI

                                      %A=0  %B=5.0  %C=5.0 %D=90.0

                                        TP=-.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   20.655    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .005220 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.5457    CFS   UNIT VOLUME =    .9989       B =   354.44
  P60 = 1.8400
          AREA =      .000580 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=26 CODE=10
```

HYDROGRAPH FROM AREA BASIN.D3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	3.4	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.26512 INCHES = .7007 ACRE-FEET
PEAK DISCHARGE RATE = 13.18 CFS AT 1.500 HOURS BASIN AREA = .0058 SQ. MI.

*

ADD HYD ID=71 HYD=D1.D2.D3 ID I=70 II=26

PRINT HYD ID=71 CODE=10

HYDROGRAPH FROM AREA D1.D2.D3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	11.6	24.000	1.5
36.000	.0	48.000	.0		
1.000	.0	13.000	9.9	25.000	.3
37.000	.0	49.000	.0		
2.000	30.4	14.000	7.9	26.000	.2
38.000	.0	50.000	.0		
3.000	16.4	15.000	6.5	27.000	.2
39.000	.0	51.000	.0		
4.000	15.9	16.000	4.6	28.000	.1
40.000	.0	52.000	.0		
5.000	15.8	17.000	3.4	29.000	.1
41.000	.0	53.000	.0		
6.000	15.8	18.000	2.8	30.000	.1
42.000	.0	54.000	.0		
7.000	15.7	19.000	2.4	31.000	.1
43.000	.0	55.000	.0		
8.000	15.6	20.000	2.1	32.000	.1
44.000	.0	56.000	.0		
9.000	15.4	21.000	1.9	33.000	.1
45.000	.0				
10.000	14.8	22.000	1.7	34.000	.1
46.000	.0				
11.000	13.2	23.000	1.6	35.000	.0

47.000 .0

RUNOFF VOLUME = 1.05362 INCHES = 20.6845 ACRE-FEET
PEAK DISCHARGE RATE = 90.11 CFS AT 1.500 HOURS BASIN AREA = .3681 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.02

DIA=4.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	1.07	1.78
.42	.69	4.63	2.44
.63	1.25	10.75	2.91
.83	1.90	19.34	3.25
1.04	2.60	30.20	3.51
1.25	3.36	43.09	3.71
1.46	4.15	57.73	3.85
1.67	4.96	73.80	3.94
1.88	5.79	90.98	3.99
2.08	6.62	108.89	4.00
2.29	7.45	127.12	4.00
2.50	8.27	145.25	4.00
2.71	9.06	162.80	4.00
2.92	9.82	179.23	4.00
3.13	10.54	193.93	4.00
3.34	11.20	206.17	4.00
3.54	11.77	214.92	4.00
3.75	12.24	218.52	4.00
4.00	12.57	218.52	4.00

ROUTE MCUNGE ID=72 HYD=RTE.D1 INFLOW ID=71

DT=0.0 L=1150 NS=0 SLOPE=0.02

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=72 CODE=0

HYDROGRAPH FROM AREA RTE.D1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.400	12.5	22.800	1.6
34.200	.1	45.600	.0		
.100	.0	11.500	12.4	22.900	1.6
34.300	.0	45.700	.0		
.200	.0	11.600	12.2	23.000	1.6
34.400	.0	45.800	.0		
.300	.0	11.700	12.1	23.100	1.6
34.500	.0	45.900	.0		
.400	.0	11.800	11.9	23.200	1.6
34.600	.0	46.000	.0		
.500	.0	11.900	11.8	23.300	1.6
34.700	.0	46.100	.0		
.600	.0	12.000	11.6	23.400	1.6
34.800	.0	46.200	.0		
.700	.0	12.100	11.5	23.500	1.6
34.900	.0	46.300	.0		
.800	.0	12.200	11.3	23.600	1.5
35.000	.0	46.400	.0		
.900	.0	12.300	11.2	23.700	1.5
35.100	.0	46.500	.0		
1.000	.0	12.400	11.1	23.800	1.5
35.200	.0	46.600	.0		
1.100	.4	12.500	10.9	23.900	1.5
35.300	.0	46.700	.0		
1.200	10.4	12.600	10.8	24.000	1.5
35.400	.0	46.800	.0		
1.300	33.9	12.700	10.6	24.100	1.3
35.500	.0	46.900	.0		
1.400	76.1	12.800	10.4	24.200	.9
35.600	.0	47.000	.0		
1.500	90.1	12.900	10.2	24.300	.6
35.700	.0	47.100	.0		
1.600	66.3	13.000	9.9	24.400	.4
35.800	.0	47.200	.0		
1.700	48.7	13.100	9.7	24.500	.4
35.900	.0	47.300	.0		
1.800	39.5	13.200	9.5	24.600	.3
36.000	.0	47.400	.0		
1.900	34.2	13.300	9.3	24.700	.3
36.100	.0	47.500	.0		
2.000	30.4	13.400	9.1	24.800	.3
36.200	.0	47.600	.0		
2.100	24.8	13.500	8.8	24.900	.3
36.300	.0	47.700	.0		
2.200	20.9	13.600	8.6	25.000	.3

36.400	.0	47.800	.0				
	2.300	19.4	13.700	8.4	25.100	.3	
36.500	.0	47.900	.0				
	2.400	18.5	13.800	8.3	25.200	.2	
36.600	.0	48.000	.0				
	2.500	17.8	13.900	8.1	25.300	.2	
36.700	.0	48.100	.0				
	2.600	17.3	14.000	7.9	25.400	.2	
36.800	.0	48.200	.0				
	2.700	17.0	14.100	7.7	25.500	.2	
36.900	.0	48.300	.0				
	2.800	16.7	14.200	7.6	25.600	.2	
37.000	.0	48.400	.0				
	2.900	16.5	14.300	7.4	25.700	.2	
37.100	.0	48.500	.0				
	3.000	16.4	14.400	7.3	25.800	.2	
37.200	.0	48.600	.0				
	3.100	16.3	14.500	7.1	25.900	.2	
37.300	.0	48.700	.0				
	3.200	16.2	14.600	7.0	26.000	.2	
37.400	.0	48.800	.0				
	3.300	16.1	14.700	6.9	26.100	.2	
37.500	.0	48.900	.0				
	3.400	16.1	14.800	6.7	26.200	.2	
37.600	.0	49.000	.0				
	3.500	16.0	14.900	6.6	26.300	.2	
37.700	.0	49.100	.0				
	3.600	16.0	15.000	6.5	26.400	.2	
37.800	.0	49.200	.0				
	3.700	15.9	15.100	6.4	26.500	.2	
37.900	.0	49.300	.0				
	3.800	15.9	15.200	6.3	26.600	.2	
38.000	.0	49.400	.0				
	3.900	15.9	15.300	6.1	26.700	.2	
38.100	.0	49.500	.0				
	4.000	15.9	15.400	5.8	26.800	.2	
38.200	.0	49.600	.0				
	4.100	15.9	15.500	5.6	26.900	.2	
38.300	.0	49.700	.0				
	4.200	15.8	15.600	5.4	27.000	.2	
38.400	.0	49.800	.0				
	4.300	15.8	15.700	5.2	27.100	.2	
38.500	.0	49.900	.0				
	4.400	15.8	15.800	5.0	27.200	.2	
38.600	.0	50.000	.0				
	4.500	15.8	15.900	4.8	27.300	.2	
38.700	.0	50.100	.0				
	4.600	15.8	16.000	4.6	27.400	.2	
38.800	.0	50.200	.0				
	4.700	15.8	16.100	4.5	27.500	.2	
38.900	.0	50.300	.0				
	4.800	15.8	16.200	4.3	27.600	.2	
39.000	.0	50.400	.0				
	4.900	15.8	16.300	4.2	27.700	.2	
39.100	.0	50.500	.0				
	5.000	15.8	16.400	4.1	27.800	.2	
39.200	.0	50.600	.0				
	5.100	15.8	16.500	4.0	27.900	.2	
39.300	.0	50.700	.0				
	5.200	15.8	16.600	3.8	28.000	.1	
39.400	.0	50.800	.0				
	5.300	15.8	16.700	3.7	28.100	.1	
39.500	.0	50.900	.0				

5.400	15.8	16.800	3.6	28.200	.1
39.600	.0	51.000	.0		
5.500	15.8	16.900	3.5	28.300	.1
39.700	.0	51.100	.0		
5.600	15.8	17.000	3.4	28.400	.1
39.800	.0	51.200	.0		
5.700	15.8	17.100	3.4	28.500	.1
39.900	.0	51.300	.0		
5.800	15.8	17.200	3.3	28.600	.1
40.000	.0	51.400	.0		
5.900	15.8	17.300	3.2	28.700	.1
40.100	.0	51.500	.0		
6.000	15.8	17.400	3.1	28.800	.1
40.200	.0	51.600	.0		
6.100	15.8	17.500	3.1	28.900	.1
40.300	.0	51.700	.0		
6.200	15.8	17.600	3.0	29.000	.1
40.400	.0	51.800	.0		
6.300	15.8	17.700	2.9	29.100	.1
40.500	.0	51.900	.0		
6.400	15.8	17.800	2.9	29.200	.1
40.600	.0	52.000	.0		
6.500	15.8	17.900	2.8	29.300	.1
40.700	.0	52.100	.0		
6.600	15.8	18.000	2.8	29.400	.1
40.800	.0	52.200	.0		
6.700	15.8	18.100	2.7	29.500	.1
40.900	.0	52.300	.0		
6.800	15.7	18.200	2.7	29.600	.1
41.000	.0	52.400	.0		
6.900	15.7	18.300	2.6	29.700	.1
41.100	.0	52.500	.0		
7.000	15.7	18.400	2.6	29.800	.1
41.200	.0	52.600	.0		
7.100	15.7	18.500	2.5	29.900	.1
41.300	.0	52.700	.0		
7.200	15.7	18.600	2.5	30.000	.1
41.400	.0	52.800	.0		
7.300	15.7	18.700	2.5	30.100	.1
41.500	.0	52.900	.0		
7.400	15.7	18.800	2.4	30.200	.1
41.600	.0	53.000	.0		
7.500	15.7	18.900	2.4	30.300	.1
41.700	.0	53.100	.0		
7.600	15.7	19.000	2.4	30.400	.1
41.800	.0	53.200	.0		
7.700	15.7	19.100	2.3	30.500	.1
41.900	.0	53.300	.0		
7.800	15.7	19.200	2.3	30.600	.1
42.000	.0	53.400	.0		
7.900	15.7	19.300	2.3	30.700	.1
42.100	.0	53.500	.0		
8.000	15.6	19.400	2.2	30.800	.1
42.200	.0	53.600	.0		
8.100	15.6	19.500	2.2	30.900	.1
42.300	.0	53.700	.0		
8.200	15.6	19.600	2.2	31.000	.1
42.400	.0	53.800	.0		
8.300	15.6	19.700	2.2	31.100	.1
42.500	.0	53.900	.0		
8.400	15.6	19.800	2.1	31.200	.1
42.600	.0	54.000	.0		
8.500	15.6	19.900	2.1	31.300	.1

42.700	.0	54.100	.0						
	8.600	15.6	20.000	2.1	31.400	.1			
42.800	.0	54.200	.0						
	8.700	15.5	20.100	2.0	31.500	.1			
42.900	.0	54.300	.0						
	8.800	15.5	20.200	2.0	31.600	.1			
43.000	.0	54.400	.0						
	8.900	15.5	20.300	2.0	31.700	.1			
43.100	.0	54.500	.0						
	9.000	15.4	20.400	2.0	31.800	.1			
43.200	.0	54.600	.0						
	9.100	15.4	20.500	2.0	31.900	.1			
43.300	.0	54.700	.0						
	9.200	15.3	20.600	2.0	32.000	.1			
43.400	.0	54.800	.0						
	9.300	15.3	20.700	1.9	32.100	.1			
43.500	.0	54.900	.0						
	9.400	15.2	20.800	1.9	32.200	.1			
43.600	.0	55.000	.0						
	9.500	15.1	20.900	1.9	32.300	.1			
43.700	.0	55.100	.0						
	9.600	15.1	21.000	1.9	32.400	.1			
43.800	.0	55.200	.0						
	9.700	15.0	21.100	1.9	32.500	.1			
43.900	.0	55.300	.0						
	9.800	15.0	21.200	1.9	32.600	.1			
44.000	.0	55.400	.0						
	9.900	14.9	21.300	1.8	32.700	.1			
44.100	.0	55.500	.0						
	10.000	14.8	21.400	1.8	32.800	.1			
44.200	.0	55.600	.0						
	10.100	14.7	21.500	1.8	32.900	.1			
44.300	.0	55.700	.0						
	10.200	14.5	21.600	1.8	33.000	.1			
44.400	.0	55.800	.0						
	10.300	14.3	21.700	1.8	33.100	.1			
44.500	.0	55.900	.0						
	10.400	14.2	21.800	1.8	33.200	.1			
44.600	.0	56.000	.0						
	10.500	14.0	21.900	1.7	33.300	.1			
44.700	.0	56.100	.0						
	10.600	13.8	22.000	1.7	33.400	.1			
44.800	.0	56.200	.0						
	10.700	13.6	22.100	1.7	33.500	.1			
44.900	.0	56.300	.0						
	10.800	13.5	22.200	1.7	33.600	.1			
45.000	.0	56.400	.0						
	10.900	13.3	22.300	1.7	33.700	.1			
45.100	.0	56.500	.0						
	11.000	13.2	22.400	1.7	33.800	.1			
45.200	.0								
	11.100	13.0	22.500	1.7	33.900	.1			
45.300	.0								
	11.200	12.9	22.600	1.7	34.000	.1			
45.400	.0								
	11.300	12.7	22.700	1.7	34.100	.1			
45.500	.0								

RUNOFF VOLUME = 1.05362 INCHES = 20.6845 ACRE-FEET
PEAK DISCHARGE RATE = 90.11 CFS AT 1.500 HOURS BASIN AREA = .3681 SQ. MI.

```
     *
     *
     ****HERITAGE UNIT 2*****
     *
     COMPUTE NM HYD      ID=27  HYD NO=BASIN.D4  DA=.01961 SQ MI
                                        %A=0  %B=28.5  %C=28.5 %D=43.0
                                          TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   33.366    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .008432 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   29.788    CFS   UNIT VOLUME =    1.007       B =   354.44
  P60 = 1.8400
          AREA =      .011178 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=27 CODE=10

                                          HYDROGRAPH FROM AREA BASIN.D4


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0           5.000        .2         10.000        .2
15.000        .1          20.000        .1
          1.000        .0           6.000        .2         11.000        .2
16.000        .1          21.000        .1
          2.000       6.8           7.000        .2         12.000        .2
17.000        .1          22.000        .1
          3.000        .4           8.000        .2         13.000        .1
18.000        .1          23.000        .1
          4.000        .2           9.000        .2         14.000        .1
19.000        .1          24.000        .1

         RUNOFF VOLUME =     1.49925 INCHES     =       1.5680 ACRE-FEET
         PEAK DISCHARGE RATE =      36.12 CFS  AT   1.500 HOURS   BASIN AREA =
.0196 SQ. MI.


     *
```

```
     *
     ADD HYD                        ID=73 HYD=D1D2D3.D4 ID I=72 II=27
     PRINT HYD                      ID=73 CODE=10

                                                HYDROGRAPH FROM AREA D1D2D3.D4

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0          12.000      11.8         24.000       1.6
36.000        .0          48.000        .0
          1.000        .0          13.000      10.1         25.000        .3
37.000        .0          49.000        .0
          2.000      37.2          14.000       8.0         26.000        .2
38.000        .0          50.000        .0
          3.000      16.7          15.000       6.6         27.000        .2
39.000        .0          51.000        .0
          4.000      16.1          16.000       4.8         28.000        .1
40.000        .0          52.000        .0
          5.000      16.0          17.000       3.6         29.000        .1
41.000        .0          53.000        .0
          6.000      16.0          18.000       2.9         30.000        .1
42.000        .0          54.000        .0
          7.000      15.9          19.000       2.5         31.000        .1
43.000        .0          55.000        .0
          8.000      15.8          20.000       2.2         32.000        .1
44.000        .0          56.000        .0
          9.000      15.6          21.000       2.0         33.000        .1
45.000        .0
         10.000      15.0          22.000       1.8         34.000        .1
46.000        .0
         11.000      13.4          23.000       1.7         35.000        .0
47.000        .0

          RUNOFF VOLUME =     1.07615 INCHES     =      22.2524 ACRE-FEET
          PEAK DISCHARGE RATE =     126.23 CFS  AT   1.500 HOURS   BASIN AREA =
.3877 SQ. MI.


     *
     *
     COMPUTE NM HYD      ID=28  HYD NO=BASIN.D5  DA=.01367 SQ MI
                                          %A=0  %B=23.0  %C=23.0 %D=54.0
                                            TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   29.209    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .007382 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
```

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 16.758 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
AREA = .006288 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=28 CODE=10

HYDROGRAPH FROM AREA BASIN.D5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.2	11.000	.1
16.000	.1	21.000	.1		
2.000	5.5	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
3.000	.3	8.000	.2	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.2	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.67850 INCHES = 1.2237 ACRE-FEET
PEAK DISCHARGE RATE = 26.55 CFS AT 1.500 HOURS BASIN AREA = .0137 SQ. MI.

*

ADD HYD ID=74 HYD=D1234.D5 ID I=73 II=28

PRINT HYD ID=74 CODE=10

HYDROGRAPH FROM AREA D1234.D5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	11.9	24.000	1.7
36.000	.0	48.000	.0		
1.000	.0	13.000	10.2	25.000	.3
37.000	.0	49.000	.0		
2.000	42.8	14.000	8.2	26.000	.2
38.000	.0	50.000	.0		
3.000	17.0	15.000	6.7	27.000	.2
39.000	.0	51.000	.0		
4.000	16.2	16.000	4.9	28.000	.1

```
40.000        .0         52.000        .0
         5.000      16.1         17.000       3.7         29.000        .1
41.000        .0         53.000        .0
         6.000      16.1         18.000       3.0         30.000        .1
42.000        .0         54.000        .0
         7.000      16.1         19.000       2.6         31.000        .1
43.000        .0         55.000        .0
         8.000      16.0         20.000       2.3         32.000        .1
44.000        .0         56.000        .0
         9.000      15.8         21.000       2.1         33.000        .1
45.000        .0
        10.000      15.1         22.000       1.9         34.000        .1
46.000        .0
        11.000      13.5         23.000       1.8         35.000        .0
47.000        .0

         RUNOFF VOLUME =     1.09667 INCHES     =      23.4762 ACRE-FEET
         PEAK DISCHARGE RATE =     152.79 CFS  AT   1.500 HOURS   BASIN AREA =
.4014 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=25  HYD NO=BASIN.D6  DA=.00781 SQ MI

                                        %A=0.0  %B=18.0  %C=18.0 %D=64.0

                                        TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   19.734    CFS   UNIT VOLUME =    1.029       B =   526.28
  P60 = 1.8400
          AREA =      .004998 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   7.4759    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .002812 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=25 CODE=10


                                              HYDROGRAPH FROM AREA BASIN.D6


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .1         10.000        .1
```

```
15.000        .1         20.000        .1
          1.000        .0           6.000        .1         11.000        .1
16.000        .1         21.000        .1
          2.000       3.6           7.000        .1         12.000        .1
17.000        .1         22.000        .1
          3.000        .2           8.000        .1         13.000        .1
18.000        .1         23.000        .1
          4.000        .1           9.000        .1         14.000        .1
19.000        .1         24.000        .1

          RUNOFF VOLUME =     1.84145 INCHES     =        .7670 ACRE-FEET
          PEAK DISCHARGE RATE =      15.89 CFS  AT   1.500 HOURS   BASIN AREA =
.0078 SQ. MI.


     *

     ADD HYD                     ID=75 HYD=D12345.D6 ID I=74 II=25

     PRINT HYD                    ID=75 CODE=10

                                                HYDROGRAPH FROM AREA D12345.D6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          12.000      12.0         24.000       1.8
36.000        .0          48.000        .0
          1.000        .0          13.000      10.3         25.000        .3
37.000        .0          49.000        .0
          2.000      46.3          14.000       8.3         26.000        .2
38.000        .0          50.000        .0
          3.000      17.2          15.000       6.8         27.000        .2
39.000        .0          51.000        .0
          4.000      16.3          16.000       5.0         28.000        .1
40.000        .0          52.000        .0
          5.000      16.2          17.000       3.7         29.000        .1
41.000        .0          53.000        .0
          6.000      16.3          18.000       3.1         30.000        .1
42.000        .0          54.000        .0
          7.000      16.2          19.000       2.6         31.000        .1
43.000        .0          55.000        .0
          8.000      16.1          20.000       2.4         32.000        .1
44.000        .0          56.000        .0
          9.000      15.9          21.000       2.2         33.000        .1
45.000        .0
         10.000      15.2          22.000       2.0         34.000        .1
46.000        .0
         11.000      13.6          23.000       1.9         35.000        .0
47.000        .0

          RUNOFF VOLUME =     1.11088 INCHES     =      24.2432 ACRE-FEET
          PEAK DISCHARGE RATE =     168.67 CFS  AT   1.500 HOURS   BASIN AREA =
.4092 SQ. MI.


     *
```

```
     *
     ************************************************************
     DIVIDE HYD                    ID=75 Q=13.80 ID I=31  HYD NO=BYPASS.D
                                                          ID II=32 HYD NO=SURGE.D
     PRINT HYD                     ID=31 CODE=10

                                                  HYDROGRAPH FROM AREA BYPASS.D

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          12.000      12.0         24.000       1.8
36.000        .0          48.000        .0
          1.000        .0          13.000      10.3         25.000        .3
37.000        .0          49.000        .0
          2.000      13.8          14.000       8.3         26.000        .2
38.000        .0          50.000        .0
          3.000      13.8          15.000       6.8         27.000        .2
39.000        .0          51.000        .0
          4.000      13.8          16.000       5.0         28.000        .1
40.000        .0          52.000        .0
          5.000      13.8          17.000       3.7         29.000        .1
41.000        .0          53.000        .0
          6.000      13.8          18.000       3.1         30.000        .1
42.000        .0          54.000        .0
          7.000      13.8          19.000       2.6         31.000        .1
43.000        .0          55.000        .0
          8.000      13.8          20.000       2.4         32.000        .1
44.000        .0          56.000        .0
          9.000      13.8          21.000       2.2         33.000        .1
45.000        .0
         10.000      13.8          22.000       2.0         34.000        .1
46.000        .0
         11.000      13.6          23.000       1.9         35.000        .0
47.000        .0

         RUNOFF VOLUME =     1.11088 INCHES     =      17.0021 ACRE-FEET
         PEAK DISCHARGE RATE =      13.80 CFS  AT   1.200 HOURS   BASIN AREA =
.2870 SQ. MI.


     PRINT HYD                     ID=32 CODE=10

                                                  HYDROGRAPH FROM AREA SURGE.D

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          3.000       3.4          6.000       2.5
9.000       2.1
          1.000        .0          4.000       2.5          7.000       2.4
10.000       1.4
```

2.000 32.5 5.000 2.4 8.000 2.3

RUNOFF VOLUME = 1.11088 INCHES = 7.2410 ACRE-FEET
PEAK DISCHARGE RATE = 154.87 CFS AT 1.500 HOURS BASIN AREA = .1222 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=50 HYD=POND.D INFLOW ID=32 CODE=6.3

OUTFLOW		STORAGE	DEPTH
0		0	5429.46
1.86	0.30	5431	
2.96	1.01	5432	
3.99	1.91	5433	
4.97	2.91	5434	
5.89	4.00	5435	
6.78	5.17	5436	
7.50	6.24	5436.85	
130.0	7.80	5438	

* * * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5429.46	.000	.00
.60	.00	5429.46	.000	.00
1.20	1.90	5429.50	.008	.05
1.80	51.43	5435.17	4.200	6.04
2.40	7.71	5435.92	5.079	6.71
3.00	3.43	5435.85	4.993	6.65
3.60	2.66	5435.70	4.814	6.51
4.20	2.44	5435.53	4.620	6.36
4.80	2.40	5435.37	4.428	6.22
5.40	2.41	5435.21	4.243	6.07
6.00	2.46	5435.06	4.066	5.94
6.60	2.48	5434.91	3.898	5.80
7.20	2.41	5434.76	3.735	5.67
7.80	2.33	5434.61	3.575	5.53
8.40	2.26	5434.47	3.418	5.40
9.00	2.06	5434.32	3.261	5.27
9.60	1.71	5434.17	3.097	5.13
10.20	1.11	5434.01	2.920	4.98
10.80	.09	5433.80	2.707	4.77
11.40	.00	5433.57	2.477	4.55
12.00	.00	5433.35	2.257	4.33

12.60	.00	5433.14	2.047	4.12
13.20	.00	5432.93	1.847	3.92
13.80	.00	5432.72	1.659	3.70
14.40	.00	5432.52	1.480	3.50
15.00	.00	5432.33	1.311	3.30
15.60	.00	5432.16	1.152	3.12
16.20	.00	5431.99	1.002	2.95
16.80	.00	5431.79	.861	2.73
17.40	.00	5431.61	.731	2.53
18.00	.00	5431.44	.610	2.34
18.60	.00	5431.28	.498	2.17
19.20	.00	5431.13	.395	2.01
19.80	.00	5431.00	.299	1.85
20.40	.00	5430.59	.220	1.36
21.00	.00	5430.29	.162	1.00
21.60	.00	5430.07	.119	.74
22.20	.00	5429.91	.087	.54
22.80	.00	5429.79	.064	.40
23.40	.00	5429.70	.047	.29
24.00	.00	5429.64	.035	.22
24.60	.00	5429.59	.026	.16
25.20	.00	5429.56	.019	.12
25.80	.00	5429.53	.014	.09
26.40	.00	5429.51	.010	.06
27.00	.00	5429.50	.007	.05
27.60	.00	5429.49	.005	.03
28.20	.00	5429.48	.004	.03
28.80	.00	5429.48	.003	.02
29.40	.00	5429.47	.002	.01
30.00	.00	5429.47	.002	.01
30.60	.00	5429.47	.001	.01
31.20	.00	5429.46	.001	.01
31.80	.00	5429.46	.001	.00
32.40	.00	5429.46	.000	.00

PEAK DISCHARGE = 6.711 CFS - PEAK OCCURS AT HOUR 2.40
MAXIMUM WATER SURFACE ELEVATION = 5435.922
MAXIMUM STORAGE = 5.0788 AC-FT INCREMENTAL TIME= .300000HRS

*

*

PRINT HYD ID=50 CODE=10

HYDROGRAPH FROM AREA POND.D

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	9.000	5.3	18.000	2.3
3.000	6.6	12.000	4.3	21.000	1.0
6.000	5.9	15.000	3.3	24.000	.2
27.000	.0	30.000	.0	33.000	.0

RUNOFF VOLUME = 1.11035 INCHES = 7.2375 ACRE-FEET
PEAK DISCHARGE RATE = 6.71 CFS AT 2.400 HOURS BASIN AREA = .1222 SQ. MI.

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.0057

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.09	.89
.21	.17	.39	1.22
.31	.31	.90	1.45
.42	.47	1.63	1.62
.52	.65	2.54	1.76
.63	.84	3.62	1.85
.73	1.04	4.85	1.93
.83	1.24	6.21	1.97
.94	1.45	7.65	2.00
1.04	1.66	9.15	2.00
1.15	1.86	10.69	2.00
1.25	2.07	12.21	2.00
1.35	2.27	13.69	2.00
1.46	2.46	15.07	2.00
1.56	2.63	16.31	2.00
1.67	2.80	17.33	2.00
1.77	2.94	18.07	2.00
1.88	3.06	18.37	2.00
2.00	3.14	18.37	2.00

ROUTE MCUNGE ID=51 HYD=RTE.D INFLOW ID=50

DT=0.0 L=1530 NS=0 SLOPE=0.0057

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 115 TABLE PTS= 19
DT= .300000 QMED= 3.36 CKMED= 5.7521

WIDTH MED= 1.83 NREACH= 1 DX= 1530.00

DEPTH (FT)	AREA Q-M (SQ FT) (CFS)	Q C1-M (CFS)	TRAVEL C2-M TIME(HR)	WIDTH C3-M (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3
.00	.0	.0	.403	.0	1.42	.68	1.000	.000	1.000	.000	.000
.10	.1	.1	.296	.9	2.36	1.43	1.666	.005	.996	.251	-.248
.21	.2	.4	.190	1.2	3.26	2.24	2.300	.011	.993	.396	-.389
.31	.3	.9	.147	1.5	4.12	2.88	2.911	.017	.991	.491	-.482
.42	.5	1.6	.124	1.6	4.86	3.43	3.427	.024	.989	.551	-.540
.52	.7	2.5	.109	1.8	5.48	3.90	3.867	.030	.988	.592	-.579
.63	.8	3.6	.098	1.9	6.01	4.32	4.240	.037	.986	.621	-.607
.73	1.0	4.9	.091	1.9	6.45	4.68	4.554	.045	.984	.643	-.627
.83	1.2	6.2	.085	2.0	6.82	5.00	4.811	.053	.982	.659	-.641
.94	1.4	7.6	.080	2.0	7.10	5.29	5.013	.062	.980	.671	-.650
1.04	1.7	9.2	.077	2.0	7.30	5.53	5.154	.072	.977	.679	-.656
1.15	1.9	10.7	.074	2.0	7.35	5.74	5.187	.083	.973	.681	-.654
1.25	2.1	12.2	.072	2.0	7.21	5.91	5.090	.097	.969	.677	-.645
1.35	2.3	13.7	.070	2.0	6.87	6.04	4.849	.114	.962	.665	-.626
1.46	2.5	15.1	.069	2.0	6.30	6.14	4.445	.137	.951	.642	-.593
1.56	2.6	16.3	.069	2.0	5.45	6.19	3.845	.172	.932	.601	-.533
1.67	2.8	17.3	.069	2.0	4.24	6.19	2.994	.234	.889	.527	-.416
1.77	2.9	18.1	.069	2.0	2.48	6.14	1.754	.417	.737	.369	-.106
1.88	3.1	18.4	.071	2.0	1.42	6.00	.999	.744	.458	.271	.271

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 2 TIMES.
AVERAGE NUMBER ITERATIONS = 1.1326

DEPTH (FT)	AREA Q-M (SQ FT) (CFS)	Q C1-M (CFS)	TRAVEL C2-M TIME(HR)	WIDTH C3-M (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3
.00	.0	.0	.403	.0	1.42	.68	1.000	.000	1.000	.000	.000
.10	.1	.1	.296	.9	1.43	1.43	1.008	.008	.992	.008	.000
.21	.2	.4	.190	1.2	1.45	2.24	1.025	.025	.975	.025	.000
.31	.3	.9	.147	1.5	1.48	2.88	1.048	.048	.954	.046	.000
.42	.5	1.6	.124	1.6	1.52	3.43	1.075	.075	.930	.070	.000
.52	.7	2.5	.109	1.8	1.57	3.90	1.106	.106	.904	.096	.000
.63	.8	3.6	.098	1.9	1.61	4.32	1.139	.139	.878		

.122	.000		3.1	.891	.109	.000					
	.73	1.0	4.9	.091	1.9		1.66	4.68	1.174	.174	.852
.148	.000		4.2	.865	.135	.000					
	.83	1.2	6.2	.085	2.0		1.71	5.00	1.210	.210	.826
.174	.000		5.5	.839	.161	.000					
	.94	1.4	7.6	.080	2.0		1.77	5.29	1.248	.248	.801
.199	.000		6.9	.813	.187	.000					
	1.04	1.7	9.2	.077	2.0		1.82	5.53	1.288	.288	.777
.223	.000		8.4	.789	.211	.000					
	1.15	1.9	10.7	.074	2.0		1.88	5.74	1.326	.326	.754
.246	.000		9.9	.765	.235	.000					
	1.25	2.1	12.2	.072	2.0		1.93	5.91	1.363	.363	.734
.266	.000		11.4	.744	.256	.000					
	1.35	2.3	13.7	.070	2.0		1.98	6.04	1.397	.397	.716
.284	.000		12.9	.725	.275	.000					
	1.46	2.5	15.1	.069	2.0		2.02	6.14	1.427	.427	.701
.299	.000		14.4	.708	.292	.000					
	1.56	2.6	16.3	.069	2.0		2.06	6.19	1.454	.454	.688
.312	.000		15.7	.694	.306	.000					
	1.67	2.8	17.3	.069	2.0		2.09	6.19	1.475	.475	.678
.322	.000		16.8	.683	.317	.000					
	1.77	2.9	18.1	.069	2.0		2.11	6.14	1.491	.491	.671
.329	.000		17.7	.674	.326	.000					
	1.88	3.1	18.4	.071	2.0		1.42	6.00	.999	.744	.458
.271	.271		18.2	.475	.271	.254					

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 1 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0268
Equations solved with two passes: first using the Ponce correction to C1, second using the Fread correction to C1, C2 and C3
*

PRINT HYD ID=51 CODE=0

HYDROGRAPH FROM AREA RTE.D

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	7.200	5.7	14.400	3.6
.300	.0	7.500	5.7	14.700	3.5
.600	.0	7.800	5.6	15.000	3.4
.900	.0	8.100	5.5	15.300	3.3
1.200	.0	8.400	5.5	15.600	3.2
1.500	.3	8.700	5.4	15.900	3.1
1.800	4.3	9.000	5.3	16.200	3.0
2.100	6.1	9.300	5.3	16.500	2.9
2.400	6.6	9.600	5.2	16.800	2.8
2.700	6.7	9.900	5.1	17.100	2.7
3.000	6.7	10.200	5.0	17.400	2.6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
21.600	.9	28.800	.0		
21.900	.7	29.100	.0		
22.200	.6	29.400	.0		
22.500	.5	29.700	.0		
22.800	.5	30.000	.0		
23.100	.4	30.300	.0		
23.400	.3	30.600	.0		
23.700	.3	30.900	.0		
24.000	.3	31.200	.0		
24.300	.2	31.500	.0		
24.600	.2	31.800	.0		

3.300	6.6	10.500	5.0	17.700	2.5
24.900	.2	32.100	.0		
3.600	6.6	10.800	4.9	18.000	2.4
25.200	.1	32.400	.0		
3.900	6.5	11.100	4.8	18.300	2.3
25.500	.1	32.700	.0		
4.200	6.4	11.400	4.6	18.600	2.2
25.800	.1	33.000	.0		
4.500	6.3	11.700	4.5	18.900	2.2
26.100	.1	33.300	.0		
4.800	6.3	12.000	4.4	19.200	2.1
26.400	.1	33.600	.0		
5.100	6.2	12.300	4.3	19.500	2.0
26.700	.1	33.900	.0		
5.400	6.1	12.600	4.2	19.800	1.9
27.000	.1	34.200	.0		
5.700	6.1	12.900	4.1	20.100	1.8
27.300	.0	34.500	.0		
6.000	6.0	13.200	4.0	20.400	1.6
27.600	.0	34.800	.0		
6.300	5.9	13.500	3.9	20.700	1.4
27.900	.0				
6.600	5.9	13.800	3.8	21.000	1.2
28.200	.0				
6.900	5.8	14.100	3.7	21.300	1.0
28.500	.0				

RUNOFF VOLUME = 1.10969 INCHES = 7.2332 ACRE-FEET
PEAK DISCHARGE RATE = 6.71 CFS AT 2.700 HOURS BASIN AREA = .1222 SQ. MI.

```
*
*
ADD HYD                    ID=75 HYD=BYPASS.RTE.D ID I=51 II=31
PRINT HYD                  ID=75 CODE=10
```

HYDROGRAPH FROM AREA BYPASS.RTE.D

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	16.4	24.000	2.0
36.000	.0	48.000	.0		
1.000	.0	13.000	14.4	25.000	.4
37.000	.0	49.000	.0		
2.000	19.3	14.000	12.0	26.000	.3
38.000	.0	50.000	.0		
3.000	20.5	15.000	10.2	27.000	.2
39.000	.0	51.000	.0		
4.000	20.3	16.000	8.0	28.000	.2
40.000	.0	52.000	.0		
5.000	20.0	17.000	6.5	29.000	.1
41.000	.0	53.000	.0		
6.000	19.8	18.000	5.5	30.000	.1
42.000	.0	54.000	.0		

```
          7.000      19.6          19.000        4.8          31.000         .1
43.000         .0          55.000         .0
          8.000      19.3          20.000        4.2          32.000         .1
44.000         .0          56.000         .0
          9.000      19.1          21.000        3.3          33.000         .1
45.000         .0
         10.000      18.9          22.000        2.7          34.000         .1
46.000         .0
         11.000      18.4          23.000        2.3          35.000         .0
47.000         .0

         RUNOFF VOLUME =     1.11051 INCHES     =      24.2351 ACRE-FEET
         PEAK DISCHARGE RATE =      20.51 CFS  AT   2.700 HOURS   BASIN AREA =
.4092 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=20  HYD NO=BASIN.C  DA=.01278 SQ MI

                                          %A=0  %B=25.0  %C=25.0 %D=50.0

                                          TP=-.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   25.285    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .006390 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   17.029    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .006390 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=20 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.C


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000         .0          5.000         .1         10.000         .1
15.000         .1          20.000         .1
         1.000         .0          6.000         .1         11.000         .1
16.000         .1          21.000         .1
         2.000        4.9          7.000         .2         12.000         .1
17.000         .1          22.000         .1
```

3.000 .3 8.000 .1 13.000 .1
18.000 .1 23.000 .1
4.000 .1 9.000 .1 14.000 .1
19.000 .1 24.000 .1

RUNOFF VOLUME = 1.61332 INCHES = 1.0996 ACRE-FEET
PEAK DISCHARGE RATE = 24.36 CFS AT 1.500 HOURS BASIN AREA = .0128 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.027

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.57	1.33
.31	.39	2.50	1.83
.47	.71	5.80	2.18
.63	1.07	10.43	2.44
.78	1.46	16.29	2.63
.94	1.89	23.25	2.78
1.09	2.33	31.14	2.89
1.25	2.79	39.82	2.96
1.41	3.26	49.09	2.99
1.56	3.72	58.75	3.00
1.72	4.19	68.58	3.00
1.88	4.65	78.36	3.00
2.03	5.10	87.83	3.00
2.19	5.53	96.69	3.00
2.35	5.93	104.63	3.00
2.50	6.30	111.23	3.00
2.66	6.62	115.95	3.00
2.81	6.89	117.89	3.00

3.00 7.07 117.89
3.00

ROUTE MCUNGE ID=76 HYD=RTE.C INFLOW ID=20

DT=0.0 L=1020 NS=0 SLOPE=0.027

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 248 TABLE PTS= 19
DT= .100000 QMED= 12.18 CKMED= 14.7527
WIDTH MED= 2.50 NREACH= 1 DX= 1020.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.094	.0	2.83	1.93	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.16	.1	.6	.069	1.3	6.73	4.09	2.376	.002	.999	.408	-.407	.1	.999	.242	-.241
.31	.4	2.5	.044	1.8	9.29	6.38	3.279	.005	.998	.533	-.531	1.4	.998	.463	-.461
.47	.7	5.8	.034	2.2	11.76	8.22	4.152	.008	.997	.612	-.609	4.0	.997	.576	-.573
.63	1.1	10.4	.029	2.4	13.85	9.77	4.887	.011	.996	.661	-.657	8.0	.996	.639	-.635
.78	1.5	16.3	.025	2.6	15.62	11.12	5.514	.014	.996	.694	-.689	13.2	.996	.679	-.675
.94	1.9	23.2	.023	2.8	17.13	12.31	6.046	.018	.995	.717	-.712	19.7	.995	.706	-.702
1.09	2.3	31.1	.021	2.9	18.40	13.35	6.494	.021	.994	.734	-.728	27.1	.995	.726	-.721
1.25	2.8	39.8	.020	3.0	19.44	14.27	6.861	.025	.994	.746	-.740	35.4	.994	.741	-.735
1.41	3.3	49.1	.019	3.0	20.26	15.08	7.149	.029	.993	.755	-.748	44.4	.993	.752	-.745
1.56	3.7	58.7	.018	3.0	20.82	15.77	7.349	.034	.992	.761	-.753	53.9	.992	.759	-.752
1.72	4.2	68.6	.017	3.0	20.96	16.36	7.396	.040	.991	.763	-.754	63.6	.991	.763	-.754
1.88	4.7	78.4	.017	3.0	20.56	16.85	7.258	.046	.989	.759	-.748	73.4	.990	.762	-.752
2.03	5.1	87.8	.016	3.0	19.59	17.23	6.915	.054	.986	.749	-.735	83.1	.988	.755	-.743
2.19	5.5	96.7	.016	3.0	17.96	17.50	6.338	.065	.982	.730	-.712	92.3	.985	.741	-.726
2.35	5.9	104.6	.016	3.0	15.54	17.65	5.483	.082	.975	.695	-.671	100.7	.980	.716	-.696
2.50	6.3	111.2	.016	3.0	12.10	17.66	4.269	.111	.959	.628	-.587	107.9	.969	.670	-.639
2.66	6.6	116.0	.016	3.0	7.09	17.51	2.501	.198	.893	.459	-.352	113.6	.942	.574	-.515
2.81	6.9	117.9	.017	3.0	4.04	17.12	1.425	.353	.746	.280	-.026	116.9	.756	.286	-.042

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 7 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0492

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.094	.0	2.83	1.93	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000

.16	.1	.6	.069	1.3	2.85	4.09	1.005	.005	.995	
.005	.000	.1	.998	.002	.000					
.31	.4	2.5	.044	1.8	2.88	6.38	1.017	.017	.983	
.017	.000	1.4	.989	.011	.000					
.47	.7	5.8	.034	2.2	2.93	8.22	1.033	.033	.968	
.032	.000	4.0	.976	.024	.000					
.63	1.1	10.4	.029	2.4	2.98	9.77	1.052	.052	.950	
.050	.000	8.0	.959	.041	.000					
.78	1.5	16.3	.025	2.6	3.04	11.12	1.074	.074	.931	
.069	.000	13.2	.941	.059	.000					
.94	1.9	23.2	.023	2.8	3.11	12.31	1.098	.098	.911	
.089	.000	19.7	.921	.079	.000					
1.09	2.3	31.1	.021	2.9	3.18	13.35	1.123	.123	.890	
.110	.000	27.1	.901	.099	.000					
1.25	2.8	39.8	.020	3.0	3.26	14.27	1.150	.150	.870	
.130	.000	35.4	.880	.120	.000					
1.41	3.3	49.1	.019	3.0	3.34	15.08	1.178	.178	.849	
.151	.000	44.4	.859	.141	.000					
1.56	3.7	58.7	.018	3.0	3.42	15.77	1.208	.208	.828	
.172	.000	53.9	.838	.162	.000					
1.72	4.2	68.6	.017	3.0	3.50	16.36	1.237	.237	.808	
.192	.000	63.6	.818	.182	.000					
1.88	4.7	78.4	.017	3.0	3.58	16.85	1.265	.265	.791	
.209	.000	73.4	.799	.201	.000					
2.03	5.1	87.8	.016	3.0	3.66	17.23	1.291	.291	.775	
.225	.000	83.1	.783	.217	.000					
2.19	5.5	96.7	.016	3.0	3.72	17.50	1.314	.314	.761	
.239	.000	92.3	.768	.232	.000					
2.35	5.9	104.6	.016	3.0	3.78	17.65	1.335	.335	.749	
.251	.000	100.7	.755	.245	.000					
2.50	6.3	111.2	.016	3.0	3.83	17.66	1.352	.352	.740	
.260	.000	107.9	.744	.256	.000					
2.66	6.6	116.0	.016	3.0	3.86	17.51	1.363	.363	.733	
.267	.000	113.6	.737	.263	.000					
2.81	6.9	117.9	.017	3.0	3.88	17.12	1.368	.368	.731	
.269	.000	116.9	.732	.268	.000					

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 3 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0357

Equations solved with two passes: first using the Ponce correction to C1, second using the Fread correction to C1, C2 and C3

*

PRINT HYD ID=76 CODE=0

HYDROGRAPH FROM AREA RTE.C

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	5.100	.1	10.200	.1
15.300	.1	20.400	.1			
	.100	.0	5.200	.1	10.300	.1
15.400	.1	20.500	.1			
	.200	.0	5.300	.1	10.400	.1
15.500	.1	20.600	.1			
	.300	.0	5.400	.1	10.500	.1
15.600	.1	20.700	.1			
	.400	.0	5.500	.1	10.600	.1
15.700	.1	20.800	.1			
	.500	.0	5.600	.1	10.700	.1

15.800	.1	20.900	.1				
	.600	.0	5.700	.1	10.800	.1	
15.900	.1	21.000	.1				
	.700	.0	5.800	.1	10.900	.1	
16.000	.1	21.100	.1				
	.800	.0	5.900	.1	11.000	.1	
16.100	.1	21.200	.1				
	.900	.0	6.000	.1	11.100	.1	
16.200	.1	21.300	.1				
	1.000	.0	6.100	.1	11.200	.1	
16.300	.1	21.400	.1				
	1.100	.0	6.200	.2	11.300	.1	
16.400	.1	21.500	.1				
	1.200	.1	6.300	.2	11.400	.1	
16.500	.1	21.600	.1				
	1.300	1.7	6.400	.2	11.500	.1	
16.600	.1	21.700	.1				
	1.400	6.9	6.500	.2	11.600	.1	
16.700	.1	21.800	.1				
	1.500	21.0	6.600	.2	11.700	.1	
16.800	.1	21.900	.1				
	1.600	23.7	6.700	.2	11.800	.1	
16.900	.1	22.000	.1				
	1.700	16.5	6.800	.2	11.900	.1	
17.000	.1	22.100	.1				
	1.800	10.9	6.900	.2	12.000	.1	
17.100	.1	22.200	.1				
	1.900	7.9	7.000	.2	12.100	.1	
17.200	.1	22.300	.1				
	2.000	6.1	7.100	.2	12.200	.1	
17.300	.1	22.400	.1				
	2.100	4.9	7.200	.2	12.300	.1	
17.400	.1	22.500	.1				
	2.200	3.0	7.300	.2	12.400	.1	
17.500	.1	22.600	.1				
	2.300	1.7	7.400	.1	12.500	.1	
17.600	.1	22.700	.1				
	2.400	1.2	7.500	.1	12.600	.1	
17.700	.1	22.800	.1				
	2.500	.9	7.600	.1	12.700	.1	
17.800	.1	22.900	.1				
	2.600	.7	7.700	.1	12.800	.1	
17.900	.1	23.000	.1				
	2.700	.6	7.800	.1	12.900	.1	
18.000	.1	23.100	.1				
	2.800	.5	7.900	.1	13.000	.1	
18.100	.1	23.200	.1				
	2.900	.4	8.000	.1	13.100	.1	
18.200	.1	23.300	.1				
	3.000	.3	8.100	.1	13.200	.1	
18.300	.1	23.400	.1				
	3.100	.3	8.200	.1	13.300	.1	
18.400	.1	23.500	.1				
	3.200	.2	8.300	.1	13.400	.1	
18.500	.1	23.600	.1				
	3.300	.2	8.400	.1	13.500	.1	
18.600	.1	23.700	.1				
	3.400	.2	8.500	.1	13.600	.1	
18.700	.1	23.800	.1				
	3.500	.2	8.600	.1	13.700	.1	
18.800	.1	23.900	.1				
	3.600	.2	8.700	.1	13.800	.1	
18.900	.1	24.000	.1				

```
         3.700        .1          8.800        .1         13.900        .1
19.000        .1         24.100        .1
         3.800        .1          8.900        .1         14.000        .1
19.100        .1         24.200        .0
         3.900        .1          9.000        .1         14.100        .1
19.200        .1         24.300        .0
         4.000        .1          9.100        .1         14.200        .1
19.300        .1         24.400        .0
         4.100        .1          9.200        .1         14.300        .1
19.400        .1         24.500        .0
         4.200        .1          9.300        .1         14.400        .1
19.500        .1         24.600        .0
         4.300        .1          9.400        .1         14.500        .1
19.600        .1         24.700        .0
         4.400        .1          9.500        .1         14.600        .1
19.700        .1         24.800        .0
         4.500        .1          9.600        .1         14.700        .1
19.800        .1         24.900        .0
         4.600        .1          9.700        .1         14.800        .1
19.900        .1         25.000        .0
         4.700        .1          9.800        .1         14.900        .1
20.000        .1
         4.800        .1          9.900        .1         15.000        .1
20.100        .1
         4.900        .1         10.000        .1         15.100        .1
20.200        .1
         5.000        .1         10.100        .1         15.200        .1
20.300        .1

         RUNOFF VOLUME =     1.60827 INCHES     =       1.0962 ACRE-FEET
         PEAK DISCHARGE RATE =      23.74 CFS  AT   1.600 HOURS   BASIN AREA =
.0128 SQ. MI.


     *

     *

     ******SANTA FE UNIT 1*******

     *

     COMPUTE NM HYD      ID=20  HYD NO=BASIN.F1  DA=.02208 SQ MI

                                        %A=0  %B=21.7  %C=21.8 %D=56.5

                                        TP=-.133 HR  RAIN=-1


         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   49.364    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .012475 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


         K =   .118228HR    TP =   .133000HR    K/TP RATIO =   .888929     SHAPE
CONSTANT, N =  3.990137
         UNIT PEAK =   25.602    CFS   UNIT VOLUME =    1.007       B =   354.51
```

```
  P60 = 1.8400
        AREA =      .009605 SQ MI    IA =    .42483 INCHES    INF =   1.03952
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=20 CODE=10

                                                HYDROGRAPH FROM AREA BASIN.F1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0           5.000        .3         10.000        .2
15.000        .2          20.000        .2
          1.000        .0           6.000        .3         11.000        .2
16.000        .2          21.000        .2
          2.000       9.2           7.000        .3         12.000        .2
17.000        .2          22.000        .2
          3.000        .5           8.000        .3         13.000        .2
18.000        .2          23.000        .1
          4.000        .2           9.000        .3         14.000        .2
19.000        .2          24.000        .1

         RUNOFF VOLUME =     1.71939 INCHES     =       2.0247 ACRE-FEET
         PEAK DISCHARGE RATE =      43.39 CFS  AT   1.500 HOURS   BASIN AREA =
.0221 SQ. MI.


     *

     ADD HYD                     ID=77 HYD=C.F1 ID I=76 II=20

     PRINT HYD                   ID=77 CODE=10

                                                HYDROGRAPH FROM AREA C.F1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0           6.000        .4         12.000        .3
18.000        .3          24.000        .2
          1.000        .0           7.000        .5         13.000        .3
19.000        .3          25.000        .0
          2.000      15.3           8.000        .4         14.000        .3
20.000        .2
          3.000        .8           9.000        .4         15.000        .3
21.000        .2
          4.000        .4          10.000        .4         16.000        .3
22.000        .2
          5.000        .4          11.000        .4         17.000        .3
23.000        .2

         RUNOFF VOLUME =     1.67860 INCHES     =       3.1208 ACRE-FEET
         PEAK DISCHARGE RATE =      64.42 CFS  AT   1.500 HOURS   BASIN AREA =
.0349 SQ. MI.
```

```
     *
     *
     *****UNIVERSE BLVD******
     *
     COMPUTE NM HYD      ID=21  HYD NO=BASIN.F2  DA=.00573 SQ MI
                                          %A=0  %B=5.0  %C=5.0 %D=90.0
                                          TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   20.406    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .005157 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.5270    CFS   UNIT VOLUME =    .9989       B =   354.44
  P60 = 1.8400
          AREA =      .000573 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=21 CODE=10


                                          HYDROGRAPH FROM AREA BASIN.F2


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0          6.000        .1         11.000        .1
16.000        .1         21.000        .1
         2.000       3.4          7.000        .1         12.000        .1
17.000        .1         22.000        .1
         3.000        .2          8.000        .1         13.000        .1
18.000        .1         23.000        .1
         4.000        .1          9.000        .1         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     2.26512 INCHES     =        .6922 ACRE-FEET
         PEAK DISCHARGE RATE =      13.02 CFS  AT   1.500 HOURS   BASIN AREA =
.0057 SQ. MI.
```

```
     *
     ADD HYD                        ID=78 HYD=CF1.F2 ID I=77 II=21
     PRINT HYD                      ID=78 CODE=10

                                                HYDROGRAPH FROM AREA CF1.F2

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000         .0          6.000        .6         12.000        .4
18.000        .3          24.000        .3
         1.000         .0          7.000        .6         13.000        .4
19.000        .3          25.000        .0
         2.000       18.7          8.000        .5         14.000        .4
20.000        .3
         3.000        1.0          9.000        .5         15.000        .4
21.000        .3
         4.000         .5         10.000        .5         16.000        .4
22.000        .3
         5.000         .5         11.000        .5         17.000        .3
23.000        .3

         RUNOFF VOLUME =     1.76139 INCHES     =       3.8130 ACRE-FEET
         PEAK DISCHARGE RATE =      77.44 CFS  AT   1.500 HOURS   BASIN AREA =
.0406 SQ. MI.


     *
     *
     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.023
                                          DIA=3.0  N=0.013

                                      RATING CURVE PIPE SECTION  1.0
                                         WATER       FLOW        FLOW        MAX
WIDTH                                   SURFACE      AREA        RATE
                                          ELEV        SQ FT       CFS         FT
                                            .00         .00         .00
.00
                                            .16         .14         .53
1.33
                                            .31         .39        2.30
1.83
                                            .47         .71        5.35
2.18
                                            .63        1.07        9.63
2.44
                                            .78        1.46       15.04
2.63
                                            .94        1.89       21.45
2.78
                                           1.09        2.33       28.74
```

2.89
1.25 2.79 36.75
2.96
1.41 3.26 45.30
2.99
1.56 3.72 54.22
3.00
1.72 4.19 63.30
3.00
1.88 4.65 72.33
3.00
2.03 5.10 81.06
3.00
2.19 5.53 89.25
3.00
2.35 5.93 96.57
3.00
2.50 6.30 102.66
3.00
2.66 6.62 107.02
3.00
2.81 6.89 108.81
3.00
3.00 7.07 108.81
3.00

ROUTE MCUNGE ID=79 HYD=RTE.CF1F2 INFLOW ID=78

DT=0.0 L=1560 NS=0 SLOPE=0.023

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 251 TABLE PTS= 19
DT= .100000 QMED= 38.72 CKMED= 18.3657
WIDTH MED= 2.97 NREACH= 1 DX= 1560.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.156	.0	4.33	1.78	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.16	.1	.5	.115	1.3	6.21	3.78	1.434	.002	.999	.179	-.177	.1	1.000	.028	-.028
.31	.4	2.3	.074	1.8	8.58	5.89	1.979	.004	.997	.330	-.327	1.3	.998	.244	-.241
.47	.7	5.4	.057	2.2	10.86	7.59	2.505	.006	.996	.430	-.427	3.7	.997	.384	-.381
.63	1.1	9.6	.048	2.4	12.78	9.02	2.949	.009	.996	.495	-.490	7.4	.996	.465	-.461
.78	1.5	15.0	.042	2.6	14.42	10.27	3.327	.011	.995	.539	-.534	12.2	.995	.519	-.514
.94	1.9	21.5	.038	2.8	15.81	11.36	3.649	.014	.994	.571	-.565	18.2	.995	.557	-.551
1.09	2.3	28.7	.035	2.9	16.98	12.32	3.919	.016	.993	.595	-.588	25.0	.994	.584	-.578
1.25	2.8	36.8	.033	3.0	17.94	13.17	4.140	.019	.993	.612	-.605	32.7	.993	.605	-.598
1.41	3.3	45.3	.031	3.0	18.69	13.92	4.314	.023	.992	.625	-.617	41.0	.992	.620	-.612
1.56	3.7	54.2	.030	3.0	19.22	14.56	4.435	.026	.990	.634	-.624	49.7	.991	.631	-.622
1.72	4.2	63.3	.029	3.0	19.34	15.10	4.463	.030	.989						

```
 .636  -.625     58.7    .990   .636  -.626
         1.88     4.7    72.3    .028    3.0    18.98  15.55    4.380   .035   .987
 .631  -.618     67.8    .988   .635  -.623
         2.03     5.1    81.1    .027    3.0    18.08  15.90    4.173   .042   .984
 .616  -.600     76.7    .986   .625  -.611
         2.19     5.5    89.2    .027    3.0    16.57  16.15    3.825   .050   .979
 .590  -.569     85.1    .982   .606  -.588
         2.35     5.9    96.6    .027    3.0    14.34  16.29    3.309   .063   .971
 .542  -.514     92.9    .976   .571  -.547
         2.50     6.3   102.7    .027    3.0    11.16  16.30    2.576   .085   .953
 .454  -.407     99.6    .965   .508  -.473
         2.66     6.6   107.0    .027    3.0     6.54  16.16    1.509   .152   .886
 .248  -.134    104.9    .935   .385  -.320
         2.81     6.9   108.8    .027    3.0     3.73  15.80     .860   .271   .745
 .062   .193    107.9    .755   .067   .178
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   4 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0662
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=79 CODE=0

                                                  HYDROGRAPH FROM AREA RTE.CF1F2

          TIME      FLOW            TIME      FLOW            TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           5.100        .5          10.200        .5
15.300        .4          20.400        .3
          .100        .0           5.200        .5          10.300        .5
15.400        .4          20.500        .3
          .200        .0           5.300        .5          10.400        .5
15.500        .4          20.600        .3
          .300        .0           5.400        .5          10.500        .5
15.600        .4          20.700        .3
          .400        .0           5.500        .5          10.600        .5
15.700        .4          20.800        .3
          .500        .0           5.600        .5          10.700        .5
15.800        .4          20.900        .3
          .600        .0           5.700        .5          10.800        .5
15.900        .4          21.000        .3
          .700        .0           5.800        .5          10.900        .5
16.000        .4          21.100        .3
          .800        .0           5.900        .5          11.000        .5
16.100        .4          21.200        .3
          .900        .0           6.000        .6          11.100        .5
16.200        .4          21.300        .3
         1.000        .0           6.100        .6          11.200        .5
16.300        .4          21.400        .3
         1.100        .0           6.200        .6          11.300        .4
16.400        .4          21.500        .3
         1.200       1.5           6.300        .6          11.400        .4
16.500        .4          21.600        .3
         1.300      13.1           6.400        .6          11.500        .4
16.600        .4          21.700        .3
         1.400      45.0           6.500        .6          11.600        .4
16.700        .4          21.800        .3
         1.500      76.9           6.600        .6          11.700        .4
16.800        .4          21.900        .3
         1.600      68.5           6.700        .6          11.800        .4
```

16.900	.4	22.000	.3				
	1.700	46.4	6.800	.6	11.900	.4	
17.000	.4	22.100	.3				
	1.800	32.7	6.900	.6	12.000	.4	
17.100	.3	22.200	.3				
	1.900	24.8	7.000	.6	12.100	.4	
17.200	.3	22.300	.3				
	2.000	19.8	7.100	.6	12.200	.4	
17.300	.3	22.400	.3				
	2.100	14.6	7.200	.6	12.300	.4	
17.400	.3	22.500	.3				
	2.200	8.7	7.300	.6	12.400	.4	
17.500	.3	22.600	.3				
	2.300	5.5	7.400	.6	12.500	.4	
17.600	.3	22.700	.3				
	2.400	4.0	7.500	.6	12.600	.4	
17.700	.3	22.800	.3				
	2.500	3.1	7.600	.6	12.700	.4	
17.800	.3	22.900	.3				
	2.600	2.4	7.700	.6	12.800	.4	
17.900	.3	23.000	.3				
	2.700	1.9	7.800	.5	12.900	.4	
18.000	.3	23.100	.3				
	2.800	1.5	7.900	.5	13.000	.4	
18.100	.3	23.200	.3				
	2.900	1.3	8.000	.5	13.100	.4	
18.200	.3	23.300	.3				
	3.000	1.1	8.100	.5	13.200	.4	
18.300	.3	23.400	.3				
	3.100	.9	8.200	.5	13.300	.4	
18.400	.3	23.500	.3				
	3.200	.8	8.300	.5	13.400	.4	
18.500	.3	23.600	.3				
	3.300	.7	8.400	.5	13.500	.4	
18.600	.3	23.700	.3				
	3.400	.7	8.500	.5	13.600	.4	
18.700	.3	23.800	.3				
	3.500	.6	8.600	.5	13.700	.4	
18.800	.3	23.900	.3				
	3.600	.6	8.700	.5	13.800	.4	
18.900	.3	24.000	.3				
	3.700	.6	8.800	.5	13.900	.4	
19.000	.3	24.100	.3				
	3.800	.5	8.900	.5	14.000	.4	
19.100	.3	24.200	.2				
	3.900	.5	9.000	.5	14.100	.4	
19.200	.3	24.300	.1				
	4.000	.5	9.100	.5	14.200	.4	
19.300	.3	24.400	.0				
	4.100	.5	9.200	.5	14.300	.4	
19.400	.3	24.500	.0				
	4.200	.5	9.300	.5	14.400	.4	
19.500	.3	24.600	.0				
	4.300	.5	9.400	.5	14.500	.4	
19.600	.3	24.700	.0				
	4.400	.5	9.500	.5	14.600	.4	
19.700	.3	24.800	.0				
	4.500	.5	9.600	.5	14.700	.4	
19.800	.3	24.900	.0				
	4.600	.5	9.700	.5	14.800	.4	
19.900	.3	25.000	.0				
	4.700	.5	9.800	.5	14.900	.4	
20.000	.3	25.100	.0				

```
         4.800        .5          9.900        .5         15.000        .4
20.100        .3
         4.900        .5         10.000        .5         15.100        .4
20.200        .3
         5.000        .5         10.100        .5         15.200        .4
20.300        .3

         RUNOFF VOLUME =     1.76280 INCHES     =       3.8161 ACRE-FEET
         PEAK DISCHARGE RATE =      76.94 CFS  AT   1.500 HOURS   BASIN AREA =
.0406 SQ. MI.


     *

     *

     *****TAOS AT THE TRAILS****

     *

     COMPUTE NM HYD      ID=22  HYD NO=BASIN.F3  DA=.03563 SQ MI

                                          %A=0  %B=21.7  %C=21.8 %D=56.5

                                          TP=-.133 HR  RAIN=-1


         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   79.657    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .020131 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


         K =   .118228HR    TP =   .133000HR    K/TP RATIO =   .888929     SHAPE
CONSTANT, N =  3.990137
         UNIT PEAK =   41.313    CFS   UNIT VOLUME =    1.007       B =   354.51
  P60 = 1.8400
         AREA =      .015499 SQ MI    IA =    .42483 INCHES    INF =   1.03952
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=22 CODE=10


                                          HYDROGRAPH FROM AREA BASIN.F3


         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          5.000        .4         10.000        .4
15.000        .3         20.000        .3
         1.000        .0          6.000        .5         11.000        .4
16.000        .3         21.000        .3
         2.000      14.9          7.000        .5         12.000        .4
17.000        .3         22.000        .2
```

```
         3.000        .8          8.000        .4          13.000        .3
18.000        .3          23.000        .2
         4.000        .4          9.000        .4          14.000        .3
19.000        .3          24.000        .2

         RUNOFF VOLUME =     1.71938 INCHES     =       3.2673 ACRE-FEET
         PEAK DISCHARGE RATE =      70.02 CFS  AT   1.500 HOURS   BASIN AREA =
.0356 SQ. MI.


     *

     ADD HYD                      ID=70 HYD=CF1F2.F3 ID I=79 II=22

     PRINT HYD                    ID=70 CODE=10

                                                HYDROGRAPH FROM AREA CF1F2.F3

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000         .0          6.000       1.0          12.000        .8
18.000        .6          24.000        .5
         1.000         .0          7.000       1.1          13.000        .8
19.000        .6          25.000        .0
         2.000       34.7          8.000       1.0          14.000        .7
20.000        .6
         3.000        1.9          9.000        .9          15.000        .7
21.000        .6
         4.000         .9         10.000        .9          16.000        .7
22.000        .5
         5.000         .9         11.000        .8          17.000        .6
23.000        .5

         RUNOFF VOLUME =     1.74248 INCHES     =       7.0833 ACRE-FEET
         PEAK DISCHARGE RATE =     146.95 CFS  AT   1.500 HOURS   BASIN AREA =
.0762 SQ. MI.


     *

     *

     ******SANTA FE III********

     *

     COMPUTE NM HYD      ID=23  HYD NO=BASIN.F4  DA=.03892 SQ MI

                                          %A=0  %B=25.0  %C=25.0 %D=50.0

                                          TP=-.133 HR  RAIN=-1

         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   77.002    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
```

AREA = .019460 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 51.860 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .019460 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

```
     PRINT HYD           ID=23 CODE=10
```

HYDROGRAPH FROM AREA BASIN.F4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.4	10.000	.4
15.000	.3	20.000	.3		
1.000	.0	6.000	.5	11.000	.4
16.000	.3	21.000	.2		
2.000	14.9	7.000	.5	12.000	.4
17.000	.3	22.000	.2		
3.000	.8	8.000	.4	13.000	.3
18.000	.3	23.000	.2		
4.000	.4	9.000	.4	14.000	.3
19.000	.3	24.000	.2		

RUNOFF VOLUME = 1.61331 INCHES = 3.3488 ACRE-FEET
PEAK DISCHARGE RATE = 74.16 CFS AT 1.500 HOURS BASIN AREA = .0389 SQ. MI.

```
     *
     *
     ADD HYD                     ID=71 HYD=CF1F2F3.F4 ID I=70 II=23
     PRINT HYD                   ID=71 CODE=10
```

HYDROGRAPH FROM AREA CF1F2F3.F4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	1.5	12.000	1.2
18.000	.9	24.000	.7		
1.000	.0	7.000	1.5	13.000	1.1
19.000	.9	25.000	.0		
2.000	49.6	8.000	1.4	14.000	1.0

20.000 .8
3.000 2.7 9.000 1.3 15.000 1.0
21.000 .8
4.000 1.3 10.000 1.3 16.000 1.0
22.000 .8
5.000 1.3 11.000 1.2 17.000 .9
23.000 .7

RUNOFF VOLUME = 1.69882 INCHES = 10.4320 ACRE-FEET
PEAK DISCHARGE RATE = 221.12 CFS AT 1.500 HOURS BASIN AREA = .1151 SQ. MI.

*

ADD HYD ID=70 HYD=CF1F2F3F4.D ID I=71 II=75

PRINT HYD ID=70 CODE=10

HYDROGRAPH FROM AREA CF1F2F3F4.D

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	17.6	24.000	2.8
36.000	.0	48.000	.0		
1.000	.0	13.000	15.5	25.000	.4
37.000	.0	49.000	.0		
2.000	68.9	14.000	13.0	26.000	.3
38.000	.0	50.000	.0		
3.000	23.2	15.000	11.2	27.000	.2
39.000	.0	51.000	.0		
4.000	21.6	16.000	9.0	28.000	.2
40.000	.0	52.000	.0		
5.000	21.3	17.000	7.4	29.000	.1
41.000	.0	53.000	.0		
6.000	21.3	18.000	6.4	30.000	.1
42.000	.0	54.000	.0		
7.000	21.1	19.000	5.6	31.000	.1
43.000	.0	55.000	.0		
8.000	20.8	20.000	5.0	32.000	.1
44.000	.0	56.000	.0		
9.000	20.5	21.000	4.1	33.000	.1
45.000	.0				
10.000	20.2	22.000	3.5	34.000	.1
46.000	.0				
11.000	19.6	23.000	3.0	35.000	.0
47.000	.0				

RUNOFF VOLUME = 1.23970 INCHES = 34.6672 ACRE-FEET
PEAK DISCHARGE RATE = 235.18 CFS AT 1.500 HOURS BASIN AREA = .5243 SQ. MI.

*

*

```
     *
     COMPUTE NM HYD      ID=24  HYD NO=BASIN.F5  DA=.01852  SQ MI
                                          %A=0  %B=12.5  %C=12.5 %D=75.0
                                          TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   54.962    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .013890 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   12.339    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .004630 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=24 CODE=10

                                                HYDROGRAPH FROM AREA BASIN.F5

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .3         10.000        .3
15.000        .2         20.000        .2
         1.000        .0          6.000        .3         11.000        .3
16.000        .2         21.000        .2
         2.000       9.5          7.000        .3         12.000        .3
17.000        .2         22.000        .2
         3.000        .5          8.000        .3         13.000        .2
18.000        .2         23.000        .2
         4.000        .3          9.000        .3         14.000        .2
19.000        .2         24.000        .2

        RUNOFF VOLUME =     2.02070 INCHES     =       1.9959 ACRE-FEET
        PEAK DISCHARGE RATE =      39.52 CFS  AT   1.500 HOURS   BASIN AREA =
.0185 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=25  HYD NO=BASIN.J10  DA=.00628 SQ MI
                                          %A=0  %B=5.0  %C=5.0 %D=90.0
```

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 22.365 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .005652 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 1.6736 CFS UNIT VOLUME = 1.001 B = 354.44 P60 = 1.8400
AREA = .000628 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=25 CODE=10

HYDROGRAPH FROM AREA BASIN.J10

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	3.7	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.26512 INCHES = .7587 ACRE-FEET
PEAK DISCHARGE RATE = 14.27 CFS AT 1.500 HOURS BASIN AREA = .0063 SQ. MI.

*

*

COMPUTE NM HYD ID=26 HYD NO=BASIN.J11 DA=.00733 SQ MI

%A=0 %B=5.0 %C=5.0 %D=90.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 26.104 CFS UNIT VOLUME = 1.030 B = 526.28

```
  P60 = 1.8400
          AREA =      .006597 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.9534    CFS   UNIT VOLUME =    1.001       B =   354.44
  P60 = 1.8400
          AREA =      .000733 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=26 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.J11


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0           5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0           6.000        .2         11.000        .1
16.000        .1         21.000        .1
         2.000       4.3           7.000        .2         12.000        .1
17.000        .1         22.000        .1
         3.000        .2           8.000        .1         13.000        .1
18.000        .1         23.000        .1
         4.000        .1           9.000        .1         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     2.26512 INCHES     =        .8855 ACRE-FEET
         PEAK DISCHARGE RATE =      16.65 CFS  AT   1.500 HOURS   BASIN AREA =
.0073 SQ. MI.


     *

     ADD HYD                     ID=23 HYD=J10.J11 ID I=25 II=26

     PRINT HYD                   ID=23 CODE=10


                                                HYDROGRAPH FROM AREA J10.J11


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0           5.000        .2         10.000        .2
15.000        .2         20.000        .2
         1.000        .0           6.000        .3         11.000        .2
16.000        .2         21.000        .2
         2.000       8.0           7.000        .3         12.000        .2
17.000        .2         22.000        .2
```

3.000 .4 8.000 .3 13.000 .2
18.000 .2 23.000 .1
4.000 .2 9.000 .3 14.000 .2
19.000 .2 24.000 .1

RUNOFF VOLUME = 2.26508 INCHES = 1.6441 ACRE-FEET
PEAK DISCHARGE RATE = 30.92 CFS AT 1.500 HOURS BASIN AREA =
.0136 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.004

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.22	1.33
.31	.39	.96	1.83
.47	.71	2.23	2.18
.63	1.07	4.02	2.44
.78	1.46	6.27	2.63
.94	1.89	8.95	2.78
1.09	2.33	11.99	2.89
1.25	2.79	15.33	2.96
1.41	3.26	18.89	2.99
1.56	3.72	22.61	3.00
1.72	4.19	26.40	3.00
1.88	4.65	30.16	3.00
2.03	5.10	33.81	3.00
2.19	5.53	37.22	3.00
2.35	5.93	40.27	3.00
2.50	6.30	42.81	3.00
2.66	6.62	44.63	3.00
2.81	6.89	45.38	3.00

3.00 7.07 45.38
3.00

ROUTE MCUNGE ID=10 HYD=RTE.J10J11 INFLOW ID=23

DT=0.0 L=1450 NS=0 SLOPE=0.004

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 248 TABLE PTS= 19
DT= .100000 QMED= 15.46 CKMED= 7.6590
WIDTH MED= 2.96 NREACH= 1 DX= 1450.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.348	.0	4.03	.74	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.16	.1	.2	.256	1.3	4.00	1.57	.993	.007	.993	.000	.007	.0	.999	.000	.001
.31	.4	1.0	.164	1.8	3.94	2.46	.977	.023	.977	.000	.023	.5	.986	.000	.014
.47	.7	2.2	.127	2.2	4.53	3.16	1.124	.039	.964	.075	-.039	1.5	.968	.019	.013
.63	1.1	4.0	.107	2.4	5.33	3.76	1.323	.053	.955	.158	-.114	3.1	.959	.120	-.079
.78	1.5	6.3	.094	2.6	6.01	4.28	1.493	.068	.947	.219	-.166	5.1	.951	.191	-.142
.94	1.9	8.9	.085	2.8	6.59	4.74	1.637	.084	.938	.265	-.203	7.6	.942	.244	-.187
1.09	2.3	12.0	.078	2.9	7.08	5.14	1.758	.101	.929	.301	-.230	10.4	.934	.285	-.218
1.25	2.8	15.3	.073	3.0	7.48	5.49	1.858	.119	.920	.328	-.248	13.6	.925	.316	-.241
1.41	3.3	18.9	.069	3.0	7.80	5.80	1.936	.140	.909	.350	-.259	17.1	.915	.341	-.255
1.56	3.7	22.6	.066	3.0	8.01	6.07	1.990	.162	.897	.365	-.263	20.7	.904	.359	-.263
1.72	4.2	26.4	.064	3.0	8.07	6.30	2.003	.188	.882	.373	-.255	24.5	.890	.371	-.261
1.88	4.7	30.2	.062	3.0	7.92	6.49	1.965	.219	.862	.372	-.234	28.3	.873	.374	-.247
2.03	5.1	33.8	.061	3.0	7.54	6.63	1.872	.258	.835	.361	-.196	32.0	.851	.368	-.219
2.19	5.5	37.2	.060	3.0	6.91	6.74	1.716	.309	.795	.339	-.134	35.5	.818	.352	-.170
2.35	5.9	40.3	.059	3.0	5.98	6.79	1.485	.387	.730	.304	-.034	38.7	.769	.324	-.093
2.50	6.3	42.8	.059	3.0	4.66	6.80	1.156	.528	.606	.255	.139	41.5	.684	.282	.034
2.66	6.6	44.6	.060	3.0	2.73	6.74	.677	.941	.281	.236	.483	43.7	.503	.234	.263
2.81	6.9	45.4	.061	3.0	1.55	6.59	.386	1.678	-.095	.347	.748	45.0	.091	.292	.617

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 7 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0458

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.348	.0	4.03	.74	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000

	.16	.1	.2	.256	1.3	4.00	1.57	.993	.007	.993
.000	.007	.0	.999	.000	.001					
	.31	.4	1.0	.164	1.8	3.94	2.46	.977	.023	.977
.000	.023	.5	.986	.000	.014					
	.47	.7	2.2	.127	2.2	4.20	3.16	1.042	.042	.960
.040	.000	1.5	.968	.019	.013					
	.63	1.1	4.0	.107	2.4	4.29	3.76	1.066	.066	.938
.062	.000	3.1	.949	.051	.000					
	.78	1.5	6.3	.094	2.6	4.40	4.28	1.093	.093	.915
.085	.000	5.1	.926	.074	.000					
	.94	1.9	8.9	.085	2.8	4.52	4.74	1.123	.123	.891
.109	.000	7.6	.903	.097	.000					
	1.09	2.3	12.0	.078	2.9	4.65	5.14	1.154	.154	.867
.133	.000	10.4	.878	.122	.000					
	1.25	2.8	15.3	.073	3.0	4.78	5.49	1.187	.187	.843
.157	.000	13.6	.854	.146	.000					
	1.41	3.3	18.9	.069	3.0	4.92	5.80	1.221	.221	.819
.181	.000	17.1	.831	.169	.000					
	1.56	3.7	22.6	.066	3.0	5.06	6.07	1.257	.257	.796
.204	.000	20.7	.807	.193	.000					
	1.72	4.2	26.4	.064	3.0	5.20	6.30	1.292	.292	.774
.226	.000	24.5	.785	.215	.000					
	1.88	4.7	30.2	.062	3.0	5.34	6.49	1.325	.325	.755
.245	.000	28.3	.764	.236	.000					
	2.03	5.1	33.8	.061	3.0	5.46	6.63	1.356	.356	.738
.262	.000	32.0	.746	.254	.000					
	2.19	5.5	37.2	.060	3.0	5.57	6.74	1.384	.384	.723
.277	.000	35.5	.730	.270	.000					
	2.35	5.9	40.3	.059	3.0	5.67	6.79	1.408	.408	.710
.290	.000	38.7	.716	.284	.000					
	2.50	6.3	42.8	.059	3.0	4.66	6.80	1.156	.528	.606
.255	.139	41.5	.684	.282	.034					
	2.66	6.6	44.6	.060	3.0	2.73	6.74	.677	.941	.281
.236	.483	43.7	.503	.234	.263					
	2.81	6.9	45.4	.061	3.0	1.80	6.59	.447	1.447	.000
.309	.691	45.0	.139	.273	.588					

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 6 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0441
Equations solved with two passes: first using the Ponce correction to C1, second using the Fread correction to C1, C2 and C3
*

PRINT HYD ID=10 CODE=0

HYDROGRAPH FROM AREA RTE.J10J11

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	5.200	.2	10.400	.2
15.600	.2	20.800	.2			
	.100	.0	5.300	.3	10.500	.2
15.700	.2	20.900	.2			
	.200	.0	5.400	.3	10.600	.2
15.800	.2	21.000	.2			
	.300	.0	5.500	.3	10.700	.2
15.900	.2	21.100	.2			
	.400	.0	5.600	.3	10.800	.2
16.000	.2	21.200	.2			
	.500	.0	5.700	.3	10.900	.2

16.100	.2	21.300	.2				
	.600	.0	5.800	.3	11.000	.2	
16.200	.2	21.400	.2				
	.700	.0	5.900	.3	11.100	.2	
16.300	.2	21.500	.2				
	.800	.0	6.000	.3	11.200	.2	
16.400	.2	21.600	.2				
	.900	.0	6.100	.3	11.300	.2	
16.500	.2	21.700	.2				
	1.000	.0	6.200	.3	11.400	.2	
16.600	.2	21.800	.2				
	1.100	.0	6.300	.3	11.500	.2	
16.700	.2	21.900	.2				
	1.200	.2	6.400	.3	11.600	.2	
16.800	.2	22.000	.2				
	1.300	3.7	6.500	.3	11.700	.2	
16.900	.2	22.100	.2				
	1.400	14.2	6.600	.3	11.800	.2	
17.000	.2	22.200	.2				
	1.500	29.0	6.700	.3	11.900	.2	
17.100	.2	22.300	.2				
	1.600	28.7	6.800	.3	12.000	.2	
17.200	.2	22.400	.2				
	1.700	20.0	6.900	.3	12.100	.2	
17.300	.2	22.500	.1				
	1.800	14.3	7.000	.3	12.200	.2	
17.400	.2	22.600	.1				
	1.900	11.4	7.100	.3	12.300	.2	
17.500	.2	22.700	.1				
	2.000	9.4	7.200	.3	12.400	.2	
17.600	.2	22.800	.1				
	2.100	7.7	7.300	.3	12.500	.2	
17.700	.2	22.900	.1				
	2.200	4.6	7.400	.3	12.600	.2	
17.800	.2	23.000	.1				
	2.300	2.6	7.500	.3	12.700	.2	
17.900	.2	23.100	.1				
	2.400	1.8	7.600	.3	12.800	.2	
18.000	.2	23.200	.1				
	2.500	1.4	7.700	.3	12.900	.2	
18.100	.2	23.300	.1				
	2.600	1.1	7.800	.3	13.000	.2	
18.200	.2	23.400	.1				
	2.700	.8	7.900	.3	13.100	.2	
18.300	.2	23.500	.1				
	2.800	.7	8.000	.3	13.200	.2	
18.400	.2	23.600	.1				
	2.900	.6	8.100	.3	13.300	.2	
18.500	.2	23.700	.1				
	3.000	.5	8.200	.3	13.400	.2	
18.600	.2	23.800	.1				
	3.100	.4	8.300	.3	13.500	.2	
18.700	.2	23.900	.1				
	3.200	.4	8.400	.3	13.600	.2	
18.800	.2	24.000	.1				
	3.300	.3	8.500	.3	13.700	.2	
18.900	.2	24.100	.1				
	3.400	.3	8.600	.3	13.800	.2	
19.000	.2	24.200	.1				
	3.500	.3	8.700	.3	13.900	.2	
19.100	.2	24.300	.0				
	3.600	.3	8.800	.3	14.000	.2	
19.200	.2	24.400	.0				

```
         3.700        .3          8.900        .3         14.100        .2
19.300        .2         24.500        .0
         3.800        .3          9.000        .3         14.200        .2
19.400        .2         24.600        .0
         3.900        .3          9.100        .3         14.300        .2
19.500        .2         24.700        .0
         4.000        .2          9.200        .3         14.400        .2
19.600        .2         24.800        .0
         4.100        .2          9.300        .3         14.500        .2
19.700        .2         24.900        .0
         4.200        .2          9.400        .3         14.600        .2
19.800        .2         25.000        .0
         4.300        .2          9.500        .3         14.700        .2
19.900        .2         25.100        .0
         4.400        .2          9.600        .2         14.800        .2
20.000        .2         25.200        .0
         4.500        .2          9.700        .3         14.900        .2
20.100        .2         25.300        .0
         4.600        .2          9.800        .2         15.000        .2
20.200        .2         25.400        .0
         4.700        .2          9.900        .2         15.100        .2
20.300        .2         25.500        .0
         4.800        .2         10.000        .2         15.200        .2
20.400        .2         25.600        .0
         4.900        .2         10.100        .2         15.300        .2
20.500        .2
         5.000        .2         10.200        .2         15.400        .2
20.600        .2
         5.100        .2         10.300        .2         15.500        .2
20.700        .2

         RUNOFF VOLUME =     2.25104 INCHES     =       1.6339 ACRE-FEET
         PEAK DISCHARGE RATE =      29.01 CFS  AT   1.500 HOURS   BASIN AREA =
.0136 SQ. MI.


     *

     *

     *

     COMPUTE NM HYD      ID=26  HYD NO=BASIN.F7  DA=.01097 SQ MI

                                      %A=0.0  %B=7.5  %C=7.5 %D=85.0

                                      TP=-.1333 HR  RAIN=-1


         K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   36.814    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .009325 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


         K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
         UNIT PEAK =   4.3753    CFS   UNIT VOLUME =    1.004       B =   354.44
```

P60 = 1.8400
AREA = .001646 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=26 CODE=10

HYDROGRAPH FROM AREA BASIN.F7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.1	20.000	.1		
1.000	.0	6.000	.2	11.000	.2
16.000	.1	21.000	.1		
2.000	6.2	7.000	.2	12.000	.2
17.000	.1	22.000	.1		
3.000	.3	8.000	.2	13.000	.2
18.000	.1	23.000	.1		
4.000	.2	9.000	.2	14.000	.2
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.18365 INCHES = 1.2776 ACRE-FEET
PEAK DISCHARGE RATE = 24.42 CFS AT 1.500 HOURS BASIN AREA = .0110 SQ. MI.

*

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.004

DIA=3.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.18	.19	.33	1.56
.36	.53	1.45	2.14
.55	.96	3.37	2.54
.73	1.45	6.06	2.84
.91	1.99	9.46	3.07
1.09	2.57	13.50	3.25

1.28	3.17	18.08	3.37
1.46	3.80	23.12	3.45
1.64	4.43	28.50	3.49
1.82	5.07	34.11	3.50
2.01	5.70	39.82	3.50
2.19	6.33	45.50	3.50
2.37	6.94	50.99	3.50
2.55	7.52	56.14	3.50
2.74	8.07	60.75	3.50
2.92	8.57	64.58	3.50
3.10	9.01	67.32	3.50
3.28	9.37	68.45	3.50
3.50	9.62	68.45	3.50

ROUTE MCUNGE ID=74 HYD=RTE.F7 INFLOW ID=26

DT=0.0 L=500 NS=0 SLOPE=0.004

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 249 TABLE PTS= 19
DT= .100000 QMED= 12.21 CKMED= 6.9976
WIDTH MED= 3.19 NREACH= 1 DX= 500.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.108	.0	1.39	.82	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.18	.2	.3	.080	1.6	2.87	1.75	2.068	.037	.976	.356	-.332	.1	.986	.181	-.167
.36	.5	1.4	.051	2.1	3.96	2.72	2.853	.085	.957	.492	-.449	.8	.962	.417	-.379
.55	1.0	3.4	.040	2.5	5.02	3.51	3.613	.132	.944	.578	-.523	2.3	.949	.539	-.488
.73	1.5	6.1	.033	2.8	5.91	4.17	4.253	.180	.934	.632	-.566	4.6	.938	.608	-.546
.91	2.0	9.5	.029	3.1	6.66	4.74	4.798	.231	.923	.668	-.592	7.7	.928	.652	-.580
1.09	2.6	13.5	.026	3.2	7.31	5.25	5.261	.285	.913	.694	-.608	11.4	.918	.683	-.601
1.28	3.2	18.1	.024	3.4	7.85	5.70	5.651	.342	.902	.714	-.616	15.7	.908	.705	-.613
1.46	3.8	23.1	.023	3.5	8.29	6.09	5.970	.404	.890	.729	-.619	20.6	.897	.722	-.619
1.64	4.4	28.5	.022	3.5	8.64	6.43	6.221	.472	.877	.740	-.617	25.8	.884	.735	-.620
1.82	5.1	34.1	.021	3.5	8.88	6.73	6.395	.549	.862	.748	-.610	31.3	.870	.745	-.615

```
        2.01     5.7     39.8     .020     3.5      8.94    6.98     6.436    .636    .842
 .752  -.595     36.9     .853    .751   -.604
        2.19     6.3     45.5     .019     3.5      8.77    7.19     6.316    .741    .816
 .752  -.568     42.6     .831    .753   -.583
        2.37     6.9     51.0     .019     3.5      8.36    7.35     6.017    .872    .779
 .746  -.525     48.2     .800    .750   -.550
        2.55     7.5     56.1     .019     3.5      7.66    7.47     5.515   1.047    .723
 .736  -.459     53.6     .755    .742   -.497
        2.74     8.1     60.7     .018     3.5      6.63    7.53     4.771   1.310    .630
 .718  -.348     58.4     .685    .728   -.413
        2.92     8.6     64.6     .018     3.5      5.16    7.53     3.715   1.788    .450
 .692  -.143     62.7     .562    .706   -.269
        3.10     9.0     67.3     .019     3.5      3.02    7.47     2.176   3.182   -.001
 .685   .316     66.0     .302    .682    .016
        3.28     9.4     68.4     .019     3.5      1.72    7.30     1.240   5.677   -.434
 .747   .687     67.9    -.220    .717    .504
    MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       7 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0526
      DEPTH    AREA      Q     TRAVEL  WIDTH     ck       VEL      C       D      C1
  C2     C3     Q-M      C1-M   C2-M   C3-M
       (FT)  (SQ FT)  (CFS)  TIME(HR) (FT)     (FPS)    (FPS)
              (CFS)
         .00      .0       .0    .108     .0     1.39     .82    1.000    .000  1.000
 .000    .000       .0   1.000   .000    .000
         .18      .2       .3    .080    1.6     1.49    1.75    1.072    .072   .933
 .067    .000       .1    .977   .023    .000
         .36      .5      1.4    .051    2.1     1.67    2.72    1.203    .203   .831
 .169    .000       .8    .880   .120    .000
         .55     1.0      3.4    .040    2.5     1.88    3.51    1.353    .353   .739
 .261    .000      2.3    .782   .218    .000
         .73     1.5      6.1    .033    2.8     2.10    4.17    1.508    .508   .663
 .337    .000      4.6    .698   .302    .000
         .91     2.0      9.5    .029    3.1     2.31    4.74    1.665    .665   .600
 .400    .000      7.7    .629   .371    .000
        1.09     2.6     13.5    .026    3.2     2.53    5.25    1.822    .822   .549
 .451    .000     11.4    .573   .427    .000
        1.28     3.2     18.1    .024    3.4     2.75    5.70    1.977    .977   .506
 .494    .000     15.7    .526   .474    .000
        1.46     3.8     23.1    .023    3.5     2.96    6.09    2.131   1.131   .469
 .531    .000     20.6    .486   .514    .000
        1.64     4.4     28.5    .022    3.5     3.17    6.43    2.285   1.285   .438
 .562    .000     25.8    .453   .547    .000
        1.82     5.1     34.1    .021    3.5     3.39    6.73    2.439   1.439   .410
 .590    .000     31.3    .423   .577    .000
        2.01     5.7     39.8    .020    3.5     3.59    6.98    2.585   1.585   .387
 .613    .000     36.9    .398   .602    .000
        2.19     6.3     45.5    .019    3.5     3.78    7.19    2.720   1.720   .368
 .632    .000     42.6    .377   .623    .000
        2.37     6.9     51.0    .019    3.5     3.95    7.35    2.844   1.844   .352
 .648    .000     48.2    .359   .641    .000
        2.55     7.5     56.1    .019    3.5     4.10    7.47    2.954   1.954   .338
 .662    .000     53.6    .345   .655    .000
        2.74     8.1     60.7    .018    3.5     4.23    7.53    3.049   2.049   .328
 .672    .000     58.4    .333   .667    .000
        2.92     8.6     64.6    .018    3.5     4.34    7.53    3.125   2.125   .320
 .680    .000     62.7    .324   .676    .000
        3.10     9.0     67.3    .019    3.5     3.03    7.47    2.179   3.179   .000
 .685    .315     66.0    .302   .682    .016
        3.28     9.4     68.4    .019    3.5     3.06    7.30    2.200   3.200   .000
 .688    .312     67.9    .000   .686    .314
    MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       6 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0441
    Equations solved with two passes: first using the Ponce correction to C1,
```

second using the Fread correction to C1, C2 and C3
*

PRINT HYD ID=74 CODE=0

HYDROGRAPH FROM AREA RTE.F7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	5.100	.2	10.200	.2
15.300	.1	20.400	.1		
	.100	.0	5.200	.2	10.300	.2
15.400	.1	20.500	.1		
	.200	.0	5.300	.2	10.400	.2
15.500	.1	20.600	.1		
	.300	.0	5.400	.2	10.500	.2
15.600	.1	20.700	.1		
	.400	.0	5.500	.2	10.600	.2
15.700	.1	20.800	.1		
	.500	.0	5.600	.2	10.700	.2
15.800	.1	20.900	.1		
	.600	.0	5.700	.2	10.800	.2
15.900	.1	21.000	.1		
	.700	.0	5.800	.2	10.900	.2
16.000	.1	21.100	.1		
	.800	.0	5.900	.2	11.000	.2
16.100	.1	21.200	.1		
	.900	.0	6.000	.2	11.100	.2
16.200	.1	21.300	.1		
	1.000	.0	6.100	.2	11.200	.2
16.300	.1	21.400	.1		
	1.100	.0	6.200	.2	11.300	.2
16.400	.1	21.500	.1		
	1.200	.4	6.300	.2	11.400	.2
16.500	.1	21.600	.1		
	1.300	4.2	6.400	.2	11.500	.2
16.600	.1	21.700	.1		
	1.400	14.8	6.500	.2	11.600	.2
16.700	.1	21.800	.1		
	1.500	23.4	6.600	.2	11.700	.2
16.800	.1	21.900	.1		
	1.600	20.5	6.700	.2	11.800	.2
16.900	.1	22.000	.1		
	1.700	14.4	6.800	.2	11.900	.2
17.000	.1	22.100	.1		
	1.800	10.5	6.900	.2	12.000	.2
17.100	.1	22.200	.1		
	1.900	8.5	7.000	.2	12.100	.2
17.200	.1	22.300	.1		
	2.000	7.0	7.100	.2	12.200	.2
17.300	.1	22.400	.1		
	2.100	5.4	7.200	.2	12.300	.2
17.400	.1	22.500	.1		
	2.200	3.2	7.300	.2	12.400	.2
17.500	.1	22.600	.1		
	2.300	1.9	7.400	.2	12.500	.2
17.600	.1	22.700	.1		
	2.400	1.4	7.500	.2	12.600	.2
17.700	.1	22.800	.1		

```
         2.500        1.0          7.600         .2          12.700         .2
17.800         .1          22.900         .1
         2.600         .8          7.700         .2          12.800         .2
17.900         .1          23.000         .1
         2.700         .6          7.800         .2          12.900         .2
18.000         .1          23.100         .1
         2.800         .5          7.900         .2          13.000         .2
18.100         .1          23.200         .1
         2.900         .4          8.000         .2          13.100         .2
18.200         .1          23.300         .1
         3.000         .4          8.100         .2          13.200         .2
18.300         .1          23.400         .1
         3.100         .3          8.200         .2          13.300         .2
18.400         .1          23.500         .1
         3.200         .3          8.300         .2          13.400         .2
18.500         .1          23.600         .1
         3.300         .3          8.400         .2          13.500         .2
18.600         .1          23.700         .1
         3.400         .2          8.500         .2          13.600         .2
18.700         .1          23.800         .1
         3.500         .2          8.600         .2          13.700         .2
18.800         .1          23.900         .1
         3.600         .2          8.700         .2          13.800         .2
18.900         .1          24.000         .1
         3.700         .2          8.800         .2          13.900         .2
19.000         .1          24.100         .1
         3.800         .2          8.900         .2          14.000         .2
19.100         .1          24.200         .1
         3.900         .2          9.000         .2          14.100         .2
19.200         .1          24.300         .0
         4.000         .2          9.100         .2          14.200         .2
19.300         .1          24.400         .0
         4.100         .2          9.200         .2          14.300         .2
19.400         .1          24.500         .0
         4.200         .2          9.300         .2          14.400         .2
19.500         .1          24.600         .0
         4.300         .2          9.400         .2          14.500         .2
19.600         .1          24.700         .0
         4.400         .2          9.500         .2          14.600         .2
19.700         .1          24.800         .0
         4.500         .2          9.600         .2          14.700         .2
19.800         .1          24.900         .0
         4.600         .2          9.700         .2          14.800         .1
19.900         .1          25.000         .0
         4.700         .2          9.800         .2          14.900         .1
20.000         .1
         4.800         .2          9.900         .2          15.000         .1
20.100         .1
         4.900         .2         10.000         .2          15.100         .1
20.200         .1
         5.000         .2         10.100         .2          15.200         .1
20.300         .1

         RUNOFF VOLUME =     2.16910 INCHES     =       1.2691 ACRE-FEET
         PEAK DISCHARGE RATE =      23.37 CFS  AT   1.500 HOURS   BASIN AREA =
.0110 SQ. MI.


     *

     *
```

```
     ADD HYD                      ID=75 HYD=F7.F5 ID I=74 II=24

     PRINT HYD                    ID=75 CODE=10

                                                HYDROGRAPH FROM AREA F7.F5

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           6.000        .5         12.000        .4
18.000        .3          24.000        .3
         1.000        .0           7.000        .6         13.000        .4
19.000        .3          25.000        .0
         2.000      16.5           8.000        .5         14.000        .4
20.000        .3
         3.000        .9           9.000        .5         15.000        .4
21.000        .3
         4.000        .5          10.000        .5         16.000        .4
22.000        .3
         5.000        .5          11.000        .4         17.000        .3
23.000        .3

         RUNOFF VOLUME =     2.07585 INCHES     =       3.2649 ACRE-FEET
         PEAK DISCHARGE RATE =      62.89 CFS  AT   1.500 HOURS   BASIN AREA =
.0295 SQ. MI.


     *

     *

     ROUTE RESERVOIR       ID=51 HYD=POND.F5  INFLOW ID=75 CODE=5

                                          OUTFLOW       STORAGE DEPTH

                                          0             0               5421

                                          3.00  0.1993  5422

                                          7.00  0.4325  5423

                                          11.00 0.7053  5424

                                          15.00 1.0245  5425

                                          20.00 1.3979  5426

                                          50.00 1.8334  5427


       *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

         TIME      INFLOW    ELEV      VOLUME    OUTFLOW
         (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)

           .00        .00   5421.00       .000       .00
           .50        .00   5421.00       .000       .00
          1.00        .00   5421.00       .000       .00
          1.50      62.89   5424.13       .746     11.51
```

2.00	16.46	5425.93	1.373	19.67
2.50	2.33	5424.75	.946	14.01
3.00	.88	5423.40	.541	8.59
3.50	.55	5422.43	.299	4.71
4.00	.46	5421.87	.174	2.62
4.50	.45	5421.54	.107	1.61
5.00	.46	5421.36	.071	1.07
5.50	.50	5421.27	.053	.80
6.00	.54	5421.22	.045	.67
6.50	.57	5421.21	.041	.62
7.00	.56	5421.20	.039	.59
7.50	.54	5421.19	.038	.57
8.00	.52	5421.18	.037	.55
8.50	.51	5421.18	.035	.53
9.00	.49	5421.17	.034	.52
9.50	.48	5421.17	.033	.50
10.00	.47	5421.16	.032	.49
10.50	.45	5421.16	.031	.47
11.00	.44	5421.15	.031	.46
11.50	.43	5421.15	.030	.45
12.00	.42	5421.15	.029	.44
12.50	.41	5421.14	.028	.43
13.00	.40	5421.14	.028	.41
13.50	.39	5421.14	.027	.41
14.00	.38	5421.13	.026	.40
14.50	.37	5421.13	.026	.39
15.00	.36	5421.13	.025	.38
15.50	.36	5421.12	.025	.37
16.00	.35	5421.12	.024	.36
16.50	.34	5421.12	.024	.36
17.00	.34	5421.12	.023	.35
17.50	.33	5421.11	.023	.34
18.00	.32	5421.11	.022	.34
18.50	.32	5421.11	.022	.33
19.00	.31	5421.11	.021	.32
19.50	.31	5421.11	.021	.32
20.00	.30	5421.10	.021	.31
20.50	.30	5421.10	.020	.31
21.00	.29	5421.10	.020	.30
21.50	.29	5421.10	.020	.30
22.00	.28	5421.10	.019	.29
22.50	.28	5421.10	.019	.29
23.00	.27	5421.09	.019	.28
23.50	.27	5421.09	.019	.28
24.00	.27	5421.09	.018	.27
24.50	.01	5421.06	.012	.19
25.00	.00	5421.03	.007	.10
25.50	.00	5421.02	.004	.05
26.00	.00	5421.01	.002	.03
26.50	.00	5421.01	.001	.02
27.00	.00	5421.00	.001	.01
27.50	.00	5421.00	.000	.00

PEAK DISCHARGE = 19.842 CFS - PEAK OCCURS AT HOUR 1.90
MAXIMUM WATER SURFACE ELEVATION = 5425.968
MAXIMUM STORAGE = 1.3861 AC-FT INCREMENTAL TIME= .100000HRS

*

*

PRINT HYD ID=51 CODE=10

HYDROGRAPH FROM AREA POND.F5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	.7	12.000	.4
18.000	.3	24.000	.3		
1.000	.0	7.000	.6	13.000	.4
19.000	.3	25.000	.1		
2.000	19.7	8.000	.6	14.000	.4
20.000	.3	26.000	.0		
3.000	8.6	9.000	.5	15.000	.4
21.000	.3	27.000	.0		
4.000	2.6	10.000	.5	16.000	.4
22.000	.3	28.000	.0		
5.000	1.1	11.000	.5	17.000	.3
23.000	.3				

RUNOFF VOLUME = 2.07584 INCHES = 3.2649 ACRE-FEET
PEAK DISCHARGE RATE = 19.84 CFS AT 1.900 HOURS BASIN AREA = .0295 SQ. MI.

*

*

COMPUTE NM HYD ID=27 HYD NO=BASIN.F8 DA=.00781 SQ MI

%A=0.0 %B=18.0 %C=18.0 %D=64.0

TP=-.1333 HR RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 19.734 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
AREA = .004998 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 7.4759 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
AREA = .002812 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=27 CODE=10

HYDROGRAPH FROM AREA BASIN.F8

TIME	FLOW	TIME	FLOW	TIME	FLOW

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	HRS	CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	3.6	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.84145 INCHES = .7670 ACRE-FEET
PEAK DISCHARGE RATE = 15.89 CFS AT 1.500 HOURS BASIN AREA = .0078 SQ. MI.

*

*

*

```
ADD HYD                    ID=78 HYD=PONDF5.F8 ID I=51 II=27

PRINT HYD                  ID=78 CODE=10
```

HYDROGRAPH FROM AREA PONDF5.F8

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	HRS	CFS
.000	.0	6.000	.8	12.000	.5
18.000	.4	24.000	.3		
1.000	.0	7.000	.7	13.000	.5
19.000	.4	25.000	.1		
2.000	23.2	8.000	.7	14.000	.5
20.000	.4	26.000	.0		
3.000	8.8	9.000	.6	15.000	.5
21.000	.4	27.000	.0		
4.000	2.7	10.000	.6	16.000	.4
22.000	.4	28.000	.0		
5.000	1.2	11.000	.6	17.000	.4
23.000	.3				

RUNOFF VOLUME = 2.02672 INCHES = 4.0318 ACRE-FEET
PEAK DISCHARGE RATE = 27.40 CFS AT 1.500 HOURS BASIN AREA = .0373 SQ. MI.

*

*

```
COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.003
```

DIA=3.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.18	.19	.29	1.56
.36	.53	1.25	2.14
.55	.96	2.92	2.54
.73	1.45	5.25	2.84
.91	1.99	8.19	3.07
1.09	2.57	11.69	3.25
1.28	3.17	15.66	3.37
1.46	3.80	20.02	3.45
1.64	4.43	24.68	3.49
1.82	5.07	29.54	3.50
2.01	5.70	34.48	3.50
2.19	6.33	39.40	3.50
2.37	6.94	44.16	3.50
2.55	7.52	48.62	3.50
2.74	8.07	52.61	3.50
2.92	8.57	55.93	3.50
3.10	9.01	58.30	3.50
3.28	9.37	59.28	3.50
3.50	9.62	59.28	3.50

ROUTE MCUNGE ID=77 HYD=RTE.PONDF5 INFLOW ID=78

DT=0.0 L=590 NS=0 SLOPE=0.004

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 288 TABLE PTS= 19
DT= .100000 QMED= 13.70 CKMED= 6.5759
WIDTH MED= 3.31 NREACH= 1 DX= 590.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M

```
          .00     .0       .0     .147     .0     1.64    .71    1.000   .000  1.000
 .000   .000       .0   1.000    .000   .000
          .18     .2       .3     .108    1.6     2.49   1.51    1.517   .032   .975
 .215  -.191       .0    .986    .029  -.015
          .36     .5      1.3     .069    2.1     3.43   2.36    2.094   .072   .954
 .368  -.323       .7    .960    .284  -.244
          .55    1.0      2.9     .054    2.5     4.35   3.04    2.651   .112   .941
 .469  -.409      2.0    .946    .423  -.369
          .73    1.5      5.2     .045    2.8     5.12   3.61    3.121   .153   .928
 .532  -.461      4.0    .934    .503  -.437
          .91    2.0      8.2     .040    3.1     5.77   4.11    3.521   .196   .917
 .576  -.493      6.7    .922    .556  -.478
         1.09    2.6     11.7     .036    3.2     6.33   4.55    3.861   .241   .905
 .608  -.513      9.9    .911    .594  -.505
         1.28    3.2     15.7     .033    3.4     6.80   4.93    4.147   .290   .893
 .632  -.526     13.6    .900    .621  -.521
         1.46    3.8     20.0     .031    3.5     7.18   5.27    4.382   .342   .880
 .651  -.531     17.8    .887    .643  -.530
         1.64    4.4     24.7     .029    3.5     7.48   5.57    4.566   .400   .866
 .665  -.531     22.3    .874    .659  -.532
         1.82    5.1     29.5     .028    3.5     7.69   5.83    4.693   .465   .849
 .675  -.524     27.1    .858    .671  -.529
         2.01    5.7     34.5     .027    3.5     7.74   6.05    4.724   .539   .828
 .681  -.508     32.0    .840    .679  -.518
         2.19    6.3     39.4     .026    3.5     7.60   6.22    4.635   .628   .799
 .681  -.480     36.9    .815    .682  -.497
         2.37    6.9     44.2     .026    3.5     7.24   6.37    4.416   .739   .760
 .675  -.435     41.8    .782    .679  -.461
         2.55    7.5     48.6     .025    3.5     6.63   6.46    4.048   .887   .701
 .663  -.364     46.4    .735    .670  -.405
         2.74    8.1     52.6     .025    3.5     5.74   6.52    3.502  1.110   .604
 .644  -.248     50.6    .662    .655  -.316
         2.92    8.6     55.9     .025    3.5     4.47   6.53    2.727  1.515   .422
 .618  -.040     54.3    .535    .632  -.167
         3.10    9.0     58.3     .025    3.5     2.62   6.47    1.597  2.697  -.019
 .622   .397     57.1    .275    .610   .115
         3.28    9.4     59.3     .026    3.5     1.49   6.32     .910  4.811  -.432
 .702   .729     58.8   -.228    .663   .565
    MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       3 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0849
    Equations solved using the Ponce correction to C2
    *

    PRINT HYD            ID=77 CODE=0


                                                  HYDROGRAPH FROM AREA RTE.PONDF5


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           5.800        .8         11.600        .5
17.400       .4         23.200        .3
          .100        .0           5.900        .8         11.700        .5
17.500       .4         23.300        .3
          .200        .0           6.000        .8         11.800        .5
17.600       .4         23.400        .3
          .300        .0           6.100        .8         11.900        .5
17.700       .4         23.500        .3
          .400        .0           6.200        .8         12.000        .5
17.800       .4         23.600        .3
```

	.500	.0		6.300	.8		12.100	.5			
17.900	.4	23.700	.3								
	.600	.0		6.400	.8		12.200	.5			
18.000	.4	23.800	.3								
	.700	.0		6.500	.7		12.300	.5			
18.100	.4	23.900	.3								
	.800	.0		6.600	.7		12.400	.5			
18.200	.4	24.000	.3								
	.900	.0		6.700	.7		12.500	.5			
18.300	.4	24.100	.3								
	1.000	.0		6.800	.7		12.600	.5			
18.400	.4	24.200	.3								
	1.100	.0		6.900	.7		12.700	.5			
18.500	.4	24.300	.3								
	1.200	.5		7.000	.7		12.800	.5			
18.600	.4	24.400	.2								
	1.300	4.2		7.100	.7		12.900	.5			
18.700	.4	24.500	.2								
	1.400	15.4		7.200	.7		13.000	.5			
18.800	.4	24.600	.2								
	1.500	26.9		7.300	.7		13.100	.5			
18.900	.4	24.700	.2								
	1.600	27.3		7.400	.7		13.200	.5			
19.000	.4	24.800	.1								
	1.700	26.0		7.500	.7		13.300	.5			
19.100	.4	24.900	.1								
	1.800	25.2		7.600	.7		13.400	.5			
19.200	.4	25.000	.1								
	1.900	24.4		7.700	.7		13.500	.5			
19.300	.4	25.100	.1								
	2.000	23.5		7.800	.7		13.600	.5			
19.400	.4	25.200	.1								
	2.100	21.8		7.900	.7		13.700	.5			
19.500	.4	25.300	.1								
	2.200	19.6		8.000	.7		13.800	.5			
19.600	.4	25.400	.1								
	2.300	17.9		8.100	.7		13.900	.5			
19.700	.4	25.500	.1								
	2.400	16.3		8.200	.7		14.000	.5			
19.800	.4	25.600	.1								
	2.500	14.8		8.300	.7		14.100	.5			
19.900	.4	25.700	.0								
	2.600	13.5		8.400	.6		14.200	.5			
20.000	.4	25.800	.0								
	2.700	12.3		8.500	.6		14.300	.5			
20.100	.4	25.900	.0								
	2.800	11.2		8.600	.6		14.400	.5			
20.200	.4	26.000	.0								
	2.900	10.1		8.700	.6		14.500	.5			
20.300	.4	26.100	.0								
	3.000	9.0		8.800	.6		14.600	.5			
20.400	.4	26.200	.0								
	3.100	8.1		8.900	.6		14.700	.5			
20.500	.4	26.300	.0								
	3.200	7.3		9.000	.6		14.800	.5			
20.600	.4	26.400	.0								
	3.300	6.5		9.100	.6		14.900	.5			
20.700	.4	26.500	.0								
	3.400	5.7		9.200	.6		15.000	.5			
20.800	.4	26.600	.0								
	3.500	5.0		9.300	.6		15.100	.5			
20.900	.4	26.700	.0								
	3.600	4.4		9.400	.6		15.200	.5			

21.000	.4	26.800	.0				
	3.700	3.9	9.500	.6	15.300	.5	
21.100	.4	26.900	.0				
	3.800	3.5	9.600	.6	15.400	.5	
21.200	.4	27.000	.0				
	3.900	3.1	9.700	.6	15.500	.4	
21.300	.4	27.100	.0				
	4.000	2.8	9.800	.6	15.600	.4	
21.400	.4	27.200	.0				
	4.100	2.6	9.900	.6	15.700	.4	
21.500	.4	27.300	.0				
	4.200	2.3	10.000	.6	15.800	.4	
21.600	.4	27.400	.0				
	4.300	2.1	10.100	.6	15.900	.4	
21.700	.4	27.500	.0				
	4.400	1.9	10.200	.6	16.000	.4	
21.800	.4	27.600	.0				
	4.500	1.8	10.300	.6	16.100	.4	
21.900	.4	27.700	.0				
	4.600	1.6	10.400	.6	16.200	.4	
22.000	.4	27.800	.0				
	4.700	1.5	10.500	.6	16.300	.4	
22.100	.4	27.900	.0				
	4.800	1.4	10.600	.6	16.400	.4	
22.200	.4	28.000	.0				
	4.900	1.3	10.700	.6	16.500	.4	
22.300	.4	28.100	.0				
	5.000	1.2	10.800	.6	16.600	.4	
22.400	.4	28.200	.0				
	5.100	1.1	10.900	.6	16.700	.4	
22.500	.3	28.300	.0				
	5.200	1.1	11.000	.6	16.800	.4	
22.600	.3	28.400	.0				
	5.300	1.0	11.100	.6	16.900	.4	
22.700	.3	28.500	.0				
	5.400	1.0	11.200	.6	17.000	.4	
22.800	.3	28.600	.0				
	5.500	.9	11.300	.5	17.100	.4	
22.900	.3	28.700	.0				
	5.600	.9	11.400	.5	17.200	.4	
23.000	.3	28.800	.0				
	5.700	.9	11.500	.5	17.300	.4	
23.100	.3						

RUNOFF VOLUME = 2.02709 INCHES = 4.0325 ACRE-FEET
PEAK DISCHARGE RATE = 27.34 CFS AT 1.600 HOURS BASIN AREA = .0373 SQ. MI.

```
*
*
ADD HYD                    ID=78 HYD=F1TOF8 ID I=77 II=70
PRINT HYD                  ID=78 CODE=10
```

HYDROGRAPH FROM AREA F1TOF8

TIME	FLOW	TIME	FLOW	TIME	FLOW

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	18.1	24.000	3.1
36.000	.0	48.000	.0		
1.000	.0	13.000	16.0	25.000	.5
37.000	.0	49.000	.0		
2.000	92.4	14.000	13.5	26.000	.3
38.000	.0	50.000	.0		
3.000	32.2	15.000	11.7	27.000	.2
39.000	.0	51.000	.0		
4.000	24.4	16.000	9.5	28.000	.2
40.000	.0	52.000	.0		
5.000	22.5	17.000	7.8	29.000	.1
41.000	.0	53.000	.0		
6.000	22.1	18.000	6.8	30.000	.1
42.000	.0	54.000	.0		
7.000	21.8	19.000	6.0	31.000	.1
43.000	.0	55.000	.0		
8.000	21.4	20.000	5.4	32.000	.1
44.000	.0	56.000	.0		
9.000	21.1	21.000	4.5	33.000	.1
45.000	.0				
10.000	20.8	22.000	3.8	34.000	.1
46.000	.0				
11.000	20.2	23.000	3.4	35.000	.0
47.000	.0				

RUNOFF VOLUME = 1.29199 INCHES = 38.6996 ACRE-FEET
PEAK DISCHARGE RATE = 262.09 CFS AT 1.500 HOURS BASIN AREA = .5616 SQ. MI.

*

****

DIVIDE HYD ID=78 Q=6.20 ID I=31 HYD NO=BYPASS.F
ID II=32 HYD NO=SURGE.F

PRINT HYD ID=31 CODE=10

HYDROGRAPH FROM AREA BYPASS.F

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	6.2	24.000	3.1
36.000	.0	48.000	.0		
1.000	.0	13.000	6.2	25.000	.5
37.000	.0	49.000	.0		
2.000	6.2	14.000	6.2	26.000	.3
38.000	.0	50.000	.0		
3.000	6.2	15.000	6.2	27.000	.2
39.000	.0	51.000	.0		
4.000	6.2	16.000	6.2	28.000	.2
40.000	.0	52.000	.0		
5.000	6.2	17.000	6.2	29.000	.1

41.000 .0 53.000 .0
6.000 6.2 18.000 6.2 30.000 .1
42.000 .0 54.000 .0
7.000 6.2 19.000 6.0 31.000 .1
43.000 .0 55.000 .0
8.000 6.2 20.000 5.4 32.000 .1
44.000 .0 56.000 .0
9.000 6.2 21.000 4.5 33.000 .1
45.000 .0
10.000 6.2 22.000 3.8 34.000 .1
46.000 .0
11.000 6.2 23.000 3.4 35.000 .0
47.000 .0

RUNOFF VOLUME = 1.29199 INCHES = 11.1874 ACRE-FEET
PEAK DISCHARGE RATE = 6.20 CFS AT 1.200 HOURS BASIN AREA = .1624 SQ. MI.

PRINT HYD ID=32 CODE=10

HYDROGRAPH FROM AREA SURGE.F

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	18.2	8.000	15.2
12.000	11.9	16.000	3.3		
1.000	.0	5.000	16.3	9.000	14.9
13.000	9.8	17.000	1.6		
2.000	86.2	6.000	15.9	10.000	14.6
14.000	7.3	18.000	.6		
3.000	26.0	7.000	15.6	11.000	14.0
15.000	5.5				

RUNOFF VOLUME = 1.29199 INCHES = 27.5122 ACRE-FEET
PEAK DISCHARGE RATE = 255.89 CFS AT 1.500 HOURS BASIN AREA = .3993 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=52 HYD=POND.F INFLOW ID=32 CODE=6.3

OUTFLOW	STORAGE	DEPTH
0	0	5415.08
3.80	0.25	5416.0
6.52	0.55	5417.0
8.74	1.69	5418.0

10.68	3.08	5419.0
12.41	4.54	5420.0
14.00	6.08	5421.0
15.47	7.70	5422.0
16.85	9.39	5423.0
18.29	11.16	5424.0
18.60	11.76	5424.33
100.00	13.02	5425.0

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5415.08	.000	.00
.60	.00	5415.08	.000	.00
1.20	19.73	5415.36	.077	1.17
1.80	117.71	5421.76	7.306	15.11
2.40	40.14	5423.37	10.039	17.38
3.00	26.01	5423.76	10.742	17.95
3.60	20.12	5423.89	10.973	18.14
4.20	17.59	5423.91	10.998	18.16
4.80	16.51	5423.88	10.940	18.11
5.40	16.03	5423.82	10.849	18.04
6.00	15.87	5423.77	10.748	17.95
6.60	15.77	5423.71	10.645	17.87
7.20	15.54	5423.65	10.537	17.78
7.80	15.31	5423.58	10.422	17.69
8.40	15.10	5423.51	10.301	17.59
9.00	14.90	5423.44	10.175	17.49
9.60	14.69	5423.37	10.044	17.38
10.20	14.48	5423.29	9.908	17.27
10.80	14.24	5423.21	9.766	17.16
11.40	13.08	5423.12	9.599	17.02
12.00	11.92	5422.99	9.379	16.84
12.60	10.79	5422.84	9.112	16.62
13.20	9.21	5422.65	8.792	16.36
13.80	7.73	5422.42	8.407	16.05
14.40	6.50	5422.16	7.972	15.69
15.00	5.46	5421.88	7.500	15.29
15.60	4.09	5421.56	6.995	14.83
16.20	2.85	5421.22	6.443	14.33
16.80	1.92	5420.86	5.864	13.78
17.40	1.16	5420.48	5.272	13.17
18.00	.57	5420.09	4.677	12.55
18.60	.10	5419.69	4.088	11.87
19.20	.00	5419.30	3.516	11.20
19.80	.00	5418.93	2.977	10.54
20.40	.00	5418.56	2.473	9.83
21.00	.00	5418.22	2.001	9.17
21.60	.00	5417.89	1.562	8.49
22.20	.00	5417.54	1.161	7.71
22.80	.00	5417.22	.797	7.00
23.40	.00	5416.73	.470	5.79
24.00	.00	5415.96	.239	3.63

24.60	.00	5415.49	.112	1.71
25.20	.00	5415.27	.053	.80
25.80	.00	5415.17	.025	.38
26.40	.00	5415.12	.012	.18
27.00	.00	5415.10	.005	.08
27.60	.00	5415.09	.003	.04
28.20	.00	5415.08	.001	.02
28.80	.00	5415.08	.001	.01
29.40	.00	5415.08	.000	.00
30.00	.00	5415.08	.000	.00
30.60	.00	5415.08	.000	.00
31.20	.00	5415.08	.000	.00
31.80	.00	5415.08	.000	.00
32.40	.00	5415.08	.000	.00
33.00	.00	5415.08	.000	.00

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
33.60	.00	5415.08	.000	.00
34.20	.00	5415.08	.000	.00
34.80	.00	5415.08	.000	.00
35.40	.00	5415.08	.000	.00
36.00	.00	5415.08	.000	.00
36.60	.00	5415.08	.000	.00
37.20	.00	5415.08	.000	.00
37.80	.00	5415.08	.000	.00
38.40	.00	5415.08	.000	.00
39.00	.00	5415.08	.000	.00
39.60	.00	5415.08	.000	.00
40.20	.00	5415.08	.000	.00
40.80	.00	5415.08	.000	.00
41.40	.00	5415.08	.000	.00
42.00	.00	5415.08	.000	.00
42.60	.00	5415.08	.000	.00
43.20	.00	5415.08	.000	.00
43.80	.00	5415.08	.000	.00
44.40	.00	5415.08	.000	.00
45.00	.00	5415.08	.000	.00
45.60	.00	5415.08	.000	.00
46.20	.00	5415.08	.000	.00
46.80	.00	5415.08	.000	.00
47.40	.00	5415.08	.000	.00
48.00	.00	5415.08	.000	.00
48.60	.00	5415.08	.000	.00
49.20	.00	5415.08	.000	.00
49.80	.00	5415.08	.000	.00
50.40	.00	5415.08	.000	.00
51.00	.00	5415.08	.000	.00
51.60	.00	5415.08	.000	.00
52.20	.00	5415.08	.000	.00
52.80	.00	5415.08	.000	.00
53.40	.00	5415.08	.000	.00
54.00	.00	5415.08	.000	.00
54.60	.00	5415.08	.000	.00
55.20	.00	5415.08	.000	.00
55.80	.00	5415.08	.000	.00
56.40	.00	5415.08	.000	.00
57.00	.00	5415.08	.000	.00
57.60	.00	5415.08	.000	.00
58.20	.00	5415.08	.000	.00
58.80	.00	5415.08	.000	.00
59.40	.00	5415.08	.000	.00

60.00	.00	5415.08	.000	.00
60.60	.00	5415.08	.000	.00
61.20	.00	5415.08	.000	.00
61.80	.00	5415.08	.000	.00
62.40	.00	5415.08	.000	.00
63.00	.00	5415.08	.000	.00
63.60	.00	5415.08	.000	.00
64.20	.00	5415.08	.000	.00
64.80	.00	5415.08	.000	.00
65.40	.00	5415.08	.000	.00
66.00	.00	5415.08	.000	.00
66.60	.00	5415.08	.000	.00

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
67.20	.00	5415.08	.000	.00
67.80	.00	5415.08	.000	.00
68.40	.00	5415.08	.000	.00
69.00	.00	5415.08	.000	.00
69.60	.00	5415.08	.000	.00
70.20	.00	5415.08	.000	.00
70.80	.00	5415.08	.000	.00
71.40	.00	5415.08	.000	.00
72.00	.00	5415.08	.000	.00
72.60	.00	5415.08	.000	.00
73.20	.00	5415.08	.000	.00
73.80	.00	5415.08	.000	.00
74.40	.00	5415.08	.000	.00
75.00	.00	5415.08	.000	.00
75.60	.00	5415.08	.000	.00
76.20	.00	5415.08	.000	.00
76.80	.00	5415.08	.000	.00
77.40	.00	5415.08	.000	.00
78.00	.00	5415.08	.000	.00
78.60	.00	5415.08	.000	.00
79.20	.00	5415.08	.000	.00
79.80	.00	5415.08	.000	.00
80.40	.00	5415.08	.000	.00
81.00	.00	5415.08	.000	.00
81.60	.00	5415.08	.000	.00
82.20	.00	5415.08	.000	.00
82.80	.00	5415.08	.000	.00
83.40	.00	5415.08	.000	.00
84.00	.00	5415.08	.000	.00
84.60	.00	5415.08	.000	.00
85.20	.00	5415.08	.000	.00
85.80	.00	5415.08	.000	.00
86.40	.00	5415.08	.000	.00
87.00	.00	5415.08	.000	.00
87.60	.00	5415.08	.000	.00
88.20	.00	5415.08	.000	.00
88.80	.00	5415.08	.000	.00
89.40	.00	5415.08	.000	.00
90.00	.00	5415.08	.000	.00
90.60	.00	5415.08	.000	.00
91.20	.00	5415.08	.000	.00
91.80	.00	5415.08	.000	.00
92.40	.00	5415.08	.000	.00
93.00	.00	5415.08	.000	.00
93.60	.00	5415.08	.000	.00
94.20	.00	5415.08	.000	.00
94.80	.00	5415.08	.000	.00

95.40	.00	5415.08	.000	.00
96.00	.00	5415.08	.000	.00
96.60	.00	5415.08	.000	.00
97.20	.00	5415.08	.000	.00
97.80	.00	5415.08	.000	.00
98.40	.00	5415.08	.000	.00
99.00	.00	5415.08	.000	.00
99.60	.00	5415.08	.000	.00
100.20	.00	5415.08	.000	.00

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
100.80	.00	5415.08	.000	.00
101.40	.00	5415.08	.000	.00
102.00	.00	5415.08	.000	.00
102.60	.00	5415.08	.000	.00

WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY

103.20	.00
103.80	.00
104.40	.00
105.00	.00
105.60	.00
106.20	.00
106.80	.00
107.40	.00
108.00	.00
108.60	.00
109.20	.00
109.80	.00
110.40	.00
111.00	.00
111.60	.00
112.20	.00
112.80	.00
113.40	.00
114.00	.00
114.60	.00
115.20	.00
115.80	.00
116.40	.00

```
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       117.00        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       117.60        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       118.20        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       118.80        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       119.40        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       120.00        .00******************************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       120.60        .009301046.00********************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       121.20        .006356123.00********************
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       121.80        .004344174.008160403.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       122.40        .002969625.005575129.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       123.00        .002030544.003808890.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       123.60        .001388970.002602208.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       124.20        .00 950652.401777813.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       124.80        .00 651197.001214592.000**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       125.40        .00 446611.30 829803.500**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       126.00        .00 306839.80 566919.100**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       126.60        .00 211349.10 387318.500**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       127.20        .00 146110.50 264616.700**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       127.80        .00 101540.00 180787.700**********
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       128.40        .00  71089.78 123516.4007978811.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       129.00        .00  50286.42  84389.1305451064.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       129.60        .00  36073.72  57657.6503724126.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       130.20        .00  26363.72  39394.9102544295.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       130.80        .00  19729.91  26917.9401738243.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       131.40        .00  15197.75  18393.7601187554.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       132.00        .00  12101.41  12570.110 811328.00
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       132.60        .00   9986.01   8591.441 554293.10
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       133.20        .00   8540.79   5873.242 378688.90
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
       133.80        .00   7553.42   4016.189 258717.40
***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***

        TIME      INFLOW    ELEV      VOLUME    OUTFLOW
        (HRS)     (CFS)     (FEET)    (AC-FT)   (CFS)
```

134.40	.00	6878.86	2747.464	176753.70	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
135.00	.00	6418.01	1880.681	120756.80	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
135.60	.00	6103.15	1288.502	82500.14	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
136.20	.00	5888.05	883.929	56363.47	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
136.80	.00	5741.09	607.528	38507.09	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
137.40	.00	5640.69	418.693	26307.75	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
138.00	.00	5572.10	289.682	17973.26	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
138.60	.00	5525.23	201.543	12279.19	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
139.20	.00	5493.22	141.327	8389.05	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
139.80	.00	5471.35	100.188	5731.34	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
140.40	.00	5456.40	72.082	3915.61	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
141.00	.00	5446.19	52.880	2675.11	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
141.60	.00	5439.22	39.762	1827.62	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
142.20	.00	5434.45	30.800	1248.61	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
142.80	.00	5431.20	24.676	853.04	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
143.40	.00	5428.97	20.493	582.79	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
144.00	.00	5427.45	17.635	398.16	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
144.60	.00	5426.42	15.683	272.02	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
145.20	.00	5425.71	14.349	185.84	
WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY					
145.80	.00	5425.22	13.437	126.97	
146.40	.00	5424.42	11.937	30.01	
147.00	.00	5423.90	10.976	18.14	
147.60	.00	5423.40	10.095	17.42	
148.20	.00	5422.92	9.248	16.73	
148.80	.00	5422.43	8.435	16.07	
149.40	.00	5421.97	7.654	15.43	
150.00	.00	5421.51	6.906	14.75	
150.60	.00	5421.07	6.190	14.10	
151.20	.00	5420.63	5.508	13.41	
151.80	.00	5420.21	4.860	12.74	
152.40	.00	5419.80	4.245	12.06	
153.00	.00	5419.40	3.664	11.37	
153.60	.00	5419.02	3.116	10.72	
154.20	.00	5418.66	2.602	10.01	
154.80	.00	5418.31	2.122	9.34	
155.40	.00	5417.99	1.675	8.71	
156.00	.00	5417.63	1.263	7.91	
156.60	.00	5417.30	.889	7.18	
157.20	.00	5417.00	.550	6.52	
157.80	.00	5416.13	.289	4.16	
158.40	.00	5415.58	.137	2.08	
159.00	.00	5415.32	.064	.98	
159.60	.00	5415.19	.030	.46	
160.20	.00	5415.13	.014	.22	

```
       160.80        .00   5415.10       .007       .10
       161.40        .00   5415.09       .003       .05
       162.00        .00   5415.09       .001       .02
       162.60        .00   5415.08       .001       .01
       163.20        .00   5415.08       .000       .00
 ***WARNING - OUTFLOW EXCEEDS RESERVOIR CAPACITY***
      PEAK DISCHARGE = ************ CFS - PEAK OCCURS AT HOUR  103.20
      MAXIMUM WATER SURFACE ELEVATION = ************
      MAXIMUM STORAGE = ************* AC-FT      INCREMENTAL TIME=     .300000HRS

     *

     *

     PRINT HYD           ID=52 CODE=10

                                                HYDROGRAPH FROM AREA POND.F

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000         .0          33.000        .0         66.000        .0
99.000        .0         132.000  811328.0
          3.000      17.9          36.000        .0         69.000        .0
102.000       .0         135.000  120756.8
          6.000      18.0          39.000        .0         72.000        .0
105.000**********         138.000   17973.3
          9.000      17.5          42.000        .0         75.000        .0
108.000**********         141.000    2675.1
         12.000      16.8          45.000        .0         78.000        .0
111.000**********         144.000     398.2
         15.000      15.3          48.000        .0         81.000        .0
114.000**********         147.000      18.1
         18.000      12.6          51.000        .0         84.000        .0
117.000**********         150.000      14.7
         21.000       9.2          54.000        .0         87.000        .0
120.000**********         153.000      11.4
         24.000       3.6          57.000        .0         90.000        .0
123.000**********         156.000       7.9
         27.000        .1          60.000        .0         93.000        .0
126.00036624020.0         159.000       1.0
         30.000        .0          63.000        .0         96.000        .0
129.000 5451064.0         162.000         .0

         RUNOFF VOLUME = ********** INCHES     =************ ACRE-FEET
         PEAK DISCHARGE RATE =********** CFS  AT 103.200 HOURS   BASIN AREA =
.3993 SQ. MI.


     *

     *

     ADD HYD                     ID=53 HYD=BYPASSF.PONDF ID I=31 II=52

     PRINT HYD                   ID=53 CODE=10

                                                HYDROGRAPH FROM AREA BYPASSF.PONDF
```

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	12.000	23.0	24.000	6.7	
36.000	.0	48.000	.0				
	1.000	.4	13.000	22.7	25.000	1.6	
37.000	.0	49.000	.0				
	2.000	22.4	14.000	22.1	26.000	.6	
38.000	.0	50.000	.0				
	3.000	24.1	15.000	21.5	27.000	.3	
39.000	.0	51.000	.0				
	4.000	24.4	16.000	20.7	28.000	.2	
40.000	.0	52.000	.0				
	5.000	24.3	17.000	19.8	29.000	.2	
41.000	.0	53.000	.0				
	6.000	24.2	18.000	18.8	30.000	.1	
42.000	.0	54.000	.0				
	7.000	24.0	19.000	17.4	31.000	.1	
43.000	.0	55.000	.0				
	8.000	23.9	20.000	15.7	32.000	.1	
44.000	.0	56.000	.0				
	9.000	23.7	21.000	13.7	33.000	.1	
45.000	.0						
	10.000	23.5	22.000	11.8	34.000	.1	
46.000	.0						
	11.000	23.3	23.000	10.1	35.000	.0	
47.000	.0						

RUNOFF VOLUME = 1.29146 INCHES = 38.6836 ACRE-FEET
PEAK DISCHARGE RATE = 24.36 CFS AT 3.900 HOURS BASIN AREA = .5616 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.004

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.08	.89
.21	.17	.33	1.22
.31	.31	.76	1.45
.42	.47	1.36	1.62
.52	.65	2.13	1.76

	.63	.84	3.03	1.85
	.73	1.04	4.07	1.93
	.83	1.24	5.20	1.97
	.94	1.45	6.41	2.00
	1.04	1.66	7.67	2.00
	1.15	1.86	8.95	2.00
	1.25	2.07	10.23	2.00
	1.35	2.27	11.47	2.00
	1.46	2.46	12.62	2.00
	1.56	2.63	13.66	2.00
	1.67	2.80	14.52	2.00
	1.77	2.94	15.14	2.00
	1.88	3.06	15.39	2.00
	2.00	3.14	15.39	2.00

ROUTE MCUNGE ID=77 HYD=RTE.PONDF INFLOW ID=53

DT=0.0 L=850 NS=0 SLOPE=0.004

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 565 TABLE PTS= 19
DT= .100000 QMED= 12.18 CKMED= 6.0826
WIDTH MED= 2.00 NREACH= 1 DX= 850.00

DEPTH (FT)	AREA Q-M (SQ FT)	Q C1-M (CFS)	TRAVEL C2-M TIME(HR)	WIDTH C3-M (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)
.00	.0	.0	.267	.0	2.36	.57	1.000	.000	1.000	.000	.000	.0
.10	.1	.1	.196	.9	2.34	1.20	.989	.011	.989	.000	.011	.0
.21	.2	.3	.126	1.2	2.73	1.88	1.156	.029	.974	.084	-.058	.2
.31	.3	.8	.098	1.5	3.46	2.41	1.463	.044	.965	.202	-.167	.5
.42	.5	1.4	.082	1.6	4.07	2.87	1.723	.061	.956	.281	-.238	1.0
.52	.7	2.1	.072	1.8	4.59	3.27	1.943	.078	.949	.338	-.287	1.7
.63	.8	3.0	.065	1.9	5.03	3.62	2.131	.096	.941	.380	-.321	2.6
.73	1.0	4.1	.060	1.9	5.40	3.92	2.289	.115	.932	.412	-.345	3.5
.83	1.2	5.2	.056	2.0	5.71	4.19	2.418	.136	.924	.437	-.361	4.6
.94	1.4	6.4	.053	2.0	5.95	4.43	2.520	.159	.914	.456	-.370	5.8

```
         1.04    1.7      7.7    .051    2.0     6.12   4.63    2.590   .184   .902
 .470  -.372      7.0    .909   .465  -.373
         1.15    1.9      9.0    .049    2.0     6.16   4.81    2.607   .214   .888
 .477  -.365      8.3    .896   .475  -.371
         1.25    2.1     10.2    .048    2.0     6.04   4.95    2.558   .249   .869
 .475  -.344      9.6    .880   .477  -.357
         1.35    2.3     11.5    .047    2.0     5.75   5.06    2.437   .293   .843
 .464  -.307     10.8    .858   .471  -.329
         1.46    2.5     12.6    .046    2.0     5.27   5.14    2.234   .352   .804
 .442  -.246     12.0    .826   .455  -.281
         1.56    2.6     13.7    .046    2.0     4.56   5.18    1.933   .440   .739
 .407  -.146     13.1    .777   .428  -.205
         1.67    2.8     14.5    .046    2.0     3.55   5.19    1.505   .601   .613
 .356   .031     14.1    .692   .385  -.077
         1.77    2.9     15.1    .046    2.0     2.08   5.14     .881  1.070   .275
 .322   .403     14.8    .507   .331   .162
         1.88    3.1     15.4    .047    2.0     1.19   5.03     .502  1.908  -.119
 .414   .705     15.3    .076   .369   .556
    MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   4 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.3723
    Equations solved using the Ponce correction to C2
    *

    PRINT HYD            ID=77 CODE=0
```

HYDROGRAPH FROM AREA RTE.PONDF

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
	.000	.0	11.400	23.3	22.800	10.5
34.200	.1	45.600	.0			
	.100	.0	11.500	23.2	22.900	10.4
34.300	.1	45.700	.0			
	.200	.0	11.600	23.2	23.000	10.2
34.400	.1	45.800	.0			
	.300	.0	11.700	23.2	23.100	10.1
34.500	.1	45.900	.0			
	.400	.0	11.800	23.2	23.200	9.8
34.600	.0	46.000	.0			
	.500	.0	11.900	23.1	23.300	9.5
34.700	.0	46.100	.0			
	.600	.0	12.000	23.1	23.400	9.2
34.800	.0	46.200	.0			
	.700	.0	12.100	23.1	23.500	8.8
34.900	.0	46.300	.0			
	.800	.0	12.200	23.0	23.600	8.3
35.000	.0	46.400	.0			
	.900	.0	12.300	23.0	23.700	7.9
35.100	.0	46.500	.0			
	1.000	.0	12.400	23.0	23.800	7.6
35.200	.0	46.600	.0			
	1.100	.8	12.500	22.9	23.900	7.2
35.300	.0	46.700	.0			
	1.200	4.7	12.600	22.9	24.000	6.9
35.400	.0	46.800	.0			
	1.300	9.9	12.700	22.9	24.100	6.2
35.500	.0	46.900	.0			
	1.400	12.3	12.800	22.8	24.200	5.1
35.600	.0	47.000	.0			

1.500	14.9	12.900	22.8	24.300	4.1
35.700	.0	47.100	.0		
1.600	16.1	13.000	22.7	24.400	3.4
35.800	.0	47.200	.0		
1.700	17.4	13.100	22.7	24.500	3.0
35.900	.0	47.300	.0		
1.800	18.7	13.200	22.6	24.600	2.6
36.000	.0	47.400	.0		
1.900	19.7	13.300	22.6	24.700	2.3
36.100	.0	47.500	.0		
2.000	20.6	13.400	22.6	24.800	2.1
36.200	.0	47.600	.0		
2.100	21.3	13.500	22.5	24.900	1.8
36.300	.0	47.700	.0		
2.200	21.9	13.600	22.5	25.000	1.7
36.400	.0	47.800	.0		
2.300	22.3	13.700	22.4	25.100	1.5
36.500	.0	47.900	.0		
2.400	22.7	13.800	22.4	25.200	1.4
36.600	.0	48.000	.0		
2.500	23.0	13.900	22.3	25.300	1.2
36.700	.0	48.100	.0		
2.600	23.3	14.000	22.2	25.400	1.1
36.800	.0	48.200	.0		
2.700	23.5	14.100	22.2	25.500	1.0
36.900	.0	48.300	.0		
2.800	23.6	14.200	22.1	25.600	.9
37.000	.0	48.400	.0		
2.900	23.8	14.300	22.1	25.700	.9
37.100	.0	48.500	.0		
3.000	23.9	14.400	22.0	25.800	.8
37.200	.0	48.600	.0		
3.100	24.0	14.500	21.9	25.900	.7
37.300	.0	48.700	.0		
3.200	24.1	14.600	21.9	26.000	.7
37.400	.0	48.800	.0		
3.300	24.1	14.700	21.8	26.100	.6
37.500	.0	48.900	.0		
3.400	24.2	14.800	21.8	26.200	.6
37.600	.0	49.000	.0		
3.500	24.2	14.900	21.7	26.300	.5
37.700	.0	49.100	.0		
3.600	24.3	15.000	21.6	26.400	.5
37.800	.0	49.200	.0		
3.700	24.3	15.100	21.6	26.500	.5
37.900	.0	49.300	.0		
3.800	24.3	15.200	21.5	26.600	.4
38.000	.0	49.400	.0		
3.900	24.3	15.300	21.4	26.700	.4
38.100	.0	49.500	.0		
4.000	24.3	15.400	21.3	26.800	.4
38.200	.0	49.600	.0		
4.100	24.3	15.500	21.3	26.900	.4
38.300	.0	49.700	.0		
4.200	24.3	15.600	21.2	27.000	.3
38.400	.0	49.800	.0		
4.300	24.3	15.700	21.1	27.100	.3
38.500	.0	49.900	.0		
4.400	24.3	15.800	21.0	27.200	.3
38.600	.0	50.000	.0		
4.500	24.3	15.900	20.9	27.300	.3
38.700	.0	50.100	.0		
4.600	24.3	16.000	20.9	27.400	.3

38.800	.0	50.200	.0								
	4.700	24.3	16.100	20.8	27.500	.3					
38.900	.0	50.300	.0								
	4.800	24.3	16.200	20.7	27.600	.3					
39.000	.0	50.400	.0								
	4.900	24.3	16.300	20.6	27.700	.2					
39.100	.0	50.500	.0								
	5.000	24.3	16.400	20.5	27.800	.2					
39.200	.0	50.600	.0								
	5.100	24.3	16.500	20.4	27.900	.2					
39.300	.0	50.700	.0								
	5.200	24.3	16.600	20.3	28.000	.2					
39.400	.0	50.800	.0								
	5.300	24.3	16.700	20.3	28.100	.2					
39.500	.0	50.900	.0								
	5.400	24.3	16.800	20.2	28.200	.2					
39.600	.0	51.000	.0								
	5.500	24.2	16.900	20.1	28.300	.2					
39.700	.0	51.100	.0								
	5.600	24.2	17.000	20.0	28.400	.2					
39.800	.0	51.200	.0								
	5.700	24.2	17.100	19.9	28.500	.2					
39.900	.0	51.300	.0								
	5.800	24.2	17.200	19.8	28.600	.2					
40.000	.0	51.400	.0								
	5.900	24.2	17.300	19.7	28.700	.2					
40.100	.0	51.500	.0								
	6.000	24.2	17.400	19.6	28.800	.2					
40.200	.0	51.600	.0								
	6.100	24.2	17.500	19.5	28.900	.2					
40.300	.0	51.700	.0								
	6.200	24.2	17.600	19.4	29.000	.2					
40.400	.0	51.800	.0								
	6.300	24.1	17.700	19.3	29.100	.2					
40.500	.0	51.900	.0								
	6.400	24.1	17.800	19.2	29.200	.1					
40.600	.0	52.000	.0								
	6.500	24.1	17.900	19.1	29.300	.1					
40.700	.0	52.100	.0								
	6.600	24.1	18.000	19.0	29.400	.1					
40.800	.0	52.200	.0								
	6.700	24.1	18.100	18.8	29.500	.1					
40.900	.0	52.300	.0								
	6.800	24.1	18.200	18.7	29.600	.1					
41.000	.0	52.400	.0								
	6.900	24.1	18.300	18.6	29.700	.1					
41.100	.0	52.500	.0								
	7.000	24.0	18.400	18.5	29.800	.1					
41.200	.0	52.600	.0								
	7.100	24.0	18.500	18.4	29.900	.1					
41.300	.0	52.700	.0								
	7.200	24.0	18.600	18.3	30.000	.1					
41.400	.0	52.800	.0								
	7.300	24.0	18.700	18.2	30.100	.1					
41.500	.0	52.900	.0								
	7.400	24.0	18.800	18.0	30.200	.1					
41.600	.0	53.000	.0								
	7.500	24.0	18.900	17.9	30.300	.1					
41.700	.0	53.100	.0								
	7.600	24.0	19.000	17.7	30.400	.1					
41.800	.0	53.200	.0								
	7.700	23.9	19.100	17.6	30.500	.1					
41.900	.0	53.300	.0								

	7.800	23.9	19.200	17.4	30.600	.1
42.000	.0	53.400	.0			
	7.900	23.9	19.300	17.3	30.700	.1
42.100	.0	53.500	.0			
	8.000	23.9	19.400	17.1	30.800	.1
42.200	.0	53.600	.0			
	8.100	23.9	19.500	16.9	30.900	.1
42.300	.0	53.700	.0			
	8.200	23.9	19.600	16.7	31.000	.1
42.400	.0	53.800	.0			
	8.300	23.8	19.700	16.6	31.100	.1
42.500	.0	53.900	.0			
	8.400	23.8	19.800	16.4	31.200	.1
42.600	.0	54.000	.0			
	8.500	23.8	19.900	16.2	31.300	.1
42.700	.0	54.100	.0			
	8.600	23.8	20.000	16.1	31.400	.1
42.800	.0	54.200	.0			
	8.700	23.8	20.100	15.9	31.500	.1
42.900	.0	54.300	.0			
	8.800	23.8	20.200	15.7	31.600	.1
43.000	.0	54.400	.0			
	8.900	23.7	20.300	15.5	31.700	.1
43.100	.0	54.500	.0			
	9.000	23.7	20.400	15.2	31.800	.1
43.200	.0	54.600	.0			
	9.100	23.7	20.500	14.9	31.900	.1
43.300	.0	54.700	.0			
	9.200	23.7	20.600	14.6	32.000	.1
43.400	.0	54.800	.0			
	9.300	23.7	20.700	14.4	32.100	.1
43.500	.0	54.900	.0			
	9.400	23.7	20.800	14.1	32.200	.1
43.600	.0	55.000	.0			
	9.500	23.6	20.900	13.9	32.300	.1
43.700	.0	55.100	.0			
	9.600	23.6	21.000	13.8	32.400	.1
43.800	.0	55.200	.0			
	9.700	23.6	21.100	13.6	32.500	.1
43.900	.0	55.300	.0			
	9.800	23.6	21.200	13.4	32.600	.1
44.000	.0	55.400	.0			
	9.900	23.6	21.300	13.2	32.700	.1
44.100	.0	55.500	.0			
	10.000	23.5	21.400	13.0	32.800	.1
44.200	.0	55.600	.0			
	10.100	23.5	21.500	12.8	32.900	.1
44.300	.0	55.700	.0			
	10.200	23.5	21.600	12.6	33.000	.1
44.400	.0	55.800	.0			
	10.300	23.5	21.700	12.4	33.100	.1
44.500	.0	55.900	.0			
	10.400	23.5	21.800	12.2	33.200	.1
44.600	.0	56.000	.0			
	10.500	23.5	21.900	12.0	33.300	.1
44.700	.0	56.100	.0			
	10.600	23.4	22.000	11.9	33.400	.1
44.800	.0	56.200	.0			
	10.700	23.4	22.100	11.7	33.500	.1
44.900	.0	56.300	.0			
	10.800	23.4	22.200	11.5	33.600	.1
45.000	.0	56.400	.0			
	10.900	23.4	22.300	11.3	33.700	.1

45.100 .0 56.500 .0
11.000 23.4 22.400 11.2 33.800 .1
45.200 .0
11.100 23.3 22.500 11.0 33.900 .1
45.300 .0
11.200 23.3 22.600 10.8 34.000 .1
45.400 .0
11.300 23.3 22.700 10.7 34.100 .1
45.500 .0

RUNOFF VOLUME = 1.29051 INCHES = 38.6551 ACRE-FEET
PEAK DISCHARGE RATE = 24.35 CFS AT 4.300 HOURS BASIN AREA = .5616 SQ. MI.

*

*

*****RESERVE*****

*

COMPUTE NM HYD ID=20 HYD NO=BASIN.G1 DA=.02531 SQ MI

%A=0 %B=25.0 %C=25.0 %D=50.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 50.075 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .012655 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 33.725 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .012655 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=20 CODE=10

HYDROGRAPH FROM AREA BASIN.G1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.2	20.000	.2		
1.000	.0	6.000	.3	11.000	.2

16.000 .2 21.000 .2
2.000 9.7 7.000 .3 12.000 .2
17.000 .2 22.000 .2
3.000 .5 8.000 .3 13.000 .2
18.000 .2 23.000 .1
4.000 .3 9.000 .3 14.000 .2
19.000 .2 24.000 .1

RUNOFF VOLUME = 1.61331 INCHES = 2.1777 ACRE-FEET
PEAK DISCHARGE RATE = 48.23 CFS AT 1.500 HOURS BASIN AREA = .0253 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.007

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.29	1.33
.31	.39	1.27	1.83
.47	.71	2.95	2.18
.63	1.07	5.31	2.44
.78	1.46	8.30	2.63
.94	1.89	11.84	2.78
1.09	2.33	15.86	2.89
1.25	2.79	20.27	2.96
1.41	3.26	24.99	2.99
1.56	3.72	29.91	3.00
1.72	4.19	34.92	3.00
1.88	4.65	39.90	3.00
2.03	5.10	44.72	3.00
2.19	5.53	49.23	3.00
2.35	5.93	53.27	3.00
2.50	6.30	56.64	3.00
2.66	6.62	59.04	

3.00

2.81 6.89 60.03

3.00

3.00 7.07 60.03

3.00

ROUTE MCUNGE ID=78 HYD=RTE.G1 INFLOW ID=20

DT=0.0 L=580 NS=0 SLOPE=0.007

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=78 CODE=0

HYDROGRAPH FROM AREA RTE.G1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.2	20.000	.2		
.100	.0	5.100	.3	10.100	.2
15.100	.2	20.100	.2		
.200	.0	5.200	.3	10.200	.3
15.200	.2	20.200	.2		
.300	.0	5.300	.3	10.300	.2
15.300	.2	20.300	.2		
.400	.0	5.400	.3	10.400	.2
15.400	.2	20.400	.2		
.500	.0	5.500	.3	10.500	.2
15.500	.2	20.500	.2		
.600	.0	5.600	.3	10.600	.2
15.600	.2	20.600	.2		
.700	.0	5.700	.3	10.700	.2
15.700	.2	20.700	.2		
.800	.0	5.800	.3	10.800	.2
15.800	.2	20.800	.2		
.900	.0	5.900	.3	10.900	.2
15.900	.2	20.900	.2		
1.000	.0	6.000	.3	11.000	.2
16.000	.2	21.000	.2		
1.100	.2	6.100	.3	11.100	.2
16.100	.2	21.100	.2		
1.200	3.2	6.200	.3	11.200	.2
16.200	.2	21.200	.2		
1.300	12.4	6.300	.3	11.300	.2
16.300	.2	21.300	.2		
1.400	41.1	6.400	.3	11.400	.2
16.400	.2	21.400	.2		
1.500	48.2	6.500	.3	11.500	.2
16.500	.2	21.500	.2		
1.600	33.6	6.600	.3	11.600	.2
16.600	.2	21.600	.2		
1.700	21.8	6.700	.3	11.700	.2
16.700	.2	21.700	.2		
1.800	15.8	6.800	.3	11.800	.2
16.800	.2	21.800	.2		
1.900	12.1	6.900	.3	11.900	.2

16.900	.2	21.900	.2				
	2.000	9.7	7.000	.3	12.000	.2	
17.000	.2	22.000	.2				
	2.100	5.9	7.100	.3	12.100	.2	
17.100	.2	22.100	.2				
	2.200	3.5	7.200	.3	12.200	.2	
17.200	.2	22.200	.2				
	2.300	2.5	7.300	.3	12.300	.2	
17.300	.2	22.300	.2				
	2.400	1.9	7.400	.3	12.400	.2	
17.400	.2	22.400	.2				
	2.500	1.4	7.500	.3	12.500	.2	
17.500	.2	22.500	.2				
	2.600	1.1	7.600	.3	12.600	.2	
17.600	.2	22.600	.2				
	2.700	.9	7.700	.3	12.700	.2	
17.700	.2	22.700	.2				
	2.800	.7	7.800	.3	12.800	.2	
17.800	.2	22.800	.2				
	2.900	.6	7.900	.3	12.900	.2	
17.900	.2	22.900	.2				
	3.000	.5	8.000	.3	13.000	.2	
18.000	.2	23.000	.1				
	3.100	.5	8.100	.3	13.100	.2	
18.100	.2	23.100	.2				
	3.200	.4	8.200	.3	13.200	.2	
18.200	.2	23.200	.2				
	3.300	.4	8.300	.3	13.300	.2	
18.300	.2	23.300	.1				
	3.400	.3	8.400	.3	13.400	.2	
18.400	.2	23.400	.1				
	3.500	.3	8.500	.3	13.500	.2	
18.500	.2	23.500	.1				
	3.600	.3	8.600	.3	13.600	.2	
18.600	.2	23.600	.1				
	3.700	.3	8.700	.3	13.700	.2	
18.700	.2	23.700	.1				
	3.800	.3	8.800	.3	13.800	.2	
18.800	.2	23.800	.1				
	3.900	.3	8.900	.3	13.900	.2	
18.900	.2	23.900	.1				
	4.000	.3	9.000	.3	14.000	.2	
19.000	.2	24.000	.1				
	4.100	.2	9.100	.3	14.100	.2	
19.100	.2	24.100	.1				
	4.200	.2	9.200	.3	14.200	.2	
19.200	.2	24.200	.0				
	4.300	.2	9.300	.3	14.300	.2	
19.300	.2	24.300	.0				
	4.400	.2	9.400	.3	14.400	.2	
19.400	.2	24.400	.0				
	4.500	.2	9.500	.3	14.500	.2	
19.500	.2	24.500	.0				
	4.600	.2	9.600	.3	14.600	.2	
19.600	.2	24.600	.0				
	4.700	.2	9.700	.3	14.700	.2	
19.700	.2	24.700	.0				
	4.800	.2	9.800	.3	14.800	.2	
19.800	.2	24.800	.0				
	4.900	.2	9.900	.3	14.900	.2	
19.900	.2						

RUNOFF VOLUME = 1.61330 INCHES = 2.1777 ACRE-FEET

PEAK DISCHARGE RATE = 48.23 CFS AT 1.500 HOURS BASIN AREA = .0253 SQ. MI.

*

*

*****SANTA FE 2*****

*

COMPUTE NM HYD ID=21 HYD NO=BASIN.G2 DA=.02530 SQ MI

%A=0 %B=25.0 %C=25.0 %D=50.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 50.056 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .012650 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 33.712 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .012650 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=21 CODE=10

HYDROGRAPH FROM AREA BASIN.G2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.2	20.000	.2		
1.000	.0	6.000	.3	11.000	.2
16.000	.2	21.000	.2		
2.000	9.7	7.000	.3	12.000	.2
17.000	.2	22.000	.2		
3.000	.5	8.000	.3	13.000	.2
18.000	.2	23.000	.1		
4.000	.3	9.000	.3	14.000	.2
19.000	.2	24.000	.1		

RUNOFF VOLUME = 1.61331 INCHES = 2.1769 ACRE-FEET
PEAK DISCHARGE RATE = 48.22 CFS AT 1.500 HOURS BASIN AREA = .0253 SQ. MI.

```
     *
     *
     ADD HYD                      ID=30 HYD=G1.G2 ID I=78 II=21
     PRINT HYD                    ID=30 CODE=10

                                                HYDROGRAPH FROM AREA G1.G2

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          5.000        .5         10.000        .5
15.000        .4         20.000        .3
          1.000        .0          6.000        .6         11.000        .5
16.000        .4         21.000        .3
          2.000      19.4          7.000        .6         12.000        .5
17.000        .4         22.000        .3
          3.000       1.0          8.000        .6         13.000        .4
18.000        .4         23.000        .3
          4.000        .5          9.000        .5         14.000        .4
19.000        .3         24.000        .3

         RUNOFF VOLUME =     1.61330 INCHES     =       4.3546 ACRE-FEET
         PEAK DISCHARGE RATE =      96.45 CFS  AT   1.500 HOURS   BASIN AREA =
.0506 SQ. MI.


     *
     *
     ADD HYD                      ID=31 HYD=G1G2.PONDF ID I=30 II=77
     PRINT HYD                    ID=31 CODE=10

                                                HYDROGRAPH FROM AREA G1G2.PONDF

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0         12.000      23.6         24.000       7.1
36.000        .0         48.000        .0
          1.000        .0         13.000      23.2         25.000       1.7
37.000        .0         49.000        .0
          2.000      40.0         14.000      22.7         26.000        .7
38.000        .0         50.000        .0
          3.000      24.9         15.000      22.0         27.000        .3
39.000        .0         51.000        .0
          4.000      24.8         16.000      21.2         28.000        .2
40.000        .0         52.000        .0
          5.000      24.8         17.000      20.3         29.000        .2
```

41.000	.0	53.000	.0				
	6.000	24.8	18.000	19.3	30.000	.1	
42.000	.0	54.000	.0				
	7.000	24.6	19.000	18.1	31.000	.1	
43.000	.0	55.000	.0				
	8.000	24.5	20.000	16.4	32.000	.1	
44.000	.0	56.000	.0				
	9.000	24.3	21.000	14.1	33.000	.1	
45.000	.0						
	10.000	24.1	22.000	12.2	34.000	.1	
46.000	.0						
	11.000	23.8	23.000	10.5	35.000	.0	
47.000	.0						

RUNOFF VOLUME = 1.31719 INCHES = 43.0096 ACRE-FEET
PEAK DISCHARGE RATE = 111.35 CFS AT 1.500 HOURS BASIN AREA = .6122 SQ. MI.

*

*

****

DIVIDE HYD ID=31 Q=17.86 ID I=32 HYD NO=BYPASS.G
ID II=33 HYD NO=SURGE.G

PRINT HYD ID=32 CODE=10

HYDROGRAPH FROM AREA BYPASS.G

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	17.9	24.000	7.1
1.000	.0	13.000	17.9	25.000	1.7
2.000	17.9	14.000	17.9	26.000	.7
3.000	17.9	15.000	17.9	27.000	.3
4.000	17.9	16.000	17.9	28.000	.2
5.000	17.9	17.000	17.9	29.000	.2
6.000	17.9	18.000	17.9	30.000	.1
7.000	17.9	19.000	17.9	31.000	.1
8.000	17.9	20.000	16.4	32.000	.1
9.000	17.9	21.000	14.1	33.000	.1
10.000	17.9	22.000	12.2	34.000	.1
11.000	17.9	23.000	10.5	35.000	.0

47.000 .0

RUNOFF VOLUME = 1.31719 INCHES = 32.2686 ACRE-FEET
PEAK DISCHARGE RATE = 17.86 CFS AT 1.300 HOURS BASIN AREA = .4593 SQ. MI.

PRINT HYD ID=33 CODE=10

HYDROGRAPH FROM AREA SURGE.G

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	7.0	8.000	6.6
12.000	5.7	16.000	3.4		
1.000	.0	5.000	7.0	9.000	6.4
13.000	5.3	17.000	2.5		
2.000	22.1	6.000	6.9	10.000	6.2
14.000	4.8	18.000	1.4		
3.000	7.1	7.000	6.8	11.000	6.0
15.000	4.2	19.000	.2		

RUNOFF VOLUME = 1.31719 INCHES = 10.7410 ACRE-FEET
PEAK DISCHARGE RATE = 93.49 CFS AT 1.500 HOURS BASIN AREA = .1529 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=34 HYD=POND.G INFLOW ID=33 CODE=6.3

OUTFLOW	STORAGE	DEPTH
0	0	5415.67
2.47	0.23	5417.0
4.15	0.84	5418.0
5.71	1.83	5419.0
7.17	3.17	5420.0
8.55	4.70	5421.0
9.86	6.34	5422.0
10.18	7.21	5422.5
100.00	8.10	5423.0

* * * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5415.67	.000	.00
.60	.00	5415.67	.000	.00
1.20	.00	5415.67	.000	.00
1.80	32.40	5419.41	2.385	6.31
2.40	8.58	5419.81	2.914	6.89
3.00	7.08	5419.83	2.946	6.93
3.60	6.99	5419.84	2.950	6.93
4.20	6.98	5419.84	2.953	6.93
4.80	6.96	5419.84	2.954	6.94
5.40	6.93	5419.84	2.955	6.94
6.00	6.91	5419.84	2.955	6.94
6.60	6.86	5419.84	2.953	6.93
7.20	6.75	5419.83	2.947	6.93
7.80	6.63	5419.82	2.935	6.91
8.40	6.52	5419.81	2.919	6.90
9.00	6.40	5419.80	2.898	6.87
9.60	6.27	5419.78	2.872	6.84
10.20	6.15	5419.75	2.841	6.81
10.80	6.02	5419.73	2.806	6.77
11.40	5.87	5419.70	2.766	6.73
12.00	5.70	5419.66	2.720	6.68
12.60	5.48	5419.63	2.668	6.62
13.20	5.22	5419.58	2.606	6.56
13.80	4.91	5419.53	2.534	6.48
14.40	4.56	5419.46	2.450	6.39
15.00	4.16	5419.39	2.353	6.28
15.60	3.71	5419.31	2.239	6.16
16.20	3.21	5419.21	2.109	6.01
16.80	2.67	5419.10	1.961	5.85
17.40	2.07	5418.96	1.793	5.65
18.00	1.45	5418.78	1.608	5.36
18.60	.78	5418.57	1.405	5.04
19.20	.00	5418.35	1.183	4.69
19.80	.00	5418.12	.959	4.34
20.40	.00	5417.86	.753	3.91
21.00	.00	5417.56	.572	3.41
21.60	.00	5417.30	.414	2.98
22.20	.00	5417.08	.276	2.60
22.80	.00	5416.62	.164	1.76
23.40	.00	5416.23	.096	1.03
24.00	.00	5416.00	.057	.61
24.60	.00	5415.86	.033	.36
25.20	.00	5415.78	.019	.21
25.80	.00	5415.74	.011	.12
26.40	.00	5415.71	.007	.07
27.00	.00	5415.69	.004	.04
27.60	.00	5415.68	.002	.02
28.20	.00	5415.68	.001	.01
28.80	.00	5415.67	.001	.01
29.40	.00	5415.67	.000	.01
30.00	.00	5415.67	.000	.00
30.60	.00	5415.67	.000	.00
31.20	.00	5415.67	.000	.00

PEAK DISCHARGE = 6.936 CFS - PEAK OCCURS AT HOUR 5.40
MAXIMUM WATER SURFACE ELEVATION = 5419.839
MAXIMUM STORAGE = 2.9550 AC-FT INCREMENTAL TIME= .300000HRS

*

*

PRINT HYD ID=24 CODE=10

HYDROGRAPH FROM AREA BASIN.F5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.2	20.000	.2		
1.000	.0	6.000	.3	11.000	.3
16.000	.2	21.000	.2		
2.000	9.5	7.000	.3	12.000	.3
17.000	.2	22.000	.2		
3.000	.5	8.000	.3	13.000	.2
18.000	.2	23.000	.2		
4.000	.3	9.000	.3	14.000	.2
19.000	.2	24.000	.2		

RUNOFF VOLUME = 2.02070 INCHES = 1.9959 ACRE-FEET
PEAK DISCHARGE RATE = 39.52 CFS AT 1.500 HOURS BASIN AREA = .0185 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.006

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.27	1.33
.31	.39	1.18	1.83
.47	.71	2.73	2.18
.63	1.07	4.92	2.44
.78	1.46	7.68	2.63
.94	1.89	10.96	2.78
1.09	2.33	14.68	2.89
1.25	2.79	18.77	2.96
1.41	3.26	23.14	2.99

	1.56	3.72	27.69
3.00			
	1.72	4.19	32.33
3.00			
	1.88	4.65	36.94
3.00			
	2.03	5.10	41.40
3.00			
	2.19	5.53	45.58
3.00			
	2.35	5.93	49.32
3.00			
	2.50	6.30	52.43
3.00			
	2.66	6.62	54.66
3.00			
	2.81	6.89	55.58
3.00			
	3.00	7.07	55.58
3.00			

ROUTE MCUNGE ID=78 HYD=RTE.PONDG INFLOW ID=34

DT=0.0 L=1440 NS=0 SLOPE=0.006

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 105 TABLE PTS= 19
DT= .300000 QMED= 3.47 CKMED= 6.0369
WIDTH MED= 2.27 NREACH= 1 DX= 1440.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.282	.0	1.33	.91	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.16	.1	.3	.207	1.3	3.17	1.93	2.380	.007	.996	.410	-.405	.0	.997	.244	-.241
.31	.4	1.2	.133	1.8	4.38	3.01	3.285	.017	.992	.535	-.527	.6	.993	.465	-.458
.47	.7	2.7	.103	2.2	5.55	3.87	4.159	.026	.990	.614	-.604	1.9	.991	.578	-.569
.63	1.1	4.9	.087	2.4	6.53	4.61	4.896	.036	.988	.663	-.651	3.8	.989	.641	-.630
.78	1.5	7.7	.076	2.6	7.36	5.24	5.523	.046	.986	.696	-.682	6.2	.987	.681	-.668
.94	1.9	11.0	.069	2.8	8.08	5.80	6.057	.056	.984	.719	-.703	9.3	.985	.708	-.693
1.09	2.3	14.7	.064	2.9	8.67	6.29	6.505	.068	.982	.736	-.718	12.8	.983	.728	-.712
1.25	2.8	18.8	.059	3.0	9.16	6.73	6.873	.080	.980	.749	-.728	16.7	.981	.743	-.724
1.41	3.3	23.1	.056	3.0	9.55	7.11	7.161	.094	.977	.758	-.735	20.9	.979	.754	-.733
1.56	3.7	27.7	.054	3.0	9.82	7.44	7.362	.109	.974	.764	-.738	25.4	.976	.762	-.738
1.72	4.2	32.3	.052	3.0	9.88	7.71	7.409	.126	.970	.766	-.736	30.0	.973	.766	-.738
1.88	4.7	36.9	.050	3.0	9.69	7.94	7.271	.147	.965	.762	-.727	34.6	.968	.765	-.733
2.03	5.1	41.4	.049	3.0	9.24	8.12	6.927	.173	.957	.753	-.710	39.2	.962	.759	-.721

```
        2.19     5.5     45.6     .048     3.0     8.46   8.25    6.349   .208   .945
 .735  -.680     43.5     .952   .746   -.698
        2.35     5.9     49.3     .048     3.0     7.32   8.32    5.493   .260   .923
 .704  -.627     47.5     .936   .723   -.659
        2.50     6.3     52.4     .048     3.0     5.70   8.33    4.277   .355   .874
 .645  -.519     50.9     .906   .681   -.587
        2.66     6.6     54.7     .048     3.0     3.34   8.25    2.505   .631   .695
 .516  -.211     53.6     .826   .600   -.425
        2.81     6.9     55.6     .050     3.0     1.90   8.07    1.428  1.126   .366
 .437   .197     55.1     .386   .437    .177
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       2 TIMES.
AVERAGE NUMBER ITERATIONS =  1.1143
       DEPTH   AREA      Q    TRAVEL  WIDTH     ck      VEL      C       D      C1
  C2     C3     Q-M     C1-M   C2-M   C3-M
        (FT)  (SQ FT)  (CFS)  TIME(HR) (FT)     (FPS)   (FPS)
                (CFS)
          .00     .0       .0    .282     .0     1.33    .91    1.000   .000  1.000
 .000   .000       .0   1.000   .000   .000
          .16     .1       .3    .207    1.3     1.36   1.93    1.017   .017   .983
 .017   .000       .0    .995   .005   .000
          .31     .4      1.2    .133    1.8     1.40   3.01    1.053   .053   .950
 .050   .000       .6    .967   .033   .000
          .47     .7      2.7    .103    2.2     1.47   3.87    1.099   .099   .910
 .090   .000      1.9    .929   .071   .000
          .63    1.1      4.9    .087    2.4     1.54   4.61    1.152   .152   .868
 .132   .000      3.8    .888   .112   .000
          .78    1.5      7.7    .076    2.6     1.61   5.24    1.209   .209   .827
 .173   .000      6.2    .847   .153   .000
          .94    1.9     11.0    .069    2.8     1.69   5.80    1.269   .269   .788
 .212   .000      9.3    .807   .193   .000
         1.09    2.3     14.7    .064    2.9     1.78   6.29    1.331   .331   .751
 .249   .000     12.8    .769   .231   .000
         1.25    2.8     18.8    .059    3.0     1.86   6.73    1.395   .395   .717
 .283   .000     16.7    .733   .267   .000
         1.41    3.3     23.1    .056    3.0     1.95   7.11    1.460   .460   .685
 .315   .000     20.9    .701   .299   .000
         1.56    3.7     27.7    .054    3.0     2.03   7.44    1.525   .525   .656
 .344   .000     25.4    .670   .330   .000
         1.72    4.2     32.3    .052    3.0     2.12   7.71    1.589   .589   .629
 .371   .000     30.0    .642   .358   .000
         1.88    4.7     36.9    .050    3.0     2.20   7.94    1.648   .648   .607
 .393   .000     34.6    .618   .382   .000
         2.03    5.1     41.4    .049    3.0     2.27   8.12    1.703   .703   .587
 .413   .000     39.2    .597   .403   .000
         2.19    5.5     45.6    .048    3.0     2.34   8.25    1.753   .753   .571
 .429   .000     43.5    .579   .421   .000
         2.35    5.9     49.3    .048    3.0     2.39   8.32    1.795   .795   .557
 .443   .000     47.5    .564   .436   .000
         2.50    6.3     52.4    .048    3.0     2.44   8.33    1.829   .829   .547
 .453   .000     50.9    .552   .448   .000
         2.66    6.6     54.7    .048    3.0     2.47   8.25    1.853   .853   .540
 .460   .000     53.6    .543   .457   .000
         2.81    6.9     55.6    .050    3.0     1.90   8.07    1.428  1.126   .366
 .437   .197     55.1    .386   .437   .177
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0471
     Equations solved with two passes: first using the Ponce correction to C1,
second using the Fread correction to C1, C2 and C3
     *

     PRINT HYD            ID=78 CODE=0
```

HYDROGRAPH FROM AREA RTE.PONDG

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.600	6.9	13.200	6.6
19.800	4.5	26.400	.1		
.300	.0	6.900	6.9	13.500	6.5
20.100	4.3	26.700	.1		
.600	.0	7.200	6.9	13.800	6.5
20.400	4.1	27.000	.1		
.900	.0	7.500	6.9	14.100	6.5
20.700	3.9	27.300	.0		
1.200	.0	7.800	6.9	14.400	6.4
21.000	3.6	27.600	.0		
1.500	.2	8.100	6.9	14.700	6.4
21.300	3.4	27.900	.0		
1.800	4.8	8.400	6.9	15.000	6.3
21.600	3.2	28.200	.0		
2.100	6.4	8.700	6.9	15.300	6.3
21.900	3.0	28.500	.0		
2.400	6.8	9.000	6.9	15.600	6.2
22.200	2.8	28.800	.0		
2.700	6.9	9.300	6.9	15.900	6.1
22.500	2.6	29.100	.0		
3.000	6.9	9.600	6.9	16.200	6.1
22.800	2.3	29.400	.0		
3.300	6.9	9.900	6.8	16.500	6.0
23.100	1.7	29.700	.0		
3.600	6.9	10.200	6.8	16.800	5.9
23.400	1.3	30.000	.0		
3.900	6.9	10.500	6.8	17.100	5.8
23.700	1.0	30.300	.0		
4.200	6.9	10.800	6.8	17.400	5.7
24.000	.8	30.600	.0		
4.500	6.9	11.100	6.8	17.700	5.6
24.300	.6	30.900	.0		
4.800	6.9	11.400	6.7	18.000	5.5
24.600	.5	31.200	.0		
5.100	6.9	11.700	6.7	18.300	5.3
24.900	.4	31.500	.0		
5.400	6.9	12.000	6.7	18.600	5.2
25.200	.3				
5.700	6.9	12.300	6.7	18.900	5.0
25.500	.2				
6.000	6.9	12.600	6.6	19.200	4.8
25.800	.2				
6.300	6.9	12.900	6.6	19.500	4.7
26.100	.1				

RUNOFF VOLUME = 1.31664 INCHES = 10.7365 ACRE-FEET
PEAK DISCHARGE RATE = 6.94 CFS AT 5.700 HOURS BASIN AREA = .1529 SQ. MI.

*

*

ADD HYD ID=79 HYD=BYPASS.RTE.G ID I=78 II=32

PRINT HYD ID=79 CODE=10

HYDROGRAPH FROM AREA BYPASS.RTE.G

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	24.6	24.000	7.9
36.000	.0	48.000	.0		
1.000	.0	13.000	24.5	25.000	2.0
37.000	.0	49.000	.0		
2.000	23.7	14.000	24.3	26.000	.8
38.000	.0	50.000	.0		
3.000	24.8	15.000	24.2	27.000	.4
39.000	.0	51.000	.0		
4.000	24.8	16.000	24.0	28.000	.2
40.000	.0	52.000	.0		
5.000	24.8	17.000	23.7	29.000	.2
41.000	.0	53.000	.0		
6.000	24.8	18.000	23.3	30.000	.1
42.000	.0	54.000	.0		
7.000	24.8	19.000	22.8	31.000	.1
43.000	.0	55.000	.0		
8.000	24.8	20.000	20.8	32.000	.1
44.000	.0	56.000	.0		
9.000	24.7	21.000	17.7	33.000	.1
45.000	.0				
10.000	24.7	22.000	15.1	34.000	.1
46.000	.0				
11.000	24.6	23.000	12.4	35.000	.0
47.000	.0				

RUNOFF VOLUME = 1.31704 INCHES = 43.0048 ACRE-FEET
PEAK DISCHARGE RATE = 24.80 CFS AT 5.700 HOURS BASIN AREA = .6122 SQ. MI.

*

*

****

*

**********POND G DISCHARGES INTO POND K**********

*

COMPUTE NM HYD ID=55 HYD NO=OFFSITE2 DA=.0805 SQ MI

%A=100 %B=0.0 %C=0.0 %D=0.0

TP=-.66 HR RAIN=-1

K = .803590HR TP = .660000HR K/TP RATIO = 1.217560 SHAPE CONSTANT, N = 2.922175

UNIT PEAK = 33.592 CFS UNIT VOLUME = .9995 B = 275.41 P60 = 1.8400
AREA = .080500 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=55 CODE=10

HYDROGRAPH FROM AREA OFFSITE2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	4.000	1.5	8.000	.3
12.000	.1	16.000	.0		
1.000	.0	5.000	.9	9.000	.2
13.000	.0	17.000	.0		
2.000	13.9	6.000	.6	10.000	.1
14.000	.0	18.000	.0		
3.000	5.2	7.000	.4	11.000	.1
15.000	.0				

RUNOFF VOLUME = .41534 INCHES = 1.7832 ACRE-FEET
PEAK DISCHARGE RATE = 13.87 CFS AT 2.000 HOURS BASIN AREA = .0805 SQ. MI.

*

*

ROUTE RESERVOIR ID=50 HYD=OFFPOND2 INFLOW ID=55 CODE=5

OUTFLOW	STORAGE	DEPTH
0	0	0
2.16	0.047	1
3.06	0.222	2
3.75	0.466	3
4.33	0.751	4
4.84	1.081	5

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	.00	.000	.00
.50	.00	.00	.000	.00
1.00	.00	.00	.000	.00
1.50	3.77	.41	.019	.88
2.00	13.87	2.49	.342	3.40

2.50	9.71	3.78	.689	4.20
3.00	5.22	4.18	.809	4.42
3.50	2.80	4.11	.787	4.39
4.00	1.50	3.80	.695	4.22
4.50	1.13	3.39	.579	3.98
5.00	.92	2.98	.461	3.74
5.50	.75	2.52	.348	3.42
6.00	.61	2.08	.241	3.11
6.50	.49	1.55	.144	2.66
7.00	.40	1.08	.061	2.23
7.50	.33	.34	.016	.73
8.00	.26	.16	.008	.35
8.50	.22	.12	.005	.25
9.00	.17	.09	.004	.20
9.50	.14	.07	.003	.16
10.00	.12	.06	.003	.13
10.50	.09	.05	.002	.11
11.00	.08	.04	.002	.09
11.50	.06	.03	.002	.07
12.00	.05	.03	.001	.06
12.50	.04	.02	.001	.05
13.00	.03	.02	.001	.04
13.50	.03	.01	.001	.03
14.00	.02	.01	.001	.02
14.50	.02	.01	.000	.02
15.00	.01	.01	.000	.02
15.50	.01	.01	.000	.01
16.00	.01	.00	.000	.01
16.50	.01	.00	.000	.01
17.00	.01	.00	.000	.01
17.50	.01	.00	.000	.01
18.00	.00	.00	.000	.00

PEAK DISCHARGE = 4.426 CFS - PEAK OCCURS AT HOUR 3.10
MAXIMUM WATER SURFACE ELEVATION = 4.188
MAXIMUM STORAGE = .8131 AC-FT INCREMENTAL TIME= .100000HRS

*

*

PRINT HYD ID=50 CODE=10

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.011

DIA=2.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.10	.06	.12	.89
.21	.17	.54	1.22
.31	.31	1.26	

1.45	.42	.47	2.26	
1.62	.52	.65	3.53	
1.76	.63	.84	5.03	
1.85	.73	1.04	6.74	
1.93	.83	1.24	8.62	
1.97	.94	1.45	10.63	
2.00	1.04	1.66	12.72	
2.00	1.15	1.86	14.85	
2.00	1.25	2.07	16.96	
2.00	1.35	2.27	19.01	
2.00	1.46	2.46	20.93	
2.00	1.56	2.63	22.65	
2.00	1.67	2.80	24.08	
2.00	1.77	2.94	25.10	
2.00	1.88	3.06	25.52	
2.00	2.00	3.14	25.52	

ROUTE MCUNGE ID=70 HYD=RTE.OFFPOND2 INFLOW ID=50

DT=0.0 L=900 NS=0 SLOPE=0.011

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 185 TABLE PTS= 19
DT= .100000 QMED= 2.21 CKMED= 6.2379
WIDTH MED= 1.62 NREACH= 1 DX= 900.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.170	.0	2.50	.94	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.10	.1	.1	.125	.9	3.28	1.99	1.312	.004	.996	.136	-.133	.0	.999	.021	-.021
.21	.2	.5	.080	1.2	4.53	3.11	1.810	.010	.993	.291	-.284	.3	.994	.203	-.197
.31	.3	1.3	.062	1.5	5.73	4.00	2.292	.015	.991	.395	-.386	.9	.992	.347	-.339
.42	.5	2.3	.053	1.6	6.75	4.76	2.698	.021	.989	.462	-.451	1.7	.990	.431	-.421
.52	.7	3.5	.046	1.8	7.61	5.42	3.044	.027	.987	.509	-.496	2.9	.988	.488	-.475
.63	.8	5.0	.042	1.9	8.34	6.00	3.338	.033	.985	.542	-.527	4.3	.986	.527	-.513
.73	1.0	6.7	.038	1.9	8.96	6.50	3.585	.039	.983						

```
 .567  -.550      5.9    .984   .556  -.540
         .83     1.2     8.6    .036    2.0     9.47   6.95    3.788   .047   .981
 .586  -.567      7.7    .982   .578  -.560
         .94     1.4    10.6    .034    2.0     9.87   7.34    3.947   .055   .978
 .600  -.578      9.6    .980   .594  -.574
        1.04     1.7    12.7    .033    2.0    10.14   7.68    4.057   .063   .975
 .609  -.585     11.7    .977   .606  -.583
        1.15     1.9    14.8    .031    2.0    10.21   7.97    4.083   .073   .972
 .612  -.584     13.8    .974   .612  -.586
        1.25     2.1    17.0    .030    2.0    10.02   8.21    4.007   .086   .966
 .607  -.574     15.9    .969   .611  -.580
        1.35     2.3    19.0    .030    2.0     9.54   8.39    3.817   .101   .959
 .593  -.552     18.0    .963   .602  -.565
        1.46     2.5    20.9    .029    2.0     8.75   8.52    3.499   .121   .948
 .567  -.515     20.0    .954   .583  -.537
        1.56     2.6    22.7    .029    2.0     7.57   8.60    3.027   .151   .928
 .521  -.449     21.8    .940   .549  -.488
        1.67     2.8    24.1    .029    2.0     5.89   8.60    2.357   .206   .884
 .439  -.323     23.4    .912   .489  -.401
        1.77     2.9    25.1    .029    2.0     3.45   8.53    1.381   .367   .733
 .272  -.005     24.6    .842   .378  -.220
        1.88     3.1    25.5    .030    2.0     1.97   8.34     .787   .655   .463
 .181   .356     25.3    .480   .181   .339
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.1024
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=70 CODE=0

                                                    HYDROGRAPH FROM AREA RTE.OFFPOND2

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          3.800       4.3          7.600        .7
11.400        .1         15.200        .0
           .100        .0          3.900       4.3          7.700        .6
11.500        .1         15.300        .0
           .200        .0          4.000       4.2          7.800        .5
11.600        .1         15.400        .0
           .300        .0          4.100       4.2          7.900        .4
11.700        .1         15.500        .0
           .400        .0          4.200       4.1          8.000        .4
11.800        .1         15.600        .0
           .500        .0          4.300       4.1          8.100        .3
11.900        .1         15.700        .0
           .600        .0          4.400       4.0          8.200        .3
12.000        .1         15.800        .0
           .700        .0          4.500       4.0          8.300        .3
12.100        .1         15.900        .0
           .800        .0          4.600       3.9          8.400        .3
12.200        .1         16.000        .0
           .900        .0          4.700       3.9          8.500        .3
12.300        .1         16.100        .0
          1.000        .0          4.800       3.9          8.600        .2
12.400        .0         16.200        .0
          1.100        .0          4.900       3.8          8.700        .2
12.500        .0         16.300        .0
          1.200        .0          5.000       3.8          8.800        .2
```

12.600	.0	16.400	.0				
	1.300	.0	5.100	3.7	8.900	.2	
12.700	.0	16.500	.0				
	1.400	.0	5.200	3.6	9.000	.2	
12.800	.0	16.600	.0				
	1.500	.4	5.300	3.6	9.100	.2	
12.900	.0	16.700	.0				
	1.600	1.6	5.400	3.5	9.200	.2	
13.000	.0	16.800	.0				
	1.700	2.6	5.500	3.4	9.300	.2	
13.100	.0	16.900	.0				
	1.800	2.6	5.600	3.4	9.400	.2	
13.200	.0	17.000	.0				
	1.900	3.1	5.700	3.3	9.500	.2	
13.300	.0	17.100	.0				
	2.000	3.3	5.800	3.3	9.600	.2	
13.400	.0	17.200	.0				
	2.100	3.6	5.900	3.2	9.700	.2	
13.500	.0	17.300	.0				
	2.200	3.8	6.000	3.1	9.800	.1	
13.600	.0	17.400	.0				
	2.300	3.9	6.100	3.1	9.900	.1	
13.700	.0	17.500	.0				
	2.400	4.1	6.200	3.0	10.000	.1	
13.800	.0	17.600	.0				
	2.500	4.2	6.300	2.9	10.100	.1	
13.900	.0	17.700	.0				
	2.600	4.3	6.400	2.8	10.200	.1	
14.000	.0	17.800	.0				
	2.700	4.3	6.500	2.7	10.300	.1	
14.100	.0	17.900	.0				
	2.800	4.4	6.600	2.6	10.400	.1	
14.200	.0	18.000	.0				
	2.900	4.4	6.700	2.5	10.500	.1	
14.300	.0	18.100	.0				
	3.000	4.4	6.800	2.4	10.600	.1	
14.400	.0	18.200	.0				
	3.100	4.4	6.900	2.3	10.700	.1	
14.500	.0	18.300	.0				
	3.200	4.4	7.000	2.3	10.800	.1	
14.600	.0	18.400	.0				
	3.300	4.4	7.100	2.2	10.900	.1	
14.700	.0	18.500	.0				
	3.400	4.4	7.200	1.9	11.000	.1	
14.800	.0	18.600	.0				
	3.500	4.4	7.300	1.3	11.100	.1	
14.900	.0	18.700	.0				
	3.600	4.4	7.400	1.0	11.200	.1	
15.000	.0	18.800	.0				
	3.700	4.3	7.500	.8	11.300	.1	
15.100	.0						

RUNOFF VOLUME = .41538 INCHES = 1.7834 ACRE-FEET
PEAK DISCHARGE RATE = 4.43 CFS AT 3.200 HOURS BASIN AREA = .0805 SQ. MI.

*

*

COMPUTE NM HYD ID=30 HYD NO=BASIN.B DA=.01998 SQ MI

%A=0 %B=34.0 %C=34.0 %D=32.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 25.299 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .006394 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 36.207 CFS UNIT VOLUME = 1.007 B = 354.44 P60 = 1.8400
AREA = .013586 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=30 CODE=10

HYDROGRAPH FROM AREA BASIN.B

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	5.8	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
3.000	.3	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.32000 INCHES = 1.4066 ACRE-FEET
PEAK DISCHARGE RATE = 34.80 CFS AT 1.500 HOURS BASIN AREA = .0200 SQ. MI.

*

*

ROUTE RESERVOIR ID=51 HYD=POND.B INFLOW ID=30 CODE=5

OUTFLOW	STORAGE	DEPTH
0	0	5515
1.71	0.06	5516

2.42	0.24	5517
2.96	0.55	5518
3.42	0.99	5519
3.82	1.67	5520

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5515.00	.000	.00
.50	.00	5515.00	.000	.00
1.00	.00	5515.00	.000	.00
1.50	34.80	5517.54	.407	2.71
2.00	5.83	5518.84	.918	3.34
2.50	.93	5518.75	.880	3.31
3.00	.31	5518.50	.769	3.19
3.50	.17	5518.23	.649	3.06
4.00	.13	5517.94	.531	2.93
4.50	.12	5517.58	.419	2.73
5.00	.13	5517.24	.315	2.55
5.50	.14	5516.88	.219	2.34
6.00	.15	5516.42	.136	2.01
6.50	.16	5516.03	.065	1.73
7.00	.15	5515.40	.024	.68
7.50	.15	5515.18	.011	.31
8.00	.14	5515.11	.007	.20
8.50	.14	5515.09	.006	.16
9.00	.14	5515.08	.005	.14
9.50	.13	5515.08	.005	.14
10.00	.13	5515.08	.005	.13
10.50	.12	5515.07	.004	.13
11.00	.12	5515.07	.004	.12
11.50	.12	5515.07	.004	.12
12.00	.12	5515.07	.004	.12
12.50	.11	5515.07	.004	.11
13.00	.11	5515.07	.004	.11
13.50	.11	5515.06	.004	.11
14.00	.10	5515.06	.004	.11
14.50	.10	5515.06	.004	.10
15.00	.10	5515.06	.004	.10
15.50	.10	5515.06	.004	.10
16.00	.10	5515.06	.003	.10
16.50	.09	5515.06	.003	.10
17.00	.09	5515.06	.003	.09
17.50	.09	5515.05	.003	.09
18.00	.09	5515.05	.003	.09
18.50	.09	5515.05	.003	.09
19.00	.09	5515.05	.003	.09
19.50	.08	5515.05	.003	.09
20.00	.08	5515.05	.003	.08
20.50	.08	5515.05	.003	.08
21.00	.08	5515.05	.003	.08
21.50	.08	5515.05	.003	.08
22.00	.08	5515.05	.003	.08
22.50	.08	5515.05	.003	.08
23.00	.07	5515.04	.003	.08
23.50	.07	5515.04	.003	.08

```
   24.00        .07   5515.04       .003       .07
   24.50        .00   5515.02       .001       .03
   25.00        .00   5515.01       .000       .01
   25.50        .00   5515.00       .000       .00
 PEAK DISCHARGE =        3.357 CFS - PEAK OCCURS AT HOUR    2.10
 MAXIMUM WATER SURFACE ELEVATION =     5518.863
 MAXIMUM STORAGE =         .9296 AC-FT      INCREMENTAL TIME=     .100000HRS

*

*

PRINT HYD                    ID=51 CODE=10

                                          HYDROGRAPH FROM AREA POND.B

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          6.000       2.0         12.000        .1
18.000        .1         24.000        .1
          1.000        .0          7.000        .7         13.000        .1
19.000        .1         25.000        .0
          2.000       3.3          8.000        .2         14.000        .1
20.000        .1         26.000        .0
          3.000       3.2          9.000        .1         15.000        .1
21.000        .1
          4.000       2.9         10.000        .1         16.000        .1
22.000        .1
          5.000       2.6         11.000        .1         17.000        .1
23.000        .1

         RUNOFF VOLUME =     1.31999 INCHES     =       1.4066 ACRE-FEET
         PEAK DISCHARGE RATE =       3.36 CFS  AT   2.100 HOURS   BASIN AREA =
.0200 SQ. MI.


     *

     *

     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.03

                                          DIA=2.0  N=0.013

                                      RATING CURVE PIPE SECTION  1.0
                                         WATER       FLOW        FLOW        MAX
WIDTH
                                         SURFACE     AREA        RATE
                                          ELEV        SQ FT       CFS         FT
                                            .00         .00         .00
.00
                                            .10         .06         .21
.89
                                            .21         .17         .89
1.22
                                            .31         .31        2.07
1.45
```

		.42	.47	3.73	
1.62					
		.52	.65	5.82	
1.76					
		.63	.84	8.31	
1.85					
		.73	1.04	11.13	
1.93					
		.83	1.24	14.24	
1.97					
		.94	1.45	17.55	
2.00					
		1.04	1.66	21.00	
2.00					
		1.15	1.86	24.52	
2.00					
		1.25	2.07	28.02	
2.00					
		1.35	2.27	31.40	
2.00					
		1.46	2.46	34.57	
2.00					
		1.56	2.63	37.41	
2.00					
		1.67	2.80	39.77	
2.00					
		1.77	2.94	41.46	
2.00					
		1.88	3.06	42.15	
2.00					
		2.00	3.14	42.15	
2.00					

ROUTE MCUNGE ID=71 HYD=RTE.PONDB INFLOW ID=51

DT=0.0 L=1180 NS=0 SLOPE=0.03

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 261 TABLE PTS= 19
DT= .100000 QMED= 1.68 CKMED= 8.4416
WIDTH MED= 1.38 NREACH= 1 DX= 1180.00

DEPTH (FT)	AREA Q-M (SQ FT)	Q C1-M (CFS)	TRAVEL C2-M TIME(HR)	WIDTH C3-M (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3
		(CFS)									
.00	.0	.0	.135	.0	3.28	1.55	1.000	.000	1.000	.000	.000
.10	.1	.2	.100	.9	5.42	3.29	1.652	.001	.999	.246	-.245
.21	.2	.9	.064	1.2	7.47	5.14	2.280	.003	.998	.391	-.389
.31	.3	2.1	.050	1.5	9.46	6.61	2.887	.004	.998	.486	-.484
.42	.5	3.7	.042	1.6	11.14	7.86	3.398	.006	.997	.546	-.543
.52	.7	5.8	.037	1.8	12.57	8.95	3.834	.007	.997	.587	-.584
.63	.8	8.3	.033	1.9	13.78	9.90	4.204	.009	.996	.616	-.613
.73	1.0	11.1	.031	1.9	14.80	10.74	4.515	.011	.996	.638	-.634
		9.7	.996	.629							-.625

```
          .83    1.2     14.2     .029    2.0    15.64  11.48    4.771   .013   .995
 .654  -.650     12.7     .996    .647  -.643
          .94    1.4     17.5     .027    2.0    16.29  12.13    4.971   .015   .995
 .666  -.661     15.9     .995    .661  -.656
         1.04    1.7     21.0     .026    2.0    16.75  12.69    5.110   .018   .994
 .674  -.668     19.3     .995    .671  -.665
         1.15    1.9     24.5     .025    2.0    16.86  13.16    5.143   .021   .993
 .676  -.669     22.7     .994    .676  -.670
         1.25    2.1     28.0     .024    2.0    16.54  13.56    5.047   .024   .992
 .671  -.663     26.3     .993    .674  -.667
         1.35    2.3     31.4     .024    2.0    15.76  13.86    4.808   .028   .990
 .657  -.648     29.7     .991    .666  -.657
         1.46    2.5     34.6     .023    2.0    14.44  14.08    4.407   .034   .988
 .632  -.620     33.0     .989    .647  -.636
         1.56    2.6     37.4     .023    2.0    12.50  14.20    3.813   .042   .983
 .588  -.571     36.0     .986    .615  -.600
         1.67    2.8     39.8     .023    2.0     9.73  14.21    2.969   .058   .971
 .503  -.475     38.6     .979    .556  -.534
         1.77    2.9     41.5     .023    2.0     5.70  14.09    1.739   .103   .928
 .296  -.224     40.6     .960    .435  -.395
         1.88    3.1     42.1     .024    2.0     3.25  13.77     .991   .183   .831
 .080   .088     41.8     .838    .088   .074
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.1036
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=71 CODE=0

                                                    HYDROGRAPH FROM AREA RTE.PONDB

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.300       2.5         10.600        .1
15.900        .1         21.200        .1
          .100        .0          5.400       2.4         10.700        .1
16.000        .1         21.300        .1
          .200        .0          5.500       2.4         10.800        .1
16.100        .1         21.400        .1
          .300        .0          5.600       2.3         10.900        .1
16.200        .1         21.500        .1
          .400        .0          5.700       2.2         11.000        .1
16.300        .1         21.600        .1
          .500        .0          5.800       2.2         11.100        .1
16.400        .1         21.700        .1
          .600        .0          5.900       2.1         11.200        .1
16.500        .1         21.800        .1
          .700        .0          6.000       2.0         11.300        .1
16.600        .1         21.900        .1
          .800        .0          6.100       2.0         11.400        .1
16.700        .1         22.000        .1
          .900        .0          6.200       1.9         11.500        .1
16.800        .1         22.100        .1
         1.000        .0          6.300       1.9         11.600        .1
16.900        .1         22.200        .1
         1.100        .0          6.400       1.8         11.700        .1
17.000        .1         22.300        .1
         1.200        .0          6.500       1.7         11.800        .1
17.100        .1         22.400        .1
```

1.300	.5	6.600	1.6	11.900	.1
17.200	.1	22.500	.1		
1.400	1.7	6.700	1.3	12.000	.1
17.300	.1	22.600	.1		
1.500	2.6	6.800	1.1	12.100	.1
17.400	.1	22.700	.1		
1.600	2.9	6.900	.9	12.200	.1
17.500	.1	22.800	.1		
1.700	3.2	7.000	.7	12.300	.1
17.600	.1	22.900	.1		
1.800	3.2	7.100	.6	12.400	.1
17.700	.1	23.000	.1		
1.900	3.3	7.200	.5	12.500	.1
17.800	.1	23.100	.1		
2.000	3.3	7.300	.4	12.600	.1
17.900	.1	23.200	.1		
2.100	3.4	7.400	.4	12.700	.1
18.000	.1	23.300	.1		
2.200	3.4	7.500	.3	12.800	.1
18.100	.1	23.400	.1		
2.300	3.3	7.600	.3	12.900	.1
18.200	.1	23.500	.1		
2.400	3.3	7.700	.3	13.000	.1
18.300	.1	23.600	.1		
2.500	3.3	7.800	.2	13.100	.1
18.400	.1	23.700	.1		
2.600	3.3	7.900	.2	13.200	.1
18.500	.1	23.800	.1		
2.700	3.3	8.000	.2	13.300	.1
18.600	.1	23.900	.1		
2.800	3.2	8.100	.2	13.400	.1
18.700	.1	24.000	.1		
2.900	3.2	8.200	.2	13.500	.1
18.800	.1	24.100	.1		
3.000	3.2	8.300	.2	13.600	.1
18.900	.1	24.200	.1		
3.100	3.2	8.400	.2	13.700	.1
19.000	.1	24.300	.1		
3.200	3.1	8.500	.2	13.800	.1
19.100	.1	24.400	.0		
3.300	3.1	8.600	.2	13.900	.1
19.200	.1	24.500	.0		
3.400	3.1	8.700	.2	14.000	.1
19.300	.1	24.600	.0		
3.500	3.1	8.800	.1	14.100	.1
19.400	.1	24.700	.0		
3.600	3.0	8.900	.1	14.200	.1
19.500	.1	24.800	.0		
3.700	3.0	9.000	.1	14.300	.1
19.600	.1	24.900	.0		
3.800	3.0	9.100	.1	14.400	.1
19.700	.1	25.000	.0		
3.900	3.0	9.200	.1	14.500	.1
19.800	.1	25.100	.0		
4.000	2.9	9.300	.1	14.600	.1
19.900	.1	25.200	.0		
4.100	2.9	9.400	.1	14.700	.1
20.000	.1	25.300	.0		
4.200	2.9	9.500	.1	14.800	.1
20.100	.1	25.400	.0		
4.300	2.8	9.600	.1	14.900	.1
20.200	.1	25.500	.0		
4.400	2.8	9.700	.1	15.000	.1

20.300	.1	25.600	.0				
	4.500	2.7	9.800	.1	15.100	.1	
20.400	.1	25.700	.0				
	4.600	2.7	9.900	.1	15.200	.1	
20.500	.1	25.800	.0				
	4.700	2.7	10.000	.1	15.300	.1	
20.600	.1	25.900	.0				
	4.800	2.6	10.100	.1	15.400	.1	
20.700	.1	26.000	.0				
	4.900	2.6	10.200	.1	15.500	.1	
20.800	.1	26.100	.0				
	5.000	2.6	10.300	.1	15.600	.1	
20.900	.1						
	5.100	2.5	10.400	.1	15.700	.1	
21.000	.1						
	5.200	2.5	10.500	.1	15.800	.1	
21.100	.1						

RUNOFF VOLUME = 1.32010 INCHES = 1.4067 ACRE-FEET
PEAK DISCHARGE RATE = 3.36 CFS AT 2.100 HOURS BASIN AREA = .0200 SQ. MI.

*

*

```
ADD HYD                    ID=72 HYD=OFF.B ID I=71 II=70

PRINT HYD                  ID=72 CODE=10
```

HYDROGRAPH FROM AREA OFF.B

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	5.2	12.000	.2
18.000	.1	24.000	.1		
1.000	.0	7.000	3.0	13.000	.2
19.000	.1	25.000	.0		
2.000	6.6	8.000	.6	14.000	.1
20.000	.1	26.000	.0		
3.000	7.6	9.000	.3	15.000	.1
21.000	.1				
4.000	7.2	10.000	.3	16.000	.1
22.000	.1				
5.000	6.3	11.000	.2	17.000	.1
23.000	.1				

RUNOFF VOLUME = .59525 INCHES = 3.1899 ACRE-FEET
PEAK DISCHARGE RATE = 7.62 CFS AT 2.900 HOURS BASIN AREA = .1005 SQ. MI.

*

*

```
     COMPUTE NM HYD      ID=30  HYD NO=BASIN.E1  DA=.03341 SQ MI

                                        %A=0.0  %B=33.0  %C=33.0 %D=34.0

                                        TP=-0.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   44.949    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .011359 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   58.764    CFS   UNIT VOLUME =    1.007       B =   354.44
  P60 = 1.8400
          AREA =      .022051 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=30 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.E1


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .2         10.000        .2
15.000        .2         20.000        .1
         1.000        .0          6.000        .3         11.000        .2
16.000        .2         21.000        .1
         2.000      10.1          7.000        .3         12.000        .2
17.000        .2         22.000        .1
         3.000        .5          8.000        .3         13.000        .2
18.000        .2         23.000        .1
         4.000        .2          9.000        .2         14.000        .2
19.000        .2         24.000        .1

         RUNOFF VOLUME =     1.35259 INCHES     =       2.4101 ACRE-FEET
         PEAK DISCHARGE RATE =      58.79 CFS  AT   1.500 HOURS   BASIN AREA =
.0334 SQ. MI.


     *

     *

     ADD HYD                     ID=73 HYD=OFFB.E1 ID I=72 II=30

     PRINT HYD                   ID=73 CODE=10


                                                HYDROGRAPH FROM AREA OFFB.E1
```

```
          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0           6.000       5.4         12.000        .4
18.000        .3         24.000        .2
          1.000        .0           7.000       3.3         13.000        .3
19.000        .2         25.000        .0
          2.000      16.7           8.000        .8         14.000        .3
20.000        .2         26.000        .0
          3.000       8.2           9.000        .6         15.000        .3
21.000        .2
          4.000       7.4          10.000        .5         16.000        .3
22.000        .2
          5.000       6.5          11.000        .4         17.000        .3
23.000        .2

         RUNOFF VOLUME =      .78423 INCHES     =       5.6000 ACRE-FEET
         PEAK DISCHARGE RATE =      61.76 CFS  AT   1.500 HOURS   BASIN AREA =
.1339 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=32  HYD NO=BASIN.E2  DA=.01348 SQ MI

                                        %A=0.0  %B=18.0  %C=18.0 %D=64.0

                                        TP=-.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   34.137    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .008627 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   12.933    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .004853 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=32 CODE=10


                                         HYDROGRAPH FROM AREA BASIN.E2


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
```

HRS	CFS	HRS	CFS	HRS	CFS
.000	.0	5.000	.2	10.000	.2
15.000	.1	20.000	.1		
1.000	.0	6.000	.2	11.000	.2
16.000	.1	21.000	.1		
2.000	6.1	7.000	.2	12.000	.2
17.000	.1	22.000	.1		
3.000	.3	8.000	.2	13.000	.1
18.000	.1	23.000	.1		
4.000	.2	9.000	.2	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.84145 INCHES = 1.3239 ACRE-FEET
PEAK DISCHARGE RATE = 27.42 CFS AT 1.500 HOURS BASIN AREA = .0135 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.002

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.16	1.33
.31	.39	.68	1.83
.47	.71	1.58	2.18
.63	1.07	2.84	2.44
.78	1.46	4.43	2.63
.94	1.89	6.33	2.78
1.09	2.33	8.48	2.89
1.25	2.79	10.84	2.96
1.41	3.26	13.36	2.99
1.56	3.72	15.99	3.00
1.72	4.19	18.67	3.00
1.88	4.65	21.33	3.00
2.03	5.10	23.90	3.00
2.19	5.53	26.32	3.00

```
                                                2.35        5.93        28.48
3.00
                                                2.50        6.30        30.27
3.00
                                                2.66        6.62        31.56
3.00
                                                2.81        6.89        32.09
3.00
                                                3.00        7.07        32.09
3.00
     ROUTE MCUNGE          ID=76 HYD=RTE.E2 INFLOW ID=32

                           DT=0.0  L=800 NS=0  SLOPE=0.01

                           MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0


          INFLOW END= 249              TABLE PTS= 19
          DT=  .100000                 QMED=       13.71  CKMED=      5.6088
          WIDTH MED=        2.99       NREACH=  1         DX=      800.00

       DEPTH    AREA      Q     TRAVEL  WIDTH      ck       VEL       C        D       C1
 C2      C3      Q-M      C1-M   C2-M    C3-M
        (FT)  (SQ FT)  (CFS)  TIME(HR) (FT)      (FPS)    (FPS)
                (CFS)
          .00      .0       .0    .271     .0      2.22     .53    1.000    .000   1.000
.000    .000       .0   1.000    .000    .000
          .16      .1       .2    .200     1.3     2.21    1.11     .993    .007    .993
.000    .007       .0    .999    .000    .001
          .31      .4       .7    .128     1.8     2.53    1.74    1.138    .018    .983
.072   -.055       .4    .989    .030   -.019
          .47      .7      1.6    .099     2.2     3.20    2.24    1.441    .028    .977
.190   -.167      1.1    .979    .135   -.115
          .63     1.1      2.8    .084     2.4     3.77    2.66    1.696    .039    .972
.269   -.240      2.2    .974    .232   -.206
          .78     1.5      4.4    .073     2.6     4.25    3.03    1.913    .049    .967
.325   -.292      3.6    .969    .299   -.268
          .94     1.9      6.3    .066     2.8     4.66    3.35    2.098    .061    .961
.367   -.328      5.4    .964    .348   -.312
         1.09     2.3      8.5    .061     2.9     5.01    3.63    2.253    .073    .956
.399   -.355      7.4    .959    .385   -.343
         1.25     2.8     10.8    .057     3.0     5.29    3.88    2.381    .087    .950
.423   -.373      9.6    .953    .413   -.366
         1.41     3.3     13.4    .054     3.0     5.51    4.10    2.481    .101    .944
.442   -.385     12.1    .947    .434   -.381
         1.56     3.7     16.0    .052     3.0     5.67    4.29    2.550    .118    .936
.455   -.391     14.7    .940    .450   -.390
         1.72     4.2     18.7    .050     3.0     5.70    4.45    2.567    .136    .926
.460   -.386     17.3    .932    .459   -.390
         1.88     4.7     21.3    .048     3.0     5.60    4.59    2.519    .159    .914
.456   -.370     20.0    .921    .460   -.380
         2.03     5.1     23.9    .047     3.0     5.33    4.69    2.399    .187    .896
.442   -.338     22.6    .906    .451   -.357
         2.19     5.5     26.3    .047     3.0     4.89    4.76    2.199    .224    .869
.416   -.285     25.1    .884    .432   -.316
         2.35     5.9     28.5    .046     3.0     4.23    4.80    1.903    .281    .824
.372   -.195     27.4    .851    .398   -.248
         2.50     6.3     30.3    .046     3.0     3.29    4.81    1.482    .383    .733
.302   -.034     29.4    .790    .343   -.133
         2.66     6.6     31.6    .047     3.0     1.93    4.77     .868    .682    .465
.216    .319     30.9    .652    .260    .088
         2.81     6.9     32.1    .048     3.0     1.10    4.66     .495   1.216    .103
.262    .635     31.8    .123    .255    .623
```

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 7 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0458

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.271	.0	2.22	.53	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.16	.1	.2	.200	1.3	2.21	1.11	.993	.007	.993	.000	.007	.0	.999	.000	.001
.31	.4	.7	.128	1.8	2.27	1.74	1.020	.020	.980	.020	.000	.4	.987	.013	.000
.47	.7	1.6	.099	2.2	2.31	2.24	1.039	.039	.962	.038	.000	1.1	.971	.029	.000
.63	1.1	2.8	.084	2.4	2.36	2.66	1.062	.062	.942	.058	.000	2.2	.952	.048	.000
.78	1.5	4.4	.073	2.6	2.42	3.03	1.087	.087	.920	.080	.000	3.6	.931	.069	.000
.94	1.9	6.3	.066	2.8	2.48	3.35	1.115	.115	.897	.103	.000	5.4	.908	.092	.000
1.09	2.3	8.5	.061	2.9	2.54	3.63	1.144	.144	.874	.126	.000	7.4	.885	.115	.000
1.25	2.8	10.8	.057	3.0	2.61	3.88	1.175	.175	.851	.149	.000	9.6	.862	.138	.000
1.41	3.3	13.4	.054	3.0	2.68	4.10	1.208	.208	.828	.172	.000	12.1	.839	.161	.000
1.56	3.7	16.0	.052	3.0	2.76	4.29	1.241	.241	.805	.195	.000	14.7	.817	.183	.000
1.72	4.2	18.7	.050	3.0	2.83	4.45	1.275	.275	.785	.215	.000	17.3	.795	.205	.000
1.88	4.7	21.3	.048	3.0	2.90	4.59	1.306	.306	.766	.234	.000	20.0	.775	.225	.000
2.03	5.1	23.9	.047	3.0	2.97	4.69	1.336	.336	.749	.251	.000	22.6	.757	.243	.000
2.19	5.5	26.3	.047	3.0	3.03	4.76	1.362	.362	.734	.266	.000	25.1	.741	.259	.000
2.35	5.9	28.5	.046	3.0	3.08	4.80	1.385	.385	.722	.278	.000	27.4	.728	.272	.000
2.50	6.3	30.3	.046	3.0	3.12	4.81	1.404	.404	.712	.288	.000	29.4	.717	.283	.000
2.66	6.6	31.6	.047	3.0	1.93	4.77	.868	.682	.465	.216	.319	30.9	.652	.260	.088
2.81	6.9	32.1	.048	3.0	1.10	4.66	.495	1.216	.103	.262	.635	31.8	.123	.255	.623

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 5 TIMES.
AVERAGE NUMBER ITERATIONS = 1.0407
Equations solved with two passes: first using the Ponce correction to C1, second using the Fread correction to C1, C2 and C3
*

PRINT HYD ID=76 CODE=0

HYDROGRAPH FROM AREA RTE.E2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.1	20.000	.1		
.100	.0	5.100	.2	10.100	.2

15.100	.1	20.100	.1				
	.200	.0	5.200	.2	10.200	.2	
15.200	.1	20.200	.1				
	.300	.0	5.300	.2	10.300	.2	
15.300	.1	20.300	.1				
	.400	.0	5.400	.2	10.400	.2	
15.400	.1	20.400	.1				
	.500	.0	5.500	.2	10.500	.2	
15.500	.1	20.500	.1				
	.600	.0	5.600	.2	10.600	.2	
15.600	.1	20.600	.1				
	.700	.0	5.700	.2	10.700	.2	
15.700	.1	20.700	.1				
	.800	.0	5.800	.2	10.800	.2	
15.800	.1	20.800	.1				
	.900	.0	5.900	.2	10.900	.2	
15.900	.1	20.900	.1				
	1.000	.0	6.000	.2	11.000	.2	
16.000	.1	21.000	.1				
	1.100	.0	6.100	.2	11.100	.2	
16.100	.1	21.100	.1				
	1.200	.2	6.200	.2	11.200	.2	
16.200	.1	21.200	.1				
	1.300	2.6	6.300	.2	11.300	.2	
16.300	.1	21.300	.1				
	1.400	10.8	6.400	.2	11.400	.2	
16.400	.1	21.400	.1				
	1.500	24.9	6.500	.2	11.500	.2	
16.500	.1	21.500	.1				
	1.600	25.3	6.600	.2	11.600	.2	
16.600	.1	21.600	.1				
	1.700	17.6	6.700	.2	11.700	.2	
16.700	.1	21.700	.1				
	1.800	12.1	6.800	.2	11.800	.2	
16.800	.1	21.800	.1				
	1.900	9.2	6.900	.2	11.900	.2	
16.900	.1	21.900	.1				
	2.000	7.4	7.000	.2	12.000	.2	
17.000	.1	22.000	.1				
	2.100	5.9	7.100	.2	12.100	.2	
17.100	.1	22.100	.1				
	2.200	3.6	7.200	.2	12.200	.2	
17.200	.1	22.200	.1				
	2.300	2.1	7.300	.2	12.300	.2	
17.300	.1	22.300	.1				
	2.400	1.5	7.400	.2	12.400	.2	
17.400	.1	22.400	.1				
	2.500	1.1	7.500	.2	12.500	.2	
17.500	.1	22.500	.1				
	2.600	.9	7.600	.2	12.600	.2	
17.600	.1	22.600	.1				
	2.700	.7	7.700	.2	12.700	.2	
17.700	.1	22.700	.1				
	2.800	.5	7.800	.2	12.800	.2	
17.800	.1	22.800	.1				
	2.900	.5	7.900	.2	12.900	.2	
17.900	.1	22.900	.1				
	3.000	.4	8.000	.2	13.000	.1	
18.000	.1	23.000	.1				
	3.100	.3	8.100	.2	13.100	.1	
18.100	.1	23.100	.1				
	3.200	.3	8.200	.2	13.200	.1	
18.200	.1	23.200	.1				

3.300	.3	8.300	.2	13.300	.1	18.300	.1
23.300	.1						
3.400	.2	8.400	.2	13.400	.1	18.400	.1
23.400	.1						
3.500	.2	8.500	.2	13.500	.1	18.500	.1
23.500	.1						
3.600	.2	8.600	.2	13.600	.1	18.600	.1
23.600	.1						
3.700	.2	8.700	.2	13.700	.1	18.700	.1
23.700	.1						
3.800	.2	8.800	.2	13.800	.1	18.800	.1
23.800	.1						
3.900	.2	8.900	.2	13.900	.1	18.900	.1
23.900	.1						
4.000	.2	9.000	.2	14.000	.1	19.000	.1
24.000	.1						
4.100	.2	9.100	.2	14.100	.1	19.100	.1
24.100	.1						
4.200	.2	9.200	.2	14.200	.1	19.200	.1
24.200	.1						
4.300	.2	9.300	.2	14.300	.1	19.300	.1
24.300	.0						
4.400	.2	9.400	.2	14.400	.1	19.400	.1
24.400	.0						
4.500	.2	9.500	.2	14.500	.1	19.500	.1
24.500	.0						
4.600	.2	9.600	.2	14.600	.1	19.600	.1
24.600	.0						
4.700	.2	9.700	.2	14.700	.1	19.700	.1
24.700	.0						
4.800	.2	9.800	.2	14.800	.1	19.800	.1
24.800	.0						
4.900	.2	9.900	.2	14.900	.1	19.900	.1
24.900	.0						

RUNOFF VOLUME = 1.82775 INCHES = 1.3140 ACRE-FEET
PEAK DISCHARGE RATE = 25.29 CFS AT 1.600 HOURS BASIN AREA = .0135 SQ. MI.

*

*

COMPUTE NM HYD ID=33 HYD NO=BASIN.E3 DA=.01197 SQ MI

%A=0.0 %B=25.0 %C=25.0 %D=50.0

TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 23.682 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .005985 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE

CONSTANT, N = 3.989065
UNIT PEAK = 15.950 CFS UNIT VOLUME = 1.006 B = 354.44
P60 = 1.8400
AREA = .005985 SQ MI IA = .42500 INCHES INF = 1.04000
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

PRINT HYD ID=33 CODE=10

HYDROGRAPH FROM AREA BASIN.E3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	4.6	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.61331 INCHES = 1.0299 ACRE-FEET
PEAK DISCHARGE RATE = 22.82 CFS AT 1.500 HOURS BASIN AREA =
.0120 SQ. MI.

*

*

COMPUTE NM HYD ID=34 HYD NO=BASIN.E4 DA=.00577 SQ MI

%A=0.0 %B=5.0 %C=5.0 %D=90.0

TP=-0.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE
CONSTANT, N = 7.106420
UNIT PEAK = 20.548 CFS UNIT VOLUME = 1.030 B = 526.28
P60 = 1.8400
AREA = .005193 SQ MI IA = .10000 INCHES INF = .04000
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE
CONSTANT, N = 3.989065
UNIT PEAK = 1.5377 CFS UNIT VOLUME = .9989 B = 354.44
P60 = 1.8400
AREA = .000577 SQ MI IA = .42500 INCHES INF = 1.04000
INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =

.100000

PRINT HYD ID=34 CODE=10

HYDROGRAPH FROM AREA BASIN.E4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	3.4	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.26513 INCHES = .6971 ACRE-FEET
PEAK DISCHARGE RATE = 13.11 CFS AT 1.500 HOURS BASIN AREA = .0058 SQ. MI.

*

*

ADD HYD ID=74 HYD=E3.E4 ID I=33 II=34

PRINT HYD ID=74 CODE=10

HYDROGRAPH FROM AREA E3.E4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.2	20.000	.1		
1.000	.0	6.000	.3	11.000	.2
16.000	.2	21.000	.1		
2.000	8.0	7.000	.3	12.000	.2
17.000	.2	22.000	.1		
3.000	.4	8.000	.2	13.000	.2
18.000	.2	23.000	.1		
4.000	.2	9.000	.2	14.000	.2
19.000	.2	24.000	.1		

RUNOFF VOLUME = 1.82529 INCHES = 1.7270 ACRE-FEET
PEAK DISCHARGE RATE = 35.93 CFS AT 1.500 HOURS BASIN AREA = .0177 SQ. MI.

*

```
     *
     ADD HYD                        ID=75 HYD=E3E4.E1BOFF ID I=74 II=73
     PRINT HYD                      ID=75 CODE=10

                                                HYDROGRAPH FROM AREA E3E4.E1BOFF

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
           .000        .0           6.000       5.7         12.000        .6
18.000        .4          24.000        .3
          1.000        .0           7.000       3.5         13.000        .5
19.000        .4          25.000        .0
          2.000      24.7           8.000       1.1         14.000        .5
20.000        .4          26.000        .0
          3.000       8.6           9.000        .8         15.000        .5
21.000        .4
          4.000       7.6          10.000        .7         16.000        .5
22.000        .4
          5.000       6.8          11.000        .6         17.000        .4
23.000        .3

         RUNOFF VOLUME =      .90603 INCHES     =       7.3270 ACRE-FEET
         PEAK DISCHARGE RATE =      97.69 CFS  AT   1.500 HOURS   BASIN AREA =
.1516 SQ. MI.


     *
     *
     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.026
                                          DIA=4.0  N=0.013

                                       RATING CURVE PIPE SECTION  1.0
                                          WATER       FLOW        FLOW        MAX
WIDTH                                    SURFACE      AREA        RATE
                                          ELEV        SQ FT       CFS         FT
                                            .00         .00         .00
.00
                                            .21         .25        1.21
1.78
                                            .42         .69        5.27
2.44
                                            .63        1.25       12.26
2.91
                                            .83        1.90       22.05
3.25
                                           1.04        2.60       34.43
3.51
                                           1.25        3.36       49.13
3.71
                                           1.46        4.15       65.82
```

3.85	1.67	4.96	84.15
3.94	1.88	5.79	103.74
3.99	2.08	6.62	124.15
4.00	2.29	7.45	144.94
4.00	2.50	8.27	165.61
4.00	2.71	9.06	185.62
4.00	2.92	9.82	204.35
4.00	3.13	10.54	221.12
4.00	3.34	11.20	235.07
4.00	3.54	11.77	245.05
4.00	3.75	12.24	249.15
4.00	4.00	12.57	249.15

ROUTE MCUNGE ID=77 HYD=RTE.E1E4 INFLOW ID=75

DT=0.0 L=1210 NS=0 SLOPE=0.026

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=77 CODE=0

HYDROGRAPH FROM AREA RTE.E1E4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.300	6.5	10.600	.7
15.900	.5	21.200	.4		
.100	.0	5.400	6.4	10.700	.7
16.000	.5	21.300	.4		
.200	.0	5.500	6.3	10.800	.6
16.100	.4	21.400	.4		
.300	.0	5.600	6.2	10.900	.6
16.200	.4	21.500	.4		
.400	.0	5.700	6.0	11.000	.6
16.300	.4	21.600	.4		
.500	.0	5.800	5.9	11.100	.6
16.400	.4	21.700	.4		
.600	.0	5.900	5.8	11.200	.6
16.500	.4	21.800	.4		
.700	.0	6.000	5.7	11.300	.6
16.600	.4	21.900	.4		
.800	.0	6.100	5.6	11.400	.6
16.700	.4	22.000	.4		
.900	.0	6.200	5.5	11.500	.6

16.800	.4	22.100	.4				
	1.000	.0	6.300	5.3	11.600	.6	
16.900	.4	22.200	.4				
	1.100	.4	6.400	5.1	11.700	.6	
17.000	.4	22.300	.4				
	1.200	5.8	6.500	5.0	11.800	.6	
17.100	.4	22.400	.3				
	1.300	22.8	6.600	4.8	11.900	.6	
17.200	.4	22.500	.3				
	1.400	81.3	6.700	4.4	12.000	.6	
17.300	.4	22.600	.4				
	1.500	97.7	6.800	4.0	12.100	.6	
17.400	.4	22.700	.3				
	1.600	70.5	6.900	3.8	12.200	.6	
17.500	.4	22.800	.3				
	1.700	48.2	7.000	3.5	12.300	.6	
17.600	.4	22.900	.3				
	1.800	35.9	7.100	3.3	12.400	.6	
17.700	.4	23.000	.3				
	1.900	29.2	7.200	2.9	12.500	.6	
17.800	.4	23.100	.3				
	2.000	24.7	7.300	2.3	12.600	.6	
17.900	.4	23.200	.3				
	2.100	18.1	7.400	2.0	12.700	.6	
18.000	.4	23.300	.3				
	2.200	13.7	7.500	1.7	12.800	.5	
18.100	.4	23.400	.3				
	2.300	12.0	7.600	1.5	12.900	.5	
18.200	.4	23.500	.3				
	2.400	10.9	7.700	1.3	13.000	.5	
18.300	.4	23.600	.3				
	2.500	10.2	7.800	1.2	13.100	.5	
18.400	.4	23.700	.3				
	2.600	9.7	7.900	1.1	13.200	.5	
18.500	.4	23.800	.3				
	2.700	9.3	8.000	1.1	13.300	.5	
18.600	.4	23.900	.3				
	2.800	9.0	8.100	1.0	13.400	.5	
18.700	.4	24.000	.3				
	2.900	8.8	8.200	1.0	13.500	.5	
18.800	.4	24.100	.2				
	3.000	8.6	8.300	1.0	13.600	.5	
18.900	.4	24.200	.1				
	3.100	8.4	8.400	.9	13.700	.5	
19.000	.4	24.300	.1				
	3.200	8.3	8.500	.9	13.800	.5	
19.100	.4	24.400	.1				
	3.300	8.2	8.600	.9	13.900	.5	
19.200	.4	24.500	.1				
	3.400	8.1	8.700	.9	14.000	.5	
19.300	.4	24.600	.0				
	3.500	8.0	8.800	.8	14.100	.5	
19.400	.4	24.700	.0				
	3.600	8.0	8.900	.8	14.200	.5	
19.500	.4	24.800	.0				
	3.700	7.9	9.000	.8	14.300	.5	
19.600	.4	24.900	.0				
	3.800	7.8	9.100	.8	14.400	.5	
19.700	.4	25.000	.0				
	3.900	7.7	9.200	.8	14.500	.5	
19.800	.4	25.100	.0				
	4.000	7.6	9.300	.8	14.600	.5	
19.900	.4	25.200	.0				

```
          4.100       7.5           9.400         .8          14.700         .5
20.000         .4          25.300         .0
          4.200       7.4           9.500         .8          14.800         .5
20.100         .4          25.400         .0
          4.300       7.3           9.600         .8          14.900         .5
20.200         .4          25.500         .0
          4.400       7.3           9.700         .7          15.000         .5
20.300         .4          25.600         .0
          4.500       7.2           9.800         .7          15.100         .5
20.400         .4          25.700         .0
          4.600       7.1           9.900         .7          15.200         .5
20.500         .4          25.800         .0
          4.700       7.0          10.000         .7          15.300         .5
20.600         .4          25.900         .0
          4.800       6.9          10.100         .7          15.400         .5
20.700         .4          26.000         .0
          4.900       6.8          10.200         .7          15.500         .5
20.800         .4          26.100         .0
          5.000       6.8          10.300         .7          15.600         .5
20.900         .4
          5.100       6.7          10.400         .7          15.700         .5
21.000         .4
          5.200       6.6          10.500         .7          15.800         .5
21.100         .4

         RUNOFF VOLUME =      .90603 INCHES     =       7.3270 ACRE-FEET
         PEAK DISCHARGE RATE =      97.69 CFS  AT   1.500 HOURS   BASIN AREA =
.1516 SQ. MI.


     *

     *

     ADD HYD                     ID=78 HYD=E1E4.E2 ID I=77 II=76

     PRINT HYD                   ID=78 CODE=10

                                                HYDROGRAPH FROM AREA E1E4.E2

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           6.000       5.9         12.000        .7
18.000         .5          24.000         .4
         1.000        .0           7.000       3.7         13.000        .7
19.000         .5          25.000         .0
         2.000      32.1           8.000       1.3         14.000        .6
20.000         .5          26.000         .0
         3.000       9.0           9.000       1.0         15.000        .6
21.000         .5
         4.000       7.8          10.000        .9         16.000        .6
22.000         .5
         5.000       6.9          11.000        .8         17.000        .6
23.000         .4

         RUNOFF VOLUME =      .98127 INCHES     =       8.6409 ACRE-FEET
         PEAK DISCHARGE RATE =     122.58 CFS  AT   1.500 HOURS   BASIN AREA =
.1651 SQ. MI.
```

```
     *
     *
     COMPUTE NM HYD      ID=35  HYD NO=BASIN.E5  DA=.04402 SQ MI
                                          %A=0.0  %B=29.0  %C=29.0 %D=42.0
                                          TP=-0.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   73.158    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .018488 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   68.041    CFS   UNIT VOLUME =    1.007       B =   354.44
  P60 = 1.8400
          AREA =      .025532 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=35 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.E5


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .4         10.000        .4
15.000        .3         20.000        .2
         1.000        .0          6.000        .4         11.000        .4
16.000        .3         21.000        .2
         2.000      15.1          7.000        .4         12.000        .3
17.000        .3         22.000        .2
         3.000        .8          8.000        .4         13.000        .3
18.000        .3         23.000        .2
         4.000        .4          9.000        .4         14.000        .3
19.000        .3         24.000        .2

        RUNOFF VOLUME =     1.48295 INCHES     =       3.4816 ACRE-FEET
        PEAK DISCHARGE RATE =      80.67 CFS  AT   1.500 HOURS   BASIN AREA =
.0440 SQ. MI.


     *
     *
```

```
     ADD HYD                       ID=80 HYD=E1E4.E5 ID I=78 II=35

     PRINT HYD                     ID=80 CODE=10

                                                HYDROGRAPH FROM AREA E1E4.E5

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0           6.000       6.3         12.000       1.1
18.000        .8          24.000        .7
         1.000        .0           7.000       4.2         13.000       1.0
19.000        .8          25.000        .0
         2.000      47.2           8.000       1.7         14.000        .9
20.000        .7          26.000        .0
         3.000       9.8           9.000       1.4         15.000        .9
21.000        .7
         4.000       8.2          10.000       1.3         16.000        .9
22.000        .7
         5.000       7.3          11.000       1.2         17.000        .8
23.000        .7

         RUNOFF VOLUME =     1.08687 INCHES     =      12.1224 ACRE-FEET
         PEAK DISCHARGE RATE =     203.25 CFS  AT   1.500 HOURS   BASIN AREA =
.2091 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=36  HYD NO=BASIN.E6  DA=.00488 SQ MI

                                       %A=0.0  %B=5.0  %C=5.0 %D=90.0

                                       TP=-0.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   17.379    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .004392 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.3005    CFS   UNIT VOLUME =    .9989       B =   354.44
  P60 = 1.8400
          AREA =      .000488 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=36 CODE=10
```

HYDROGRAPH FROM AREA BASIN.E6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	2.9	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.1	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.26512 INCHES = .5895 ACRE-FEET
PEAK DISCHARGE RATE = 11.09 CFS AT 1.500 HOURS BASIN AREA = .0049 SQ. MI.

*

*

ADD HYD ID=40 HYD=E1E6 ID I=80 II=36

PRINT HYD ID=40 CODE=10

HYDROGRAPH FROM AREA E1E6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	6.4	12.000	1.2
18.000	.9	24.000	.7		
1.000	.0	7.000	4.3	13.000	1.1
19.000	.8	25.000	.0		
2.000	50.0	8.000	1.8	14.000	1.0
20.000	.8	26.000	.0		
3.000	9.9	9.000	1.5	15.000	1.0
21.000	.8				
4.000	8.3	10.000	1.3	16.000	.9
22.000	.7				
5.000	7.4	11.000	1.2	17.000	.9
23.000	.7				

RUNOFF VOLUME = 1.11374 INCHES = 12.7119 ACRE-FEET
PEAK DISCHARGE RATE = 214.33 CFS AT 1.500 HOURS BASIN AREA = .2140 SQ. MI.

*

```
     *
     ************************************************************
     DIVIDE HYD                   ID=40 Q=15.5 ID I=61  HYD NO=BYPASS.E
                                                        ID II=62 HYD NO=SURGE.E
     PRINT HYD                    ID=61 CODE=10

                                                 HYDROGRAPH FROM AREA BYPASS.E

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           6.000       6.4         12.000       1.2
18.000        .9          24.000        .7
          1.000        .0           7.000       4.3         13.000       1.1
19.000        .8          25.000        .0
          2.000      15.5           8.000       1.8         14.000       1.0
20.000        .8          26.000        .0
          3.000       9.9           9.000       1.5         15.000       1.0
21.000        .8
          4.000       8.3          10.000       1.3         16.000        .9
22.000        .7
          5.000       7.4          11.000       1.2         17.000        .9
23.000        .7

         RUNOFF VOLUME =     1.11374 INCHES     =       6.1450 ACRE-FEET
         PEAK DISCHARGE RATE =      15.50 CFS  AT   1.300 HOURS   BASIN AREA =
.1035 SQ. MI.


     PRINT HYD                    ID=62 CODE=10

                                                 HYDROGRAPH FROM AREA SURGE.E

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           1.000       .0          2.000      34.5

         RUNOFF VOLUME =     1.11374 INCHES     =       6.5669 ACRE-FEET
         PEAK DISCHARGE RATE =     198.83 CFS  AT   1.500 HOURS   BASIN AREA =
.1106 SQ. MI.


     ************************************************************
     *
     *
     ROUTE RESERVOIR       ID=37 HYD=POND.E  INFLOW ID=62 CODE=6.3
```

OUTFLOW		STORAGE	DEPTH
0.0		0.00	5441.6
3.31	1.37	5444	
4.53	2.73	5445	
5.68	4.25	5446	
6.77	5.97	5447	
7.81	7.52	5448	
50.0	9.07	5449	

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5441.60	.000	.00
.60	.00	5441.60	.000	.00
1.20	.00	5441.60	.000	.00
1.80	62.10	5446.56	5.217	6.29
2.40	.39	5447.06	6.058	6.83
3.00	.00	5446.86	5.727	6.62
3.60	.00	5446.67	5.404	6.41
4.20	.00	5446.49	5.091	6.21
4.80	.00	5446.31	4.788	6.02
5.40	.00	5446.14	4.494	5.83
6.00	.00	5445.97	4.209	5.65
6.60	.00	5445.79	3.934	5.44
7.20	.00	5445.62	3.669	5.24
7.80	.00	5445.45	3.414	5.05
8.40	.00	5445.29	3.168	4.86
9.00	.00	5445.13	2.932	4.68
9.60	.00	5444.98	2.704	4.51
10.20	.00	5444.82	2.485	4.31
10.80	.00	5444.67	2.276	4.12
11.40	.00	5444.52	2.076	3.94
12.00	.00	5444.38	1.885	3.77
12.60	.00	5444.24	1.702	3.61
13.20	.00	5444.12	1.527	3.45
13.80	.00	5443.98	1.360	3.29
14.40	.00	5443.71	1.206	2.91
15.00	.00	5443.47	1.070	2.59
15.60	.00	5443.26	.949	2.29
16.20	.00	5443.08	.842	2.03
16.80	.00	5442.91	.747	1.80
17.40	.00	5442.76	.663	1.60
18.00	.00	5442.63	.588	1.42
18.60	.00	5442.51	.521	1.26
19.20	.00	5442.41	.463	1.12
19.80	.00	5442.32	.410	.99
20.40	.00	5442.24	.364	.88
21.00	.00	5442.17	.323	.78
21.60	.00	5442.10	.286	.69
22.20	.00	5442.05	.254	.61
22.80	.00	5442.00	.225	.54
23.40	.00	5441.95	.200	.48
24.00	.00	5441.91	.177	.43

24.60	.00	5441.88	.157	.38
25.20	.00	5441.84	.140	.34
25.80	.00	5441.82	.124	.30
26.40	.00	5441.79	.110	.27
27.00	.00	5441.77	.097	.24
27.60	.00	5441.75	.086	.21
28.20	.00	5441.73	.077	.19
28.80	.00	5441.72	.068	.16
29.40	.00	5441.71	.060	.15
30.00	.00	5441.69	.054	.13
30.60	.00	5441.68	.047	.11
31.20	.00	5441.67	.042	.10
31.80	.00	5441.67	.037	.09
32.40	.00	5441.66	.033	.08
33.00	.00	5441.65	.029	.07

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
33.60	.00	5441.65	.026	.06
34.20	.00	5441.64	.023	.06
34.80	.00	5441.64	.021	.05
35.40	.00	5441.63	.018	.04
36.00	.00	5441.63	.016	.04
36.60	.00	5441.63	.014	.03
37.20	.00	5441.62	.013	.03
37.80	.00	5441.62	.011	.03
38.40	.00	5441.62	.010	.02
39.00	.00	5441.62	.009	.02
39.60	.00	5441.61	.008	.02
40.20	.00	5441.61	.007	.02
40.80	.00	5441.61	.006	.01
41.40	.00	5441.61	.005	.01
42.00	.00	5441.61	.005	.01
42.60	.00	5441.61	.004	.01
43.20	.00	5441.61	.004	.01
43.80	.00	5441.61	.003	.01
44.40	.00	5441.61	.003	.01
45.00	.00	5441.60	.003	.01
45.60	.00	5441.60	.002	.01
46.20	.00	5441.60	.002	.01
46.80	.00	5441.60	.002	.00

PEAK DISCHARGE = 6.829 CFS - PEAK OCCURS AT HOUR 2.40
MAXIMUM WATER SURFACE ELEVATION = 5447.057
MAXIMUM STORAGE = 6.0584 AC-FT INCREMENTAL TIME= .300000HRS

*

PRINT HYD ID=37 CODE=10

HYDROGRAPH FROM AREA POND.E

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	3.8	24.000	.4
3.000	6.6	15.000	2.6	27.000	.2
6.000	5.6	18.000	1.4	30.000	.1
36.000	.0	48.000	.0		
39.000	.0	51.000	.0		

```
42.000        .0         54.000        .0
         9.000       4.7          21.000        .8          33.000        .1
45.000        .0

         RUNOFF VOLUME =     1.11484 INCHES     =       6.5735 ACRE-FEET
         PEAK DISCHARGE RATE =       6.83 CFS  AT   2.400 HOURS   BASIN AREA =
.1106 SQ. MI.


     *

     *

     ADD HYD                      ID=40 HYD=TOTALE ID I=61 II=37

     PRINT HYD                    ID=40 CODE=10

                                                HYDROGRAPH FROM AREA TOTALE

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000         .0          11.000       5.3          22.000       1.4
33.000        .1          44.000        .0
         1.000         .0          12.000       4.9          23.000       1.2
34.000        .1          45.000        .0
         2.000       22.1          13.000       4.6          24.000       1.1
35.000        .0          46.000        .0
         3.000       16.5          14.000       4.2          25.000        .4
36.000        .0          47.000        .0
         4.000       14.6          15.000       3.5          26.000        .3
37.000        .0          48.000        .0
         5.000       13.4          16.000       3.0          27.000        .2
38.000        .0          49.000        .0
         6.000       12.1          17.000       2.6          28.000        .2
39.000        .0          50.000        .0
         7.000        9.6          18.000       2.3          29.000        .2
40.000        .0          51.000        .0
         8.000        6.8          19.000       2.0          30.000        .1
41.000        .0          52.000        .0
         9.000        6.2          20.000       1.7          31.000        .1
42.000        .0          53.000        .0
        10.000        5.7          21.000       1.5          32.000        .1
43.000        .0          54.000        .0

         RUNOFF VOLUME =     1.11427 INCHES     =      12.7180 ACRE-FEET
         PEAK DISCHARGE RATE =      22.33 CFS  AT   2.400 HOURS   BASIN AREA =
.2140 SQ. MI.


     *

     *

     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.022

                                          DIA=2.5  N=0.013
```

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.13	.10	.32	1.11
.26	.27	1.39	1.53
.39	.49	3.22	1.82
.52	.74	5.79	2.03
.65	1.02	9.04	2.19
.78	1.31	12.90	2.32
.91	1.62	17.29	2.41
1.04	1.94	22.10	2.47
1.17	2.26	27.25	2.50
1.30	2.59	32.61	2.50
1.43	2.91	38.07	2.50
1.56	3.23	43.50	2.50
1.69	3.54	48.75	2.50
1.82	3.84	53.68	2.50
1.95	4.12	58.08	2.50
2.08	4.37	61.74	2.50
2.21	4.60	64.37	2.50
2.35	4.78	65.44	2.50
2.50	4.91	65.44	2.50

ROUTE MCUNGE ID=38 HYD=RTE.PONDE INFLOW ID=40

DT=0.0 L=1200 NS=0 SLOPE=0.022

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 544 TABLE PTS= 19
DT= .100000 QMED= 11.16 CKMED= 13.1133
WIDTH MED= 2.26 NREACH= 1 DX= 1200.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.139	.0	3.33	1.54	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000

```
         .13     .1       .3     .102    1.1     5.38   3.27    1.614   .002   .998
 .236  -.234      .1     .999    .054  -.053
         .26     .3       1.4    .065    1.5     7.43   5.10    2.228   .005   .997
 .381  -.378      .8     .998    .299  -.296
         .39     .5       3.2    .051    1.8     9.40   6.57    2.821   .007   .996
 .478  -.474     2.2     .997    .433  -.430
         .52     .7       5.8    .043    2.0    11.07   7.81    3.321   .010   .995
 .538  -.534     4.4     .996    .510  -.506
         .65    1.0       9.0    .037    2.2    12.49   8.89    3.746   .012   .995
 .580  -.574     7.4     .995    .561  -.556
         .78    1.3      12.9    .034    2.3    13.69   9.84    4.108   .015   .994
 .610  -.604    10.9     .994    .596  -.591
         .91    1.6      17.3    .031    2.4    14.71  10.67    4.412   .019   .993
 .632  -.625    15.0     .994    .622  -.616
        1.04    1.9      22.1    .029    2.5    15.54  11.41    4.662   .022   .992
 .648  -.640    19.7     .993    .641  -.634
        1.17    2.3      27.2    .028    2.5    16.19  12.05    4.857   .026   .991
 .660  -.651    24.6     .992    .655  -.647
        1.30    2.6      32.6    .026    2.5    16.64  12.61    4.993   .030   .990
 .668  -.658    29.9     .991    .665  -.656
        1.43    2.9      38.1    .025    2.5    16.75  13.08    5.025   .034   .989
 .670  -.659    35.3     .989    .670  -.660
        1.56    3.2      43.5    .025    2.5    16.44  13.47    4.932   .040   .987
 .665  -.652    40.8     .988    .669  -.657
        1.69    3.5      48.8    .024    2.5    15.66  13.77    4.698   .047   .984
 .652  -.635    46.1     .985    .660  -.645
        1.82    3.8      53.7    .024    2.5    14.35  13.99    4.306   .057   .979
 .627  -.606    51.2     .982    .642  -.623
        1.95    4.1      58.1    .024    2.5    12.42  14.11    3.726   .071   .970
 .583  -.553    55.9     .976    .609  -.585
        2.08    4.4      61.7    .024    2.5     9.67  14.12    2.901   .097   .952
 .500  -.451    59.9     .964    .551  -.515
        2.21    4.6      64.4    .024    2.5     5.66  14.00    1.699   .172   .880
 .303  -.184    63.1     .933    .434  -.367
        2.35    4.8      65.4    .024    2.5     3.23  13.68     .968   .307   .730
 .121   .149    64.9     .740   .126   .133
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   4 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.3243
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=38 CODE=0

                                                  HYDROGRAPH FROM AREA RTE.PONDE

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          10.900       5.3          21.800       1.4
32.700       .1          43.600        .0
          .100        .0          11.000       5.3          21.900       1.4
32.800       .1          43.700        .0
          .200        .0          11.100       5.3          22.000       1.4
32.900       .1          43.800        .0
          .300        .0          11.200       5.2          22.100       1.4
33.000       .1          43.900        .0
          .400        .0          11.300       5.2          22.200       1.4
33.100       .1          44.000        .0
          .500        .0          11.400       5.1          22.300       1.3
33.200       .1          44.100        .0
```

.600	.0	11.500	5.1	22.400	1.3
33.300	.1	44.200	.0		
.700	.0	11.600	5.1	22.500	1.3
33.400	.1	44.300	.0		
.800	.0	11.700	5.0	22.600	1.3
33.500	.1	44.400	.0		
.900	.0	11.800	5.0	22.700	1.3
33.600	.1	44.500	.0		
1.000	.0	11.900	5.0	22.800	1.3
33.700	.1	44.600	.0		
1.100	.1	12.000	4.9	22.900	1.3
33.800	.1	44.700	.0		
1.200	6.8	12.100	4.9	23.000	1.2
33.900	.1	44.800	.0		
1.300	17.9	12.200	4.9	23.100	1.2
34.000	.1	44.900	.0		
1.400	17.1	12.300	4.8	23.200	1.2
34.100	.1	45.000	.0		
1.500	19.9	12.400	4.8	23.300	1.2
34.200	.1	45.100	.0		
1.600	20.0	12.500	4.8	23.400	1.2
34.300	.1	45.200	.0		
1.700	21.1	12.600	4.7	23.500	1.2
34.400	.1	45.300	.0		
1.800	21.5	12.700	4.7	23.600	1.2
34.500	.1	45.400	.0		
1.900	22.1	12.800	4.7	23.700	1.2
34.600	.1	45.500	.0		
2.000	22.0	12.900	4.6	23.800	1.2
34.700	.1	45.600	.0		
2.100	22.3	13.000	4.6	23.900	1.1
34.800	.1	45.700	.0		
2.200	22.3	13.100	4.6	24.000	1.1
34.900	.0	45.800	.0		
2.300	22.3	13.200	4.5	24.100	1.0
35.000	.0	45.900	.0		
2.400	22.3	13.300	4.5	24.200	.7
35.100	.0	46.000	.0		
2.500	21.3	13.400	4.5	24.300	.6
35.200	.0	46.100	.0		
2.600	19.6	13.500	4.4	24.400	.5
35.300	.0	46.200	.0		
2.700	18.7	13.600	4.4	24.500	.5
35.400	.0	46.300	.0		
2.800	17.7	13.700	4.4	24.600	.4
35.500	.0	46.400	.0		
2.900	17.1	13.800	4.3	24.700	.4
35.600	.0	46.500	.0		
3.000	16.6	13.900	4.3	24.800	.4
35.700	.0	46.600	.0		
3.100	16.3	14.000	4.2	24.900	.4
35.800	.0	46.700	.0		
3.200	15.9	14.100	4.1	25.000	.4
35.900	.0	46.800	.0		
3.300	15.7	14.200	4.1	25.100	.4
36.000	.0	46.900	.0		
3.400	15.5	14.300	4.0	25.200	.4
36.100	.0	47.000	.0		
3.500	15.3	14.400	3.9	25.300	.3
36.200	.0	47.100	.0		
3.600	15.1	14.500	3.9	25.400	.3
36.300	.0	47.200	.0		
3.700	15.0	14.600	3.8	25.500	.3

36.400	.0	47.300	.0				
	3.800	14.8	14.700	3.8	25.600	.3	
36.500	.0	47.400	.0				
	3.900	14.7	14.800	3.7	25.700	.3	
36.600	.0	47.500	.0				
	4.000	14.6	14.900	3.6	25.800	.3	
36.700	.0	47.600	.0				
	4.100	14.4	15.000	3.6	25.900	.3	
36.800	.0	47.700	.0				
	4.200	14.3	15.100	3.5	26.000	.3	
36.900	.0	47.800	.0				
	4.300	14.2	15.200	3.5	26.100	.3	
37.000	.0	47.900	.0				
	4.400	14.0	15.300	3.4	26.200	.3	
37.100	.0	48.000	.0				
	4.500	13.9	15.400	3.4	26.300	.3	
37.200	.0	48.100	.0				
	4.600	13.8	15.500	3.3	26.400	.3	
37.300	.0	48.200	.0				
	4.700	13.7	15.600	3.2	26.500	.3	
37.400	.0	48.300	.0				
	4.800	13.6	15.700	3.2	26.600	.3	
37.500	.0	48.400	.0				
	4.900	13.5	15.800	3.2	26.700	.3	
37.600	.0	48.500	.0				
	5.000	13.4	15.900	3.1	26.800	.2	
37.700	.0	48.600	.0				
	5.100	13.3	16.000	3.1	26.900	.2	
37.800	.0	48.700	.0				
	5.200	13.2	16.100	3.0	27.000	.2	
37.900	.0	48.800	.0				
	5.300	13.0	16.200	3.0	27.100	.2	
38.000	.0	48.900	.0				
	5.400	12.9	16.300	2.9	27.200	.2	
38.100	.0	49.000	.0				
	5.500	12.8	16.400	2.9	27.300	.2	
38.200	.0	49.100	.0				
	5.600	12.7	16.500	2.8	27.400	.2	
38.300	.0	49.200	.0				
	5.700	12.5	16.600	2.8	27.500	.2	
38.400	.0	49.300	.0				
	5.800	12.4	16.700	2.8	27.600	.2	
38.500	.0	49.400	.0				
	5.900	12.2	16.800	2.7	27.700	.2	
38.600	.0	49.500	.0				
	6.000	12.1	16.900	2.7	27.800	.2	
38.700	.0	49.600	.0				
	6.100	12.0	17.000	2.6	27.900	.2	
38.800	.0	49.700	.0				
	6.200	11.9	17.100	2.6	28.000	.2	
38.900	.0	49.800	.0				
	6.300	11.7	17.200	2.6	28.100	.2	
39.000	.0	49.900	.0				
	6.400	11.5	17.300	2.5	28.200	.2	
39.100	.0	50.000	.0				
	6.500	11.3	17.400	2.5	28.300	.2	
39.200	.0	50.100	.0				
	6.600	11.1	17.500	2.4	28.400	.2	
39.300	.0	50.200	.0				
	6.700	10.7	17.600	2.4	28.500	.2	
39.400	.0	50.300	.0				
	6.800	10.3	17.700	2.4	28.600	.2	
39.500	.0	50.400	.0				

6.900	10.0	17.800	2.4	28.700	.2
39.600	.0	50.500	.0		
7.000	9.7	17.900	2.3	28.800	.2
39.700	.0	50.600	.0		
7.100	9.4	18.000	2.3	28.900	.2
39.800	.0	50.700	.0		
7.200	9.1	18.100	2.3	29.000	.2
39.900	.0	50.800	.0		
7.300	8.4	18.200	2.2	29.100	.2
40.000	.0	50.900	.0		
7.400	7.9	18.300	2.2	29.200	.2
40.100	.0	51.000	.0		
7.500	7.7	18.400	2.2	29.300	.2
40.200	.0	51.100	.0		
7.600	7.3	18.500	2.1	29.400	.1
40.300	.0	51.200	.0		
7.700	7.2	18.600	2.1	29.500	.1
40.400	.0	51.300	.0		
7.800	7.0	18.700	2.1	29.600	.1
40.500	.0	51.400	.0		
7.900	6.9	18.800	2.0	29.700	.1
40.600	.0	51.500	.0		
8.000	6.8	18.900	2.0	29.800	.1
40.700	.0	51.600	.0		
8.100	6.7	19.000	2.0	29.900	.1
40.800	.0	51.700	.0		
8.200	6.6	19.100	2.0	30.000	.1
40.900	.0	51.800	.0		
8.300	6.6	19.200	1.9	30.100	.1
41.000	.0	51.900	.0		
8.400	6.5	19.300	1.9	30.200	.1
41.100	.0	52.000	.0		
8.500	6.4	19.400	1.9	30.300	.1
41.200	.0	52.100	.0		
8.600	6.4	19.500	1.9	30.400	.1
41.300	.0	52.200	.0		
8.700	6.3	19.600	1.8	30.500	.1
41.400	.0	52.300	.0		
8.800	6.3	19.700	1.8	30.600	.1
41.500	.0	52.400	.0		
8.900	6.2	19.800	1.8	30.700	.1
41.600	.0	52.500	.0		
9.000	6.2	19.900	1.8	30.800	.1
41.700	.0	52.600	.0		
9.100	6.1	20.000	1.8	30.900	.1
41.800	.0	52.700	.0		
9.200	6.1	20.100	1.7	31.000	.1
41.900	.0	52.800	.0		
9.300	6.0	20.200	1.7	31.100	.1
42.000	.0	52.900	.0		
9.400	6.0	20.300	1.7	31.200	.1
42.100	.0	53.000	.0		
9.500	6.0	20.400	1.7	31.300	.1
42.200	.0	53.100	.0		
9.600	5.9	20.500	1.7	31.400	.1
42.300	.0	53.200	.0		
9.700	5.9	20.600	1.6	31.500	.1
42.400	.0	53.300	.0		
9.800	5.8	20.700	1.6	31.600	.1
42.500	.0	53.400	.0		
9.900	5.8	20.800	1.6	31.700	.1
42.600	.0	53.500	.0		
10.000	5.7	20.900	1.6	31.800	.1

```
42.700        .0         53.600         .0
        10.100       5.7          21.000       1.6          31.900         .1
42.800        .0         53.700         .0
        10.200       5.6          21.100       1.5          32.000         .1
42.900        .0         53.800         .0
        10.300       5.6          21.200       1.5          32.100         .1
43.000        .0         53.900         .0
        10.400       5.6          21.300       1.5          32.200         .1
43.100        .0         54.000         .0
        10.500       5.5          21.400       1.5          32.300         .1
43.200        .0         54.100         .0
        10.600       5.5          21.500       1.5          32.400         .1
43.300        .0         54.200         .0
        10.700       5.4          21.600       1.5          32.500         .1
43.400        .0         54.300         .0
        10.800       5.4          21.700       1.4          32.600         .1
43.500        .0         54.400         .0

         RUNOFF VOLUME =     1.11446 INCHES     =      12.7203 ACRE-FEET
         PEAK DISCHARGE RATE =      22.34 CFS  AT   2.100 HOURS   BASIN AREA =
.2140 SQ. MI.


     *

     *

     *

     ***PARK***

     *

     COMPUTE NM HYD      ID=32  HYD NO=BASIN.P  DA=.00845 SQ MI

                                          %A=43  %B=25  %C=25 %D=7

                                          TP=-.133 HR  RAIN=-1


          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   2.3405    CFS   UNIT VOLUME =    1.026       B =   526.28
  P60 = 1.8400
          AREA =      .000592 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .139440HR    TP =   .133000HR    K/TP RATIO =  1.048418     SHAPE
CONSTANT, N =  3.367471
          UNIT PEAK =   18.348    CFS   UNIT VOLUME =    .9925       B =   310.53
  P60 = 1.8400
          AREA =      .007859 SQ MI    IA =    .52903 INCHES    INF =   1.33129
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=32 CODE=10
```

HYDROGRAPH FROM AREA BASIN.P

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.0	10.000	.0
15.000	.0	20.000	.0		
1.000	.0	6.000	.0	11.000	.0
16.000	.0	21.000	.0		
2.000	1.1	7.000	.0	12.000	.0
17.000	.0	22.000	.0		
3.000	.1	8.000	.0	13.000	.0
18.000	.0	23.000	.0		
4.000	.0	9.000	.0	14.000	.0
19.000	.0	24.000	.0		

RUNOFF VOLUME = .72623 INCHES = .3273 ACRE-FEET
PEAK DISCHARGE RATE = 10.08 CFS AT 1.500 HOURS BASIN AREA = .0085 SQ. MI.

*

*

VALLE VISTA

*

COMPUTE NM HYD ID=33 HYD NO=BASIN.H1 DA=.01825 SQ MI

%A=0.0 %B=16 %C=16 %D=68

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 49.106 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .012410 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118257HR TP = .133000HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 15.563 CFS UNIT VOLUME = 1.006 B = 354.44 P60 = 1.8400
AREA = .005840 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=33 CODE=10

HYDROGRAPH FROM AREA BASIN.H1

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW
HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
	.000	.0		5.000	.2	10.000	.2
15.000	.2	20.000	.2				
	1.000	.0		6.000	.3	11.000	.2
16.000	.2	21.000	.2				
	2.000	8.7		7.000	.3	12.000	.2
17.000	.2	22.000	.2				
	3.000	.5		8.000	.3	13.000	.2
18.000	.2	23.000	.1				
	4.000	.2		9.000	.3	14.000	.2
19.000	.2	24.000	.1				

RUNOFF VOLUME = 1.90663 INCHES = 1.8558 ACRE-FEET
PEAK DISCHARGE RATE = 37.78 CFS AT 1.500 HOURS BASIN AREA = .0183 SQ. MI.

*

*

ADD HYD ID=43 HYD=PONDE.H1 ID I=38 II=33

PRINT HYD ID=43 CODE=10

HYDROGRAPH FROM AREA PONDE.H1

TIME	FLOW	TIME	FLOW	TIME	FLOW	TIME	FLOW
HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
	.000	.0		11.000	5.6	22.000	1.5
33.000	.1	44.000	.0				
	1.000	.0		12.000	5.2	23.000	1.4
34.000	.1	45.000	.0				
	2.000	30.7		13.000	4.8	24.000	1.3
35.000	.0	46.000	.0				
	3.000	17.1		14.000	4.4	25.000	.4
36.000	.0	47.000	.0				
	4.000	14.8		15.000	3.8	26.000	.3
37.000	.0	48.000	.0				
	5.000	13.6		16.000	3.3	27.000	.2
38.000	.0	49.000	.0				
	6.000	12.4		17.000	2.8	28.000	.2
39.000	.0	50.000	.0				
	7.000	10.0		18.000	2.5	29.000	.2
40.000	.0	51.000	.0				
	8.000	7.1		19.000	2.2	30.000	.1
41.000	.0	52.000	.0				
	9.000	6.5		20.000	1.9	31.000	.1
42.000	.0	53.000	.0				
	10.000	6.0		21.000	1.7	32.000	.1
43.000	.0	54.000	.0				

RUNOFF VOLUME = 1.17670 INCHES = 14.5760 ACRE-FEET
PEAK DISCHARGE RATE = 57.68 CFS AT 1.500 HOURS BASIN AREA =

.2323 SQ. MI.

*

*

RAINBOW BLVD PORTION

*

COMPUTE NM HYD ID=34 HYD NO=BASIN.H2 DA=.00836 SQ MI

%A=0.0 %B=0.0 %C=10.0 %D=90.0

TP=-.133 HR RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 29.772 CFS UNIT VOLUME = 1.030 B = 526.28 P60 = 1.8400
AREA = .007524 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .105291HR TP = .133000HR K/TP RATIO = .791661 SHAPE CONSTANT, N = 4.531123
UNIT PEAK = 2.4461 CFS UNIT VOLUME = 1.010 B = 389.14 P60 = 1.8400
AREA = .000836 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=34 CODE=10

HYDROGRAPH FROM AREA BASIN.H2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.1	20.000	.1		
1.000	.0	6.000	.2	11.000	.1
16.000	.1	21.000	.1		
2.000	5.0	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
3.000	.3	8.000	.2	13.000	.1
18.000	.1	23.000	.1		
4.000	.2	9.000	.2	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.28220 INCHES = 1.0175 ACRE-FEET
PEAK DISCHARGE RATE = 19.16 CFS AT 1.500 HOURS BASIN AREA = .0084 SQ. MI.

```
     *
     *
     ADD HYD                    ID=44 HYD=P.H2 ID I=32 II=34
     PRINT HYD                  ID=44 CODE=10
```

HYDROGRAPH FROM AREA P.H2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.1	20.000	.1		
1.000	.0	6.000	.2	11.000	.2
16.000	.1	21.000	.1		
2.000	6.1	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
3.000	.3	8.000	.2	13.000	.1
18.000	.1	23.000	.1		
4.000	.2	9.000	.2	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 1.50001 INCHES = 1.3448 ACRE-FEET
PEAK DISCHARGE RATE = 29.25 CFS AT 1.500 HOURS BASIN AREA = .0168 SQ. MI.

```
     *
     *
     ADD HYD                    ID=45 HYD=PH2.H1 ID I=44 II=43
     PRINT HYD                  ID=45 CODE=10
```

HYDROGRAPH FROM AREA PH2.H1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.000	5.7	22.000	1.6
33.000	.1	44.000	.0		
1.000	.0	12.000	5.3	23.000	1.5
34.000	.1	45.000	.0		
2.000	36.8	13.000	4.9	24.000	1.4
35.000	.0	46.000	.0		
3.000	17.4	14.000	4.5	25.000	.4
36.000	.0	47.000	.0		
4.000	15.0	15.000	3.9	26.000	.3
37.000	.0	48.000	.0		
5.000	13.8	16.000	3.4	27.000	.2
38.000	.0	49.000	.0		

```
         6.000      12.6         17.000       2.9         28.000        .2
39.000        .0         50.000        .0
         7.000      10.2         18.000       2.6         29.000        .2
40.000        .0         51.000        .0
         8.000       7.3         19.000       2.3         30.000        .1
41.000        .0         52.000        .0
         9.000       6.6         20.000       2.0         31.000        .1
42.000        .0         53.000        .0
        10.000       6.1         21.000       1.8         32.000        .1
43.000        .0         54.000        .0

         RUNOFF VOLUME =     1.19852 INCHES     =      15.9208 ACRE-FEET
         PEAK DISCHARGE RATE =      86.93 CFS  AT   1.500 HOURS   BASIN AREA =
.2491 SQ. MI.


     *

     *

     *

     COMPUTE NM HYD      ID=35  HYD NO=BASIN.H3  DA=.01191 SQ MI

                                          %A=0.0  %B=20.0  %C=20.0 %D=60.0

                                          TP=-.133 HR  RAIN=-1


         K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
         UNIT PEAK =   28.276    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
         AREA =      .007146 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


         K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
         UNIT PEAK =   12.696    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
         AREA =      .004764 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=35 CODE=10


                                              HYDROGRAPH FROM AREA BASIN.H3


         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0          6.000        .2         11.000        .1
16.000        .1         21.000        .1
```

```
         2.000       5.2          7.000        .2         12.000        .1
17.000        .1         22.000        .1
         3.000        .3          8.000        .2         13.000        .1
18.000        .1         23.000        .1
         4.000        .1          9.000        .2         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     1.77627 INCHES     =       1.1283 ACRE-FEET
         PEAK DISCHARGE RATE =      23.79 CFS  AT   1.500 HOURS   BASIN AREA =
.0119 SQ. MI.


     *

     *

     ADD HYD                      ID=46 HYD=PH1H3 ID I=45 II=35

     PRINT HYD                    ID=46 CODE=10

                                                HYDROGRAPH FROM AREA PH1H3

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0         11.000       5.8         22.000       1.7
33.000        .1         44.000        .0
         1.000        .0         12.000       5.4         23.000       1.6
34.000        .1         45.000        .0
         2.000      42.0         13.000       5.1         24.000       1.5
35.000        .0         46.000        .0
         3.000      17.7         14.000       4.7         25.000        .4
36.000        .0         47.000        .0
         4.000      15.1         15.000       4.0         26.000        .3
37.000        .0         48.000        .0
         5.000      13.9         16.000       3.5         27.000        .2
38.000        .0         49.000        .0
         6.000      12.8         17.000       3.0         28.000        .2
39.000        .0         50.000        .0
         7.000      10.3         18.000       2.7         29.000        .2
40.000        .0         51.000        .0
         8.000       7.4         19.000       2.4         30.000        .1
41.000        .0         52.000        .0
         9.000       6.8         20.000       2.1         31.000        .1
42.000        .0         53.000        .0
        10.000       6.3         21.000       1.9         32.000        .1
43.000        .0         54.000        .0

         RUNOFF VOLUME =     1.22489 INCHES     =      17.0490 ACRE-FEET
         PEAK DISCHARGE RATE =     110.72 CFS  AT   1.500 HOURS   BASIN AREA =
.2610 SQ. MI.


     *

     *

     *
```

```
     ************************************************************

     DIVIDE HYD                    ID=46 Q=21.6 ID I=47  HYD NO=BYPASS.H
                                                        ID II=48 HYD NO=SURGE.H

     PRINT HYD                     ID=47 CODE=10

                                                  HYDROGRAPH FROM AREA BYPASS.H

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          11.000        5.8         22.000        1.7
33.000        .1          44.000        .0
          1.000        .0          12.000        5.4         23.000        1.6
34.000        .1          45.000        .0
          2.000      21.6          13.000        5.1         24.000        1.5
35.000        .0          46.000        .0
          3.000      17.7          14.000        4.7         25.000         .4
36.000        .0          47.000        .0
          4.000      15.1          15.000        4.0         26.000         .3
37.000        .0          48.000        .0
          5.000      13.9          16.000        3.5         27.000         .2
38.000        .0          49.000        .0
          6.000      12.8          17.000        3.0         28.000         .2
39.000        .0          50.000        .0
          7.000      10.3          18.000        2.7         29.000         .2
40.000        .0          51.000        .0
          8.000       7.4          19.000        2.4         30.000         .1
41.000        .0          52.000        .0
          9.000       6.8          20.000        2.1         31.000         .1
42.000        .0          53.000        .0
         10.000       6.3          21.000        1.9         32.000         .1
43.000        .0          54.000        .0

         RUNOFF VOLUME =     1.22489 INCHES     =      13.7517 ACRE-FEET
         PEAK DISCHARGE RATE =      21.60 CFS  AT   1.300 HOURS   BASIN AREA =
.2105 SQ. MI.


     PRINT HYD                     ID=48 CODE=10

                                                  HYDROGRAPH FROM AREA SURGE.H

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          1.000         .0          2.000       20.4

         RUNOFF VOLUME =     1.22489 INCHES     =       3.2973 ACRE-FEET
         PEAK DISCHARGE RATE =      89.12 CFS  AT   1.500 HOURS   BASIN AREA =
.0505 SQ. MI.
```

****

*

*

******

ROUTE RESERVOIR ID=30 HYD=POND.H INFLOW ID=48 CODE=5

OUTFLOW	STORAGE	DEPTH
0.0	0.0	5418.65
2.31	0.57	5420
3.88	1.62	5421
5.36	3.02	5422
100.0	4.60	5423

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5418.65	.000	.00
.50	.00	5418.65	.000	.00
1.00	.00	5418.65	.000	.00
1.50	89.12	5420.54	1.142	3.16
2.00	20.37	5421.79	2.722	5.04
2.50	2.61	5421.88	2.856	5.19
3.00	.00	5421.74	2.658	4.98
3.50	.00	5421.60	2.457	4.76
4.00	.00	5421.46	2.264	4.56
4.50	.00	5421.33	2.080	4.37
5.00	.00	5421.20	1.903	4.18
5.50	.00	5421.08	1.734	4.00
6.00	.00	5420.96	1.573	3.81
6.50	.00	5420.81	1.420	3.58
7.00	.00	5420.67	1.277	3.37
7.50	.00	5420.54	1.142	3.16
8.00	.00	5420.42	1.015	2.98
8.50	.00	5420.31	.896	2.80
9.00	.00	5420.20	.784	2.63
9.50	.00	5420.10	.678	2.47
10.00	.00	5420.01	.579	2.32
10.50	.00	5419.81	.490	1.99
11.00	.00	5419.63	.414	1.68
11.50	.00	5419.48	.351	1.42
12.00	.00	5419.35	.296	1.20
12.50	.00	5419.24	.251	1.02
13.00	.00	5419.15	.212	.86
13.50	.00	5419.07	.179	.73
14.00	.00	5419.01	.152	.61
14.50	.00	5418.95	.128	.52
15.00	.00	5418.91	.109	.44
15.50	.00	5418.87	.092	.37
16.00	.00	5418.83	.078	.31
16.50	.00	5418.81	.066	.27

17.00	.00	5418.78	.056	.23
17.50	.00	5418.76	.047	.19
18.00	.00	5418.74	.040	.16
18.50	.00	5418.73	.034	.14
19.00	.00	5418.72	.028	.12
19.50	.00	5418.71	.024	.10
20.00	.00	5418.70	.020	.08
20.50	.00	5418.69	.017	.07
21.00	.00	5418.68	.015	.06
21.50	.00	5418.68	.012	.05
22.00	.00	5418.67	.010	.04
22.50	.00	5418.67	.009	.04
23.00	.00	5418.67	.007	.03
23.50	.00	5418.67	.006	.03
24.00	.00	5418.66	.005	.02
24.50	.00	5418.66	.005	.02
25.00	.00	5418.66	.004	.02
25.50	.00	5418.66	.003	.01
26.00	.00	5418.66	.003	.01
26.50	.00	5418.66	.002	.01
27.00	.00	5418.65	.002	.01
27.50	.00	5418.65	.002	.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	.00	5418.65	.001	.01
28.50	.00	5418.65	.001	.00

PEAK DISCHARGE = 5.202 CFS - PEAK OCCURS AT HOUR 2.30
MAXIMUM WATER SURFACE ELEVATION = 5421.894
MAXIMUM STORAGE = 2.8710 AC-FT INCREMENTAL TIME= .100000HRS

*

PRINT HYD ID=30 CODE=10

HYDROGRAPH FROM AREA POND.H

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	7.000	3.4	14.000	.6
21.000	.1	28.000	.0		
1.000	.0	8.000	3.0	15.000	.4
22.000	.0	29.000	.0		
2.000	5.0	9.000	2.6	16.000	.3
23.000	.0	30.000	.0		
3.000	5.0	10.000	2.3	17.000	.2
24.000	.0	31.000	.0		
4.000	4.6	11.000	1.7	18.000	.2
25.000	.0	32.000	.0		
5.000	4.2	12.000	1.2	19.000	.1
26.000	.0	33.000	.0		
6.000	3.8	13.000	.9	20.000	.1
27.000	.0				

RUNOFF VOLUME = 1.22489 INCHES = 3.2973 ACRE-FEET
PEAK DISCHARGE RATE = 5.20 CFS AT 2.300 HOURS BASIN AREA = .0505 SQ. MI.

```
     *
     *
     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.003
                                          DIA=2.5  N=0.013

                                       RATING CURVE PIPE SECTION  1.0
                                          WATER       FLOW        FLOW        MAX
                                        SURFACE       AREA        RATE
WIDTH
                                           ELEV        SQ FT       CFS         FT
                                            .00         .00         .00
.00
                                            .13         .10         .12
1.11
                                            .26         .27         .51
1.53
                                            .39         .49        1.19
1.82
                                            .52         .74        2.14
2.03
                                            .65        1.02        3.34
2.19
                                            .78        1.31        4.77
2.32
                                            .91        1.62        6.38
2.41
                                           1.04        1.94        8.16
2.47
                                           1.17        2.26       10.06
2.50
                                           1.30        2.59       12.04
2.50
                                           1.43        2.91       14.06
2.50
                                           1.56        3.23       16.06
2.50
                                           1.69        3.54       18.00
2.50
                                           1.82        3.84       19.82
2.50
                                           1.95        4.12       21.45
2.50
                                           2.08        4.37       22.80
2.50
                                           2.21        4.60       23.77
2.50
                                           2.35        4.78       24.17
2.50
                                           2.50        4.91       24.17
2.50
     ROUTE MCUNGE         ID=49 HYD=RTE.PONDH INFLOW ID=30
                          DT=0.0  L=1600 NS=0  SLOPE=0.003
                          MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
```

INFLOW END= 332 TABLE PTS= 19
DT= .100000 QMED= 2.60 CKMED= 4.3547
WIDTH MED= 2.09 NREACH= 2 DX= 800.00

DEPTH (FT)	AREA Q-M (SQ FT)	Q C1-M (CFS)	TRAVEL TIME(HR)	WIDTH C2-M (FT)	C3-M	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3
.00	.0	.0	.500	.0		2.22	.57	1.000	.000	1.000	.000	.000
.13	.1	.1	.368	1.1		2.18	1.21	.980	.020	.980	.000	.020
.26	.3	.5	.236	1.5		2.74	1.88	1.234	.051	.955	.125	-.080
.39	.5	1.2	.183	1.8		3.47	2.43	1.562	.079	.940	.243	-.183
.52	.7	2.1	.154	2.0		4.09	2.88	1.839	.107	.927	.321	-.248
.65	1.0	3.3	.135	2.2		4.61	3.28	2.075	.137	.914	.377	-.292
.78	1.3	4.8	.122	2.3		5.06	3.63	2.275	.169	.902	.419	-.321
.91	1.6	6.4	.113	2.4		5.43	3.94	2.444	.203	.888	.452	-.340
1.04	1.9	8.2	.105	2.5		5.74	4.21	2.582	.240	.874	.477	-.351
1.17	2.3	10.1	.100	2.5		5.98	4.45	2.691	.281	.858	.496	-.355
1.30	2.6	12.0	.095	2.5		6.15	4.66	2.766	.327	.840	.511	-.352
1.43	2.9	14.1	.092	2.5		6.19	4.83	2.784	.379	.818	.520	-.338
1.56	3.2	16.1	.089	2.5		6.07	4.97	2.732	.441	.789	.521	-.309
1.69	3.5	18.0	.087	2.5		5.78	5.09	2.602	.519	.748	.515	-.263
1.82	3.8	19.8	.086	2.5		5.30	5.17	2.385	.623	.689	.501	-.190
1.95	4.1	21.4	.085	2.5		4.59	5.21	2.064	.779	.594	.480	-.074
2.08	4.4	22.8	.085	2.5		3.57	5.21	1.607	1.064	.420	.455	.125
2.21	4.6	23.8	.086	2.5		2.09	5.17	.941	1.894	.012	.479	.509
2.35	4.8	24.2	.088	2.5		1.19	5.05	.536	3.379	-.375	.593	.782
	24.0	-.184	.537	.647								

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 3 TIMES.
AVERAGE NUMBER ITERATIONS = 1.1687
Equations solved using the Ponce correction to C2
*

PRINT HYD ID=49 CODE=0

HYDROGRAPH FROM AREA RTE.PONDH

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.700	3.5	13.400	.8
20.100	.1	26.800	.0		

	.100	.0	6.800	3.5	13.500	.8	
20.200	.1	26.900	.0				
	.200	.0	6.900	3.4	13.600	.7	
20.300	.1	27.000	.0				
	.300	.0	7.000	3.4	13.700	.7	
20.400	.1	27.100	.0				
	.400	.0	7.100	3.4	13.800	.7	
20.500	.1	27.200	.0				
	.500	.0	7.200	3.3	13.900	.7	
20.600	.1	27.300	.0				
	.600	.0	7.300	3.3	14.000	.6	
20.700	.1	27.400	.0				
	.700	.0	7.400	3.2	14.100	.6	
20.800	.1	27.500	.0				
	.800	.0	7.500	3.2	14.200	.6	
20.900	.1	27.600	.0				
	.900	.0	7.600	3.2	14.300	.6	
21.000	.1	27.700	.0				
	1.000	.0	7.700	3.1	14.400	.6	
21.100	.1	27.800	.0				
	1.100	.0	7.800	3.1	14.500	.5	
21.200	.1	27.900	.0				
	1.200	.0	7.900	3.0	14.600	.5	
21.300	.1	28.000	.0				
	1.300	.0	8.000	3.0	14.700	.5	
21.400	.1	28.100	.0				
	1.400	.0	8.100	3.0	14.800	.5	
21.500	.1	28.200	.0				
	1.500	1.3	8.200	2.9	14.900	.5	
21.600	.1	28.300	.0				
	1.600	3.4	8.300	2.9	15.000	.5	
21.700	.0	28.400	.0				
	1.700	4.0	8.400	2.9	15.100	.5	
21.800	.0	28.500	.0				
	1.800	4.5	8.500	2.8	15.200	.4	
21.900	.0	28.600	.0				
	1.900	4.7	8.600	2.8	15.300	.4	
22.000	.0	28.700	.0				
	2.000	4.9	8.700	2.8	15.400	.4	
22.100	.0	28.800	.0				
	2.100	5.1	8.800	2.7	15.500	.4	
22.200	.0	28.900	.0				
	2.200	5.2	8.900	2.7	15.600	.4	
22.300	.0	29.000	.0				
	2.300	5.2	9.000	2.7	15.700	.4	
22.400	.0	29.100	.0				
	2.400	5.2	9.100	2.6	15.800	.4	
22.500	.0	29.200	.0				
	2.500	5.2	9.200	2.6	15.900	.3	
22.600	.0	29.300	.0				
	2.600	5.2	9.300	2.6	16.000	.3	
22.700	.0	29.400	.0				
	2.700	5.1	9.400	2.5	16.100	.3	
22.800	.0	29.500	.0				
	2.800	5.1	9.500	2.5	16.200	.3	
22.900	.0	29.600	.0				
	2.900	5.1	9.600	2.5	16.300	.3	
23.000	.0	29.700	.0				
	3.000	5.0	9.700	2.4	16.400	.3	
23.100	.0	29.800	.0				
	3.100	5.0	9.800	2.4	16.500	.3	
23.200	.0	29.900	.0				
	3.200	4.9	9.900	2.4	16.600	.3	

23.300	.0	30.000	.0				
	3.300	4.9	10.000	2.4	16.700	.3	
23.400	.0	30.100	.0				
	3.400	4.8	10.100	2.3	16.800	.3	
23.500	.0	30.200	.0				
	3.500	4.8	10.200	2.3	16.900	.2	
23.600	.0	30.300	.0				
	3.600	4.8	10.300	2.2	17.000	.2	
23.700	.0	30.400	.0				
	3.700	4.7	10.400	2.1	17.100	.2	
23.800	.0	30.500	.0				
	3.800	4.7	10.500	2.1	17.200	.2	
23.900	.0	30.600	.0				
	3.900	4.6	10.600	2.0	17.300	.2	
24.000	.0	30.700	.0				
	4.000	4.6	10.700	1.9	17.400	.2	
24.100	.0	30.800	.0				
	4.100	4.6	10.800	1.9	17.500	.2	
24.200	.0	30.900	.0				
	4.200	4.5	10.900	1.8	17.600	.2	
24.300	.0	31.000	.0				
	4.300	4.5	11.000	1.7	17.700	.2	
24.400	.0	31.100	.0				
	4.400	4.4	11.100	1.7	17.800	.2	
24.500	.0	31.200	.0				
	4.500	4.4	11.200	1.6	17.900	.2	
24.600	.0	31.300	.0				
	4.600	4.4	11.300	1.6	18.000	.2	
24.700	.0	31.400	.0				
	4.700	4.3	11.400	1.5	18.100	.2	
24.800	.0	31.500	.0				
	4.800	4.3	11.500	1.5	18.200	.2	
24.900	.0	31.600	.0				
	4.900	4.2	11.600	1.4	18.300	.2	
25.000	.0	31.700	.0				
	5.000	4.2	11.700	1.4	18.400	.2	
25.100	.0	31.800	.0				
	5.100	4.2	11.800	1.3	18.500	.1	
25.200	.0	31.900	.0				
	5.200	4.1	11.900	1.3	18.600	.1	
25.300	.0	32.000	.0				
	5.300	4.1	12.000	1.3	18.700	.1	
25.400	.0	32.100	.0				
	5.400	4.1	12.100	1.2	18.800	.1	
25.500	.0	32.200	.0				
	5.500	4.0	12.200	1.2	18.900	.1	
25.600	.0	32.300	.0				
	5.600	4.0	12.300	1.1	19.000	.1	
25.700	.0	32.400	.0				
	5.700	4.0	12.400	1.1	19.100	.1	
25.800	.0	32.500	.0				
	5.800	3.9	12.500	1.1	19.200	.1	
25.900	.0	32.600	.0				
	5.900	3.9	12.600	1.0	19.300	.1	
26.000	.0	32.700	.0				
	6.000	3.9	12.700	1.0	19.400	.1	
26.100	.0	32.800	.0				
	6.100	3.8	12.800	1.0	19.500	.1	
26.200	.0	32.900	.0				
	6.200	3.8	12.900	.9	19.600	.1	
26.300	.0	33.000	.0				
	6.300	3.7	13.000	.9	19.700	.1	
26.400	.0	33.100	.0				

```
          6.400       3.7          13.100        .9          19.800        .1
26.500        .0          33.200         .0
          6.500       3.6          13.200        .8          19.900        .1
26.600        .0          33.300         .0
          6.600       3.6          13.300        .8          20.000        .1
26.700        .0

         RUNOFF VOLUME =     1.22499 INCHES     =       3.2976 ACRE-FEET
         PEAK DISCHARGE RATE =       5.20 CFS  AT   2.400 HOURS   BASIN AREA =
.0505 SQ. MI.


     *

     *

     ADD HYD                      ID=31 HYD=BYPASS.RTE.H ID I=49 II=47

     PRINT HYD                    ID=31 CODE=10

                                                HYDROGRAPH FROM AREA BYPASS.RTE.H

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0         11.000       7.6         22.000       1.8
33.000        .1          44.000         .0
         1.000        .0         12.000       6.7         23.000       1.6
34.000        .1          45.000         .0
         2.000      26.5         13.000       6.0         24.000       1.5
35.000        .0          46.000         .0
         3.000      22.7         14.000       5.3         25.000        .4
36.000        .0          47.000         .0
         4.000      19.7         15.000       4.5         26.000        .3
37.000        .0          48.000         .0
         5.000      18.1         16.000       3.8         27.000        .2
38.000        .0          49.000         .0
         6.000      16.6         17.000       3.3         28.000        .2
39.000        .0          50.000         .0
         7.000      13.7         18.000       2.8         29.000        .2
40.000        .0          51.000         .0
         8.000      10.4         19.000       2.5         30.000        .1
41.000        .0          52.000         .0
         9.000       9.4         20.000       2.2         31.000        .1
42.000        .0          53.000         .0
        10.000       8.6         21.000       2.0         32.000        .1
43.000        .0          54.000         .0

         RUNOFF VOLUME =     1.22490 INCHES     =      17.0492 ACRE-FEET
         PEAK DISCHARGE RATE =      26.80 CFS  AT   2.400 HOURS   BASIN AREA =
.2610 SQ. MI.


     *

     *

     *****TIERRA VISTA******
```

```
     *
     COMPUTE NM HYD      ID=20  HYD NO=BASIN.K1  DA=.02673 SQ MI
                                          %A=0.0  %B=19.0  %C=19.0 %D=62.0
                                          TP=-.1715 HR  RAIN=-1

          K =   .093468HR    TP =   .171500HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   50.856    CFS   UNIT VOLUME =    1.006       B =   526.28
  P60 = 1.8400
          AREA =      .016573 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .152490HR    TP =   .171500HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989068
          UNIT PEAK =   20.992    CFS   UNIT VOLUME =    1.004       B =   354.44
  P60 = 1.8400
          AREA =      .010157 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=20 CODE=10

                                                HYDROGRAPH FROM AREA BASIN.K1

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          6.000        .4         12.000        .3
18.000        .2         24.000        .2
         1.000        .0          7.000        .4         13.000        .3
19.000        .2         25.000        .0
         2.000      13.4          8.000        .4         14.000        .3
20.000        .2
         3.000        .9          9.000        .4         15.000        .3
21.000        .2
         4.000        .4         10.000        .3         16.000        .3
22.000        .2
         5.000        .3         11.000        .3         17.000        .2
23.000        .2

        RUNOFF VOLUME =     1.80886 INCHES     =       2.5787 ACRE-FEET
        PEAK DISCHARGE RATE =      50.54 CFS  AT   1.500 HOURS   BASIN AREA =
.0267 SQ. MI.


     *

     *

     ADD HYD                     ID=32 HYD=PONDH.K1 ID I=31 II=20
```

PRINT HYD ID=32 CODE=10

HYDROGRAPH FROM AREA PONDH.K1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.000	7.9	22.000	2.0
33.000	.1	44.000	.0		
1.000	.0	12.000	7.0	23.000	1.8
34.000	.1	45.000	.0		
2.000	39.9	13.000	6.2	24.000	1.7
35.000	.0	46.000	.0		
3.000	23.6	14.000	5.6	25.000	.4
36.000	.0	47.000	.0		
4.000	20.1	15.000	4.7	26.000	.3
37.000	.0	48.000	.0		
5.000	18.5	16.000	4.1	27.000	.2
38.000	.0	49.000	.0		
6.000	17.0	17.000	3.5	28.000	.2
39.000	.0	50.000	.0		
7.000	14.1	18.000	3.1	29.000	.2
40.000	.0	51.000	.0		
8.000	10.8	19.000	2.7	30.000	.1
41.000	.0	52.000	.0		
9.000	9.8	20.000	2.4	31.000	.1
42.000	.0	53.000	.0		
10.000	9.0	21.000	2.2	32.000	.1
43.000	.0	54.000	.0		

RUNOFF VOLUME = 1.27915 INCHES = 19.6279 ACRE-FEET
PEAK DISCHARGE RATE = 73.46 CFS AT 1.500 HOURS BASIN AREA = .2877 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.0088

DIA=4.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.23	.32	.97	2.00
.47	.88	4.20	2.75
.70	1.59	9.77	3.27
.94	2.40	17.56	

3.66

1.17	3.30	27.42
1.41	4.25	39.13
1.64	5.25	52.42
1.88	6.28	67.02
2.11	7.32	82.62
2.35	8.38	98.88
2.58	9.43	115.44
2.81	10.46	131.90
3.05	11.47	147.83
3.28	12.43	162.76
3.52	13.34	176.11
3.75	14.17	187.22
3.99	14.90	195.17
4.22	15.50	198.44
4.50	15.90	198.44

3.95
4.17
4.33
4.44
4.49
4.50
4.50
4.50
4.50
4.50
4.50
4.50

```
     ROUTE MCUNGE          ID=33 HYD=RTE.K1 INFLOW ID=32
                           DT=0.0  L=800 NS=0  SLOPE=0.0088
                           MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
          ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED
     *
     PRINT HYD             ID=33 CODE=0
```

HYDROGRAPH FROM AREA RTE.K1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	10.900	8.0	21.800	2.0
.100	.0	11.000	7.9	21.900	2.0
.200	.0	11.100	7.8	22.000	2.0
.300	.0	11.200	7.7	22.100	2.0
.400	.0	11.300	7.6	22.200	1.9
.500	.0	11.400	7.5	22.300	1.9
.600	.0	11.500	7.4	22.400	1.9

32.700
32.800
32.900
33.000
33.100
33.200

.1	43.600	.0
.1	43.700	.0
.1	43.800	.0
.1	43.900	.0
.1	44.000	.0
.1	44.100	.0

33.300	.1	44.200	.0				
	.700	.0	11.600	7.3	22.500	1.9	
33.400	.1	44.300	.0				
	.800	.0	11.700	7.2	22.600	1.9	
33.500	.1	44.400	.0				
	.900	.0	11.800	7.1	22.700	1.9	
33.600	.1	44.500	.0				
	1.000	.0	11.900	7.1	22.800	1.8	
33.700	.1	44.600	.0				
	1.100	.7	12.000	7.0	22.900	1.8	
33.800	.1	44.700	.0				
	1.200	16.0	12.100	6.9	23.000	1.8	
33.900	.1	44.800	.0				
	1.300	31.7	12.200	6.8	23.100	1.8	
34.000	.1	44.900	.0				
	1.400	54.1	12.300	6.8	23.200	1.8	
34.100	.1	45.000	.0				
	1.500	73.5	12.400	6.7	23.300	1.8	
34.200	.1	45.100	.0				
	1.600	67.9	12.500	6.6	23.400	1.7	
34.300	.1	45.200	.0				
	1.700	54.8	12.600	6.5	23.500	1.7	
34.400	.1	45.300	.0				
	1.800	47.3	12.700	6.5	23.600	1.7	
34.500	.1	45.400	.0				
	1.900	42.8	12.800	6.4	23.700	1.7	
34.600	.1	45.500	.0				
	2.000	39.9	12.900	6.3	23.800	1.7	
34.700	.1	45.600	.0				
	2.100	36.6	13.000	6.2	23.900	1.7	
34.800	.1	45.700	.0				
	2.200	32.6	13.100	6.2	24.000	1.7	
34.900	.0	45.800	.0				
	2.300	30.8	13.200	6.1	24.100	1.4	
35.000	.0	45.900	.0				
	2.400	29.9	13.300	6.1	24.200	.9	
35.100	.0	46.000	.0				
	2.500	29.2	13.400	6.0	24.300	.7	
35.200	.0	46.100	.0				
	2.600	28.7	13.500	5.9	24.400	.6	
35.300	.0	46.200	.0				
	2.700	27.2	13.600	5.9	24.500	.5	
35.400	.0	46.300	.0				
	2.800	25.6	13.700	5.8	24.600	.5	
35.500	.0	46.400	.0				
	2.900	24.5	13.800	5.8	24.700	.5	
35.600	.0	46.500	.0				
	3.000	23.6	13.900	5.7	24.800	.4	
35.700	.0	46.600	.0				
	3.100	22.9	14.000	5.6	24.900	.4	
35.800	.0	46.700	.0				
	3.200	22.4	14.100	5.5	25.000	.4	
35.900	.0	46.800	.0				
	3.300	21.9	14.200	5.4	25.100	.4	
36.000	.0	46.900	.0				
	3.400	21.6	14.300	5.3	25.200	.4	
36.100	.0	47.000	.0				
	3.500	21.3	14.400	5.2	25.300	.4	
36.200	.0	47.100	.0				
	3.600	21.0	14.500	5.1	25.400	.3	
36.300	.0	47.200	.0				
	3.700	20.7	14.600	5.1	25.500	.3	
36.400	.0	47.300	.0				

	3.800	20.5	14.700	5.0	25.600	.3	36.500	.0	47.400	.0
	3.900	20.3	14.800	4.9	25.700	.3	36.600	.0	47.500	.0
	4.000	20.1	14.900	4.8	25.800	.3	36.700	.0	47.600	.0
	4.100	19.9	15.000	4.7	25.900	.3	36.800	.0	47.700	.0
	4.200	19.7	15.100	4.7	26.000	.3	36.900	.0	47.800	.0
	4.300	19.5	15.200	4.6	26.100	.3	37.000	.0	47.900	.0
	4.400	19.3	15.300	4.5	26.200	.3	37.100	.0	48.000	.0
	4.500	19.2	15.400	4.5	26.300	.3	37.200	.0	48.100	.0
	4.600	19.0	15.500	4.4	26.400	.3	37.300	.0	48.200	.0
	4.700	18.9	15.600	4.3	26.500	.3	37.400	.0	48.300	.0
	4.800	18.7	15.700	4.3	26.600	.3	37.500	.0	48.400	.0
	4.900	18.6	15.800	4.2	26.700	.3	37.600	.0	48.500	.0
	5.000	18.5	15.900	4.1	26.800	.3	37.700	.0	48.600	.0
	5.100	18.3	16.000	4.1	26.900	.3	37.800	.0	48.700	.0
	5.200	18.2	16.100	4.0	27.000	.2	37.900	.0	48.800	.0
	5.300	18.1	16.200	3.9	27.100	.2	38.000	.0	48.900	.0
	5.400	17.9	16.300	3.9	27.200	.2	38.100	.0	49.000	.0
	5.500	17.8	16.400	3.8	27.300	.2	38.200	.0	49.100	.0
	5.600	17.6	16.500	3.8	27.400	.2	38.300	.0	49.200	.0
	5.700	17.5	16.600	3.7	27.500	.2	38.400	.0	49.300	.0
	5.800	17.3	16.700	3.7	27.600	.2	38.500	.0	49.400	.0
	5.900	17.2	16.800	3.6	27.700	.2	38.600	.0	49.500	.0
	6.000	17.0	16.900	3.6	27.800	.2	38.700	.0	49.600	.0
	6.100	16.8	17.000	3.5	27.900	.2	38.800	.0	49.700	.0
	6.200	16.7	17.100	3.5	28.000	.2	38.900	.0	49.800	.0
	6.300	16.5	17.200	3.4	28.100	.2	39.000	.0	49.900	.0
	6.400	16.2	17.300	3.4	28.200	.2	39.100	.0	50.000	.0
	6.500	16.0	17.400	3.3	28.300	.2	39.200	.0	50.100	.0
	6.600	15.7	17.500	3.3	28.400	.2	39.300	.0	50.200	.0
	6.700	15.3	17.600	3.2	28.500	.2	39.400	.0	50.300	.0
	6.800	14.8	17.700	3.2	28.600	.2	39.500	.0	50.400	.0
	6.900	14.5	17.800	3.2	28.700	.2				

39.600	.0	50.500	.0								
	7.000	14.1		17.900	3.1		28.800	.2			
39.700	.0	50.600	.0								
	7.100	13.9		18.000	3.1		28.900	.2			
39.800	.0	50.700	.0								
	7.200	13.4		18.100	3.1		29.000	.2			
39.900	.0	50.800	.0								
	7.300	12.7		18.200	3.0		29.100	.2			
40.000	.0	50.900	.0								
	7.400	12.2		18.300	2.9		29.200	.2			
40.100	.0	51.000	.0								
	7.500	11.9		18.400	2.9		29.300	.2			
40.200	.0	51.100	.0								
	7.600	11.5		18.500	2.9		29.400	.2			
40.300	.0	51.200	.0								
	7.700	11.3		18.600	2.8		29.500	.1			
40.400	.0	51.300	.0								
	7.800	11.1		18.700	2.8		29.600	.1			
40.500	.0	51.400	.0								
	7.900	11.0		18.800	2.8		29.700	.1			
40.600	.0	51.500	.0								
	8.000	10.8		18.900	2.7		29.800	.1			
40.700	.0	51.600	.0								
	8.100	10.7		19.000	2.7		29.900	.1			
40.800	.0	51.700	.0								
	8.200	10.5		19.100	2.7		30.000	.1			
40.900	.0	51.800	.0								
	8.300	10.4		19.200	2.7		30.100	.1			
41.000	.0	51.900	.0								
	8.400	10.3		19.300	2.6		30.200	.1			
41.100	.0	52.000	.0								
	8.500	10.2		19.400	2.6		30.300	.1			
41.200	.0	52.100	.0								
	8.600	10.1		19.500	2.6		30.400	.1			
41.300	.0	52.200	.0								
	8.700	10.1		19.600	2.5		30.500	.1			
41.400	.0	52.300	.0								
	8.800	9.9		19.700	2.5		30.600	.1			
41.500	.0	52.400	.0								
	8.900	9.9		19.800	2.5		30.700	.1			
41.600	.0	52.500	.0								
	9.000	9.8		19.900	2.5		30.800	.1			
41.700	.0	52.600	.0								
	9.100	9.7		20.000	2.4		30.900	.1			
41.800	.0	52.700	.0								
	9.200	9.6		20.100	2.4		31.000	.1			
41.900	.0	52.800	.0								
	9.300	9.5		20.200	2.4		31.100	.1			
42.000	.0	52.900	.0								
	9.400	9.5		20.300	2.3		31.200	.1			
42.100	.0	53.000	.0								
	9.500	9.4		20.400	2.3		31.300	.1			
42.200	.0	53.100	.0								
	9.600	9.3		20.500	2.3		31.400	.1			
42.300	.0	53.200	.0								
	9.700	9.2		20.600	2.3		31.500	.1			
42.400	.0	53.300	.0								
	9.800	9.1		20.700	2.2		31.600	.1			
42.500	.0	53.400	.0								
	9.900	9.0		20.800	2.2		31.700	.1			
42.600	.0	53.500	.0								
	10.000	9.0		20.900	2.2		31.800	.1			
42.700	.0	53.600	.0								

```
        10.100       8.9          21.000       2.2          31.900        .1
42.800        .0          53.700        .0
        10.200       8.8          21.100       2.2          32.000        .1
42.900        .0          53.800        .0
        10.300       8.7          21.200       2.1          32.100        .1
43.000        .0          53.900        .0
        10.400       8.5          21.300       2.1          32.200        .1
43.100        .0          54.000        .0
        10.500       8.4          21.400       2.1          32.300        .1
43.200        .0          54.100        .0
        10.600       8.3          21.500       2.1          32.400        .1
43.300        .0          54.200        .0
        10.700       8.2          21.600       2.0          32.500        .1
43.400        .0          54.300        .0
        10.800       8.1          21.700       2.0          32.600        .1
43.500        .0          54.400        .0

        RUNOFF VOLUME =     1.27915 INCHES     =      19.6279 ACRE-FEET
        PEAK DISCHARGE RATE =      73.46 CFS  AT   1.500 HOURS   BASIN AREA =
.2877 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=21  HYD NO=BASIN.K2  DA=.01486 SQ MI

                                        %A=0.0  %B=15.0  %C=15.0 %D=70.0

                                        TP=-.1715 HR  RAIN=-1


          K =   .093468HR    TP =   .171500HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   31.920    CFS   UNIT VOLUME =    1.005       B =   526.28
  P60 = 1.8400
          AREA =      .010402 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .152490HR    TP =   .171500HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989068
          UNIT PEAK =   9.2134    CFS   UNIT VOLUME =    1.003       B =   354.44
  P60 = 1.8400
          AREA =      .004458 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=21 CODE=10


                                          HYDROGRAPH FROM AREA BASIN.K2


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
```

.000	.0	6.000	.2	12.000	.2
18.000 .1	24.000 .1				
1.000	.0	7.000	.2	13.000	.2
19.000 .1	25.000 .0				
2.000	8.1	8.000	.2	14.000	.2
20.000 .1					
3.000	.5	9.000	.2	15.000	.2
21.000 .1					
4.000	.2	10.000	.2	16.000	.2
22.000 .1					
5.000	.2	11.000	.2	17.000	.2
23.000 .1					

RUNOFF VOLUME = 1.93922 INCHES = 1.5369 ACRE-FEET
PEAK DISCHARGE RATE = 29.39 CFS AT 1.500 HOURS BASIN AREA = .0149 SQ. MI.

*

```
ADD HYD                    ID=34 HYD=K1.K2 ID I=33 II=21

PRINT HYD                  ID=34 CODE=10
```

HYDROGRAPH FROM AREA K1.K2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.000	8.1	22.000	2.1
33.000 .1	44.000 .0				
1.000	.0	12.000	7.2	23.000	1.9
34.000 .1	45.000 .0				
2.000	48.0	13.000	6.4	24.000	1.8
35.000 .0	46.000 .0				
3.000	24.1	14.000	5.7	25.000	.4
36.000 .0	47.000 .0				
4.000	20.3	15.000	4.9	26.000	.3
37.000 .0	48.000 .0				
5.000	18.7	16.000	4.2	27.000	.2
38.000 .0	49.000 .0				
6.000	17.2	17.000	3.7	28.000	.2
39.000 .0	50.000 .0				
7.000	14.4	18.000	3.2	29.000	.2
40.000 .0	51.000 .0				
8.000	11.0	19.000	2.9	30.000	.1
41.000 .0	52.000 .0				
9.000	10.0	20.000	2.6	31.000	.1
42.000 .0	53.000 .0				
10.000	9.2	21.000	2.3	32.000	.1
43.000 .0	54.000 .0				

RUNOFF VOLUME = 1.31157 INCHES = 21.1647 ACRE-FEET
PEAK DISCHARGE RATE = 102.85 CFS AT 1.500 HOURS BASIN AREA = .3026 SQ. MI.

*

```
     *
     COMPUTE NM HYD      ID=22  HYD NO=BASIN.K3  DA=.00648 SQ MI
                                          %A=0  %B=5.0  %C=5.0 %D=90.0
                                          TP=-.133 HR  RAIN=-1

          K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   23.077    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .005832 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118257HR    TP =   .133000HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.7269    CFS   UNIT VOLUME =    1.001       B =   354.44
  P60 = 1.8400
          AREA =      .000648 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=22 CODE=10

                                                HYDROGRAPH FROM AREA BASIN.K3

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0          6.000        .1         11.000        .1
16.000        .1         21.000        .1
         2.000       3.8          7.000        .1         12.000        .1
17.000        .1         22.000        .1
         3.000        .2          8.000        .1         13.000        .1
18.000        .1         23.000        .1
         4.000        .1          9.000        .1         14.000        .1
19.000        .1         24.000        .1

        RUNOFF VOLUME =     2.26512 INCHES     =        .7828 ACRE-FEET
        PEAK DISCHARGE RATE =      14.72 CFS  AT   1.500 HOURS   BASIN AREA =
.0065 SQ. MI.


     *

     *

     ADD HYD                     ID=24 HYD=PONDG.K3 ID I=79 II=22

     PRINT HYD                   ID=24 CODE=10
```

HYDROGRAPH FROM AREA PONDG.K3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	24.7	24.000	8.0
36.000	.0	48.000	.0		
1.000	.0	13.000	24.6	25.000	2.0
37.000	.0	49.000	.0		
2.000	27.5	14.000	24.4	26.000	.8
38.000	.0	50.000	.0		
3.000	25.0	15.000	24.3	27.000	.4
39.000	.0	51.000	.0		
4.000	24.9	16.000	24.1	28.000	.2
40.000	.0	52.000	.0		
5.000	24.9	17.000	23.8	29.000	.2
41.000	.0	53.000	.0		
6.000	24.9	18.000	23.4	30.000	.1
42.000	.0	54.000	.0		
7.000	24.9	19.000	22.9	31.000	.1
43.000	.0	55.000	.0		
8.000	24.9	20.000	20.9	32.000	.1
44.000	.0	56.000	.0		
9.000	24.9	21.000	17.8	33.000	.1
45.000	.0				
10.000	24.8	22.000	15.1	34.000	.1
46.000	.0				
11.000	24.7	23.000	12.5	35.000	.0
47.000	.0				

RUNOFF VOLUME = 1.32697 INCHES = 43.7876 ACRE-FEET
PEAK DISCHARGE RATE = 32.82 CFS AT 1.500 HOURS BASIN AREA = .6187 SQ. MI.

*

*

COMPUTE NM HYD ID=23 HYD NO=BASIN.K4 DA=.0134 SQ MI

%A=0.0 %B=70.0 %C=30.0 %D=0.0

TP=-.133 HR RAIN=-1

K = .123444HR TP = .133000HR K/TP RATIO = .928150 SHAPE CONSTANT, N = 3.811914
UNIT PEAK = 34.500 CFS UNIT VOLUME = 1.004 B = 342.43 P60 = 1.8400
AREA = .013400 SQ MI IA = .45500 INCHES INF = 1.12400 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=23 CODE=10

HYDROGRAPH FROM AREA BASIN.K4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.000	.0	2.000	1.5
3.000	.1	4.000	.0		

RUNOFF VOLUME = .73726 INCHES = .5269 ACRE-FEET
PEAK DISCHARGE RATE = 18.28 CFS AT 1.500 HOURS BASIN AREA = .0134 SQ. MI.

```
*
*
ADD HYD                    ID=25 HYD=K3.K4 ID I=24 II=23
PRINT HYD                  ID=25 CODE=10
```

HYDROGRAPH FROM AREA K3.K4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	24.7	24.000	8.0
36.000	.0	48.000	.0		
1.000	.0	13.000	24.6	25.000	2.0
37.000	.0	49.000	.0		
2.000	29.1	14.000	24.4	26.000	.8
38.000	.0	50.000	.0		
3.000	25.1	15.000	24.3	27.000	.4
39.000	.0	51.000	.0		
4.000	24.9	16.000	24.1	28.000	.2
40.000	.0	52.000	.0		
5.000	24.9	17.000	23.8	29.000	.2
41.000	.0	53.000	.0		
6.000	24.9	18.000	23.4	30.000	.1
42.000	.0	54.000	.0		
7.000	24.9	19.000	22.9	31.000	.1
43.000	.0	55.000	.0		
8.000	24.9	20.000	20.9	32.000	.1
44.000	.0	56.000	.0		
9.000	24.9	21.000	17.8	33.000	.1
45.000	.0				
10.000	24.8	22.000	15.1	34.000	.1
46.000	.0				
11.000	24.7	23.000	12.5	35.000	.0
47.000	.0				

RUNOFF VOLUME = 1.31447 INCHES = 44.3145 ACRE-FEET
PEAK DISCHARGE RATE = 51.10 CFS AT 1.500 HOURS BASIN AREA = .6321 SQ. MI.

```
     *
     *
     ********BASINS 2, B, E, H, L ARE LATER ROUTED THROUGH POND K***********
     *
     *
     COMPUTE NM HYD      ID=81  HYD NO=BASIN.J1  DA=.00517 SQ MI
                                          %A=0.0  %B=12.5  %C=12.5 %D=75.0
                                          TP=-.1333 HR  RAIN=-1

          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   15.309    CFS   UNIT VOLUME =    1.029       B =   526.28
  P60 = 1.8400
          AREA =      .003878 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   3.4367    CFS   UNIT VOLUME =    1.004       B =   354.44
  P60 = 1.8400
          AREA =      .001293 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=81 CODE=10

                                          HYDROGRAPH FROM AREA BASIN.J1


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .1         10.000        .1
15.000        .1         20.000        .1
         1.000        .0          6.000        .1         11.000        .1
16.000        .1         21.000        .0
         2.000       2.6          7.000        .1         12.000        .1
17.000        .1         22.000        .0
         3.000        .1          8.000        .1         13.000        .1
18.000        .1         23.000        .0
         4.000        .1          9.000        .1         14.000        .1
19.000        .1         24.000        .0

         RUNOFF VOLUME =     2.02069 INCHES     =        .5572 ACRE-FEET
         PEAK DISCHARGE RATE =      11.04 CFS  AT   1.500 HOURS   BASIN AREA =
.0052 SQ. MI.
```

```
     *

     *****CANTATA*****

     *

     COMPUTE NM HYD      ID=82  HYD NO=BASIN.J2  DA=.01706 SQ MI
                                              %A=0.0  %B=12.5  %C=12.5 %D=75.0
                                              TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   50.515    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .012795 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   11.340    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .004265 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=82 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.J2


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .3         10.000        .3
15.000        .2         20.000        .2
         1.000        .0          6.000        .3         11.000        .2
16.000        .2         21.000        .2
         2.000       8.7          7.000        .3         12.000        .2
17.000        .2         22.000        .2
         3.000        .5          8.000        .3         13.000        .2
18.000        .2         23.000        .1
         4.000        .3          9.000        .3         14.000        .2
19.000        .2         24.000        .1

        RUNOFF VOLUME =     2.02069 INCHES     =       1.8386 ACRE-FEET
        PEAK DISCHARGE RATE =      36.40 CFS  AT   1.500 HOURS   BASIN AREA =
.0171 SQ. MI.


     *

     COMPUTE NM HYD      ID=83  HYD NO=BASIN.J3  DA=.00580 SQ MI
```

%A=0.0 %B=19.0 %C=19.0 %D=62.0

TP=-.1333 HR RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 14.197 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
AREA = .003596 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 5.8604 CFS UNIT VOLUME = 1.005 B = 354.44 P60 = 1.8400
AREA = .002204 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=83 CODE=10

HYDROGRAPH FROM AREA BASIN.J3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.0		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.0		
2.000	2.6	7.000	.1	12.000	.1
17.000	.1	22.000	.0		
3.000	.1	8.000	.1	13.000	.1
18.000	.1	23.000	.0		
4.000	.1	9.000	.1	14.000	.1
19.000	.0	24.000	.0		

RUNOFF VOLUME = 1.80886 INCHES = .5595 ACRE-FEET
PEAK DISCHARGE RATE = 11.70 CFS AT 1.500 HOURS BASIN AREA = .0058 SQ. MI.

*

*****CANTATA*****

*

COMPUTE NM HYD ID=84 HYD NO=BASIN.J4 DA=.01006 SQ MI

%A=0.0 %B=12.5 %C=12.5 %D=75.0

TP=-.1333 HR RAIN=-1

```
          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   29.788    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .007545 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   6.6873    CFS   UNIT VOLUME =    1.006       B =   354.44
  P60 = 1.8400
          AREA =      .002515 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=84 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.J4


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .2         10.000        .2
15.000        .1         20.000        .1
         1.000        .0          6.000        .2         11.000        .1
16.000        .1         21.000        .1
         2.000       5.2          7.000        .2         12.000        .1
17.000        .1         22.000        .1
         3.000        .3          8.000        .2         13.000        .1
18.000        .1         23.000        .1
         4.000        .2          9.000        .2         14.000        .1
19.000        .1         24.000        .1

         RUNOFF VOLUME =     2.02069 INCHES     =       1.0842 ACRE-FEET
         PEAK DISCHARGE RATE =      21.47 CFS  AT   1.500 HOURS   BASIN AREA =
.0101 SQ. MI.


     *

     *

     COMPUTE NM HYD      ID=85  HYD NO=BASIN.J5  DA=.00134 SQ MI

                                      %A=0.0  %B=5.0  %C=5.0 %D=90.0

                                      TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   4.7614    CFS   UNIT VOLUME =    1.028       B =   526.28
  P60 = 1.8400
          AREA =      .001206 SQ MI    IA =    .10000 INCHES    INF =    .04000
```

INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = .35630 CFS UNIT VOLUME = .9737 B = 354.44 P60 = 1.8400
AREA = .000134 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=85 CODE=10

HYDROGRAPH FROM AREA BASIN.J5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.0	10.000	.0
15.000	.0	20.000	.0		
1.000	.0	6.000	.0	11.000	.0
16.000	.0	21.000	.0		
2.000	.8	7.000	.0	12.000	.0
17.000	.0	22.000	.0		
3.000	.0	8.000	.0	13.000	.0
18.000	.0	23.000	.0		
4.000	.0	9.000	.0	14.000	.0
19.000	.0	24.000	.0		

RUNOFF VOLUME = 2.26513 INCHES = .1619 ACRE-FEET
PEAK DISCHARGE RATE = 3.05 CFS AT 1.500 HOURS BASIN AREA = .0013 SQ. MI.

*

*

COMPUTE NM HYD ID=86 HYD NO=BASIN.J6 DA=.00422 SQ MI
%A=0.0 %B=5.0 %C=5.0 %D=90.0
TP=-.1333 HR RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 14.995 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
AREA = .003798 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE

```
CONSTANT, N =  3.989065
          UNIT PEAK =   1.1221    CFS   UNIT VOLUME =    .9963       B =   354.44
  P60 = 1.8400
          AREA =      .000422 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=86 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.J6


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           5.000        .1         10.000        .1
15.000        .1          20.000        .0
          1.000        .0           6.000        .1         11.000        .1
16.000        .1          21.000        .0
          2.000       2.5           7.000        .1         12.000        .1
17.000        .1          22.000        .0
          3.000        .1           8.000        .1         13.000        .1
18.000        .1          23.000        .0
          4.000        .1           9.000        .1         14.000        .1
19.000        .1          24.000        .0

         RUNOFF VOLUME =     2.26512 INCHES     =        .5098 ACRE-FEET
         PEAK DISCHARGE RATE =       9.59 CFS  AT   1.500 HOURS   BASIN AREA =
.0042 SQ. MI.



     *

     *

     COMPUTE NM HYD      ID=87  HYD NO=BASIN.J7  DA=.00444 SQ MI

                                      %A=0.0  %B=5.0  %C=5.0 %D=90.0

                                      TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   15.776    CFS   UNIT VOLUME =    1.029       B =   526.28
  P60 = 1.8400
          AREA =      .003996 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.1806    CFS   UNIT VOLUME =    .9989       B =   354.44
  P60 = 1.8400
          AREA =      .000444 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
```

.100000

PRINT HYD ID=87 CODE=10

HYDROGRAPH FROM AREA BASIN.J7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	2.6	7.000	.1	12.000	.1
17.000	.1	22.000	.0		
3.000	.1	8.000	.1	13.000	.1
18.000	.1	23.000	.0		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.0		

RUNOFF VOLUME = 2.26512 INCHES = .5364 ACRE-FEET
PEAK DISCHARGE RATE = 10.09 CFS AT 1.500 HOURS BASIN AREA = .0044 SQ. MI.

*

*

COMPUTE NM HYD ID=88 HYD NO=BASIN.J8 DA=.00903 SQ MI

%A=0.0 %B=70.0 %C=30.0 %D=0.0

TP=-.1333 HR RAIN=-1

K = .123722HR TP = .133300HR K/TP RATIO = .928150 SHAPE CONSTANT, N = 3.811914
UNIT PEAK = 23.197 CFS UNIT VOLUME = 1.003 B = 342.43 P60 = 1.8400
AREA = .009030 SQ MI IA = .45500 INCHES INF = 1.12400 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=88 CODE=10

HYDROGRAPH FROM AREA BASIN.J8

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.000	.0	2.000	1.0
3.000	.1				

RUNOFF VOLUME = .73726 INCHES = .3551 ACRE-FEET

PEAK DISCHARGE RATE = 12.31 CFS AT 1.500 HOURS BASIN AREA = .0090 SQ. MI.

*

*

COMPUTE NM HYD ID=89 HYD NO=BASIN.J9 DA=.00548 SQ MI

%A=0.0 %B=7.5 %C=7.5 %D=85.0

TP=-.1333 HR RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 18.390 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
AREA = .004658 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = 2.1857 CFS UNIT VOLUME = 1.002 B = 354.44 P60 = 1.8400
AREA = .000822 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=89 CODE=10

HYDROGRAPH FROM AREA BASIN.J9

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
1.000	.0	6.000	.1	11.000	.1
16.000	.1	21.000	.1		
2.000	3.1	7.000	.1	12.000	.1
17.000	.1	22.000	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		

RUNOFF VOLUME = 2.18365 INCHES = .6382 ACRE-FEET
PEAK DISCHARGE RATE = 12.20 CFS AT 1.500 HOURS BASIN AREA = .0055 SQ. MI.

*

```
     *

     COMPUTE NM HYD      ID=12  HYD NO=BASIN.J12  DA=.01419 SQ MI
                                          %A=100.0  %B=0.0  %C=0.0 %D=0.0
                                          TP=-.1333 HR  RAIN=-1

          K =   .164440HR    TP =   .133300HR    K/TP RATIO =  1.233609     SHAPE
CONSTANT, N =  2.887705
          UNIT PEAK =   29.012    CFS   UNIT VOLUME =    .9838       B =   272.53
  P60 = 1.8400
          AREA =      .014190 SQ MI    IA =    .65000 INCHES    INF =   1.67000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=12 CODE=10

                                          HYDROGRAPH FROM AREA BASIN.J12

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          1.000        .0          2.000       1.0
3.000        .1          4.000        .0

         RUNOFF VOLUME =      .41534 INCHES     =        .3143 ACRE-FEET
         PEAK DISCHARGE RATE =      10.65 CFS  AT   1.500 HOURS   BASIN AREA =
.0142 SQ. MI.


     *

     *

     ADD HYD                    ID=11 HYD=J10J11.J6 ID I=86 II=10

     PRINT HYD                  ID=11 CODE=10

                                          HYDROGRAPH FROM AREA J10J11.J6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          6.000        .4         12.000        .3
18.000        .2          24.000        .2
          1.000        .0          7.000        .4         13.000        .3
19.000        .2          25.000        .0
          2.000      11.9          8.000        .4         14.000        .3
20.000        .2
          3.000        .6          9.000        .3         15.000        .3
21.000        .2
          4.000        .3         10.000        .3         16.000        .2
```

22.000 .2
5.000 .3 11.000 .3 17.000 .2
23.000 .2

RUNOFF VOLUME = 2.25428 INCHES = 2.1437 ACRE-FEET
PEAK DISCHARGE RATE = 38.60 CFS AT 1.500 HOURS BASIN AREA = .0178 SQ. MI.

*

*

ADD HYD ID=95 HYD=J10J11J6.J9 ID I=11 II=89

PRINT HYD ID=95 CODE=10

HYDROGRAPH FROM AREA J10J11J6.J9

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	.5	12.000	.4
18.000	.3	24.000	.2		
1.000	.0	7.000	.5	13.000	.4
19.000	.3	25.000	.0		
2.000	15.0	8.000	.5	14.000	.3
20.000	.3				
3.000	.8	9.000	.4	15.000	.3
21.000	.3				
4.000	.4	10.000	.4	16.000	.3
22.000	.3				
5.000	.4	11.000	.4	17.000	.3
23.000	.2				

RUNOFF VOLUME = 2.23766 INCHES = 2.7818 ACRE-FEET
PEAK DISCHARGE RATE = 50.80 CFS AT 1.500 HOURS BASIN AREA = .0233 SQ. MI.

*

*

ADD HYD ID=90 HYD=J10J11J6J9.J5 ID I=85 II=95

PRINT HYD ID=90 CODE=10

HYDROGRAPH FROM AREA J10J11J6J9.J5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	.5	12.000	.4
18.000	.3	24.000	.3		

	1.000	.0	7.000	.5	13.000	.4	
19.000	.3	25.000	.0				
	2.000	15.8	8.000	.5	14.000	.4	
20.000	.3						
	3.000	.8	9.000	.5	15.000	.3	
21.000	.3						
	4.000	.4	10.000	.4	16.000	.3	
22.000	.3						
	5.000	.4	11.000	.4	17.000	.3	
23.000	.3						

RUNOFF VOLUME = 2.23914 INCHES = 2.9437 ACRE-FEET
PEAK DISCHARGE RATE = 53.86 CFS AT 1.500 HOURS BASIN AREA = .0247 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.007

DIA=3.0 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.16	.14	.29	1.33
.31	.39	1.27	1.83
.47	.71	2.95	2.18
.63	1.07	5.31	2.44
.78	1.46	8.30	2.63
.94	1.89	11.84	2.78
1.09	2.33	15.86	2.89
1.25	2.79	20.27	2.96
1.41	3.26	24.99	2.99
1.56	3.72	29.91	3.00
1.72	4.19	34.92	3.00
1.88	4.65	39.90	3.00
2.03	5.10	44.72	3.00
2.19	5.53	49.23	3.00
2.35	5.93	53.27	3.00

2.50	6.30	56.64	3.00
2.66	6.62	59.04	3.00
2.81	6.89	60.03	3.00
3.00	7.07	60.03	3.00

ROUTE MCUNGE ID=91 HYD=RTE.J5J6 INFLOW ID=90

DT=0.0 L=350 NS=0 SLOPE=0.007

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=91 CODE=0

HYDROGRAPH FROM AREA RTE.J5J6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.200	.4	10.400	.4
15.600	.3	20.800	.3		
.100	.0	5.300	.5	10.500	.4
15.700	.3	20.900	.3		
.200	.0	5.400	.5	10.600	.4
15.800	.3	21.000	.3		
.300	.0	5.500	.5	10.700	.4
15.900	.3	21.100	.3		
.400	.0	5.600	.5	10.800	.4
16.000	.3	21.200	.3		
.500	.0	5.700	.5	10.900	.4
16.100	.3	21.300	.3		
.600	.0	5.800	.5	11.000	.4
16.200	.3	21.400	.3		
.700	.0	5.900	.5	11.100	.4
16.300	.3	21.500	.3		
.800	.0	6.000	.5	11.200	.4
16.400	.3	21.600	.3		
.900	.0	6.100	.5	11.300	.4
16.500	.3	21.700	.3		
1.000	.0	6.200	.5	11.400	.4
16.600	.3	21.800	.3		
1.100	.2	6.300	.5	11.500	.4
16.700	.3	21.900	.3		
1.200	2.7	6.400	.5	11.600	.4
16.800	.3	22.000	.3		
1.300	12.9	6.500	.5	11.700	.4
16.900	.3	22.100	.3		
1.400	36.9	6.600	.5	11.800	.4
17.000	.3	22.200	.3		
1.500	53.9	6.700	.5	11.900	.4
17.100	.3	22.300	.3		
1.600	45.9	6.800	.5	12.000	.4
17.200	.3	22.400	.3		
1.700	31.9	6.900	.5	12.100	.4
17.300	.3	22.500	.3		

	1.800	23.6		7.000	.5		12.200	.4	
17.400	.3		22.600	.3					
	1.900	19.1		7.100	.5		12.300	.4	
17.500	.3		22.700	.3					
	2.000	15.8		7.200	.5		12.400	.4	
17.600	.3		22.800	.3					
	2.100	11.5		7.300	.5		12.500	.4	
17.700	.3		22.900	.3					
	2.200	6.7		7.400	.5		12.600	.4	
17.800	.3		23.000	.3					
	2.300	4.0		7.500	.5		12.700	.4	
17.900	.3		23.100	.3					
	2.400	2.9		7.600	.5		12.800	.4	
18.000	.3		23.200	.3					
	2.500	2.2		7.700	.5		12.900	.4	
18.100	.3		23.300	.3					
	2.600	1.7		7.800	.5		13.000	.4	
18.200	.3		23.400	.3					
	2.700	1.4		7.900	.5		13.100	.4	
18.300	.3		23.500	.3					
	2.800	1.1		8.000	.5		13.200	.4	
18.400	.3		23.600	.3					
	2.900	.9		8.100	.5		13.300	.4	
18.500	.3		23.700	.3					
	3.000	.8		8.200	.5		13.400	.4	
18.600	.3		23.800	.3					
	3.100	.7		8.300	.5		13.500	.4	
18.700	.3		23.900	.3					
	3.200	.6		8.400	.5		13.600	.4	
18.800	.3		24.000	.3					
	3.300	.6		8.500	.5		13.700	.4	
18.900	.3		24.100	.2					
	3.400	.5		8.600	.5		13.800	.4	
19.000	.3		24.200	.1					
	3.500	.5		8.700	.5		13.900	.4	
19.100	.3		24.300	.0					
	3.600	.5		8.800	.5		14.000	.4	
19.200	.3		24.400	.0					
	3.700	.5		8.900	.5		14.100	.4	
19.300	.3		24.500	.0					
	3.800	.5		9.000	.5		14.200	.4	
19.400	.3		24.600	.0					
	3.900	.4		9.100	.5		14.300	.4	
19.500	.3		24.700	.0					
	4.000	.4		9.200	.5		14.400	.4	
19.600	.3		24.800	.0					
	4.100	.4		9.300	.5		14.500	.4	
19.700	.3		24.900	.0					
	4.200	.4		9.400	.5		14.600	.4	
19.800	.3		25.000	.0					
	4.300	.4		9.500	.5		14.700	.4	
19.900	.3		25.100	.0					
	4.400	.4		9.600	.4		14.800	.3	
20.000	.3		25.200	.0					
	4.500	.4		9.700	.4		14.900	.3	
20.100	.3		25.300	.0					
	4.600	.4		9.800	.4		15.000	.3	
20.200	.3		25.400	.0					
	4.700	.4		9.900	.4		15.100	.3	
20.300	.3		25.500	.0					
	4.800	.4		10.000	.4		15.200	.3	
20.400	.3		25.600	.0					
	4.900	.4		10.100	.4		15.300	.3	

20.500 .3
5.000 .4 10.200 .4 15.400 .3
20.600 .3
5.100 .4 10.300 .4 15.500 .3
20.700 .3

RUNOFF VOLUME = 2.23914 INCHES = 2.9437 ACRE-FEET
PEAK DISCHARGE RATE = 53.86 CFS AT 1.500 HOURS BASIN AREA = .0247 SQ. MI.

*

*

ADD HYD ID=93 HYD=J1.J4 ID I=81 II=84

PRINT HYD ID=93 CODE=10

HYDROGRAPH FROM AREA J1.J4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.2	10.000	.2
15.000	.2	20.000	.1		
1.000	.0	6.000	.3	11.000	.2
16.000	.2	21.000	.1		
2.000	7.8	7.000	.3	12.000	.2
17.000	.2	22.000	.1		
3.000	.4	8.000	.3	13.000	.2
18.000	.2	23.000	.1		
4.000	.2	9.000	.2	14.000	.2
19.000	.2	24.000	.1		

RUNOFF VOLUME = 2.02065 INCHES = 1.6413 ACRE-FEET
PEAK DISCHARGE RATE = 32.51 CFS AT 1.500 HOURS BASIN AREA = .0152 SQ. MI.

*

ADD HYD ID=94 HYD=J1J4.J5J6J9 ID I=91 II=93

PRINT HYD ID=94 CODE=10

HYDROGRAPH FROM AREA J1J4.J5J6J9

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	.8	12.000	.6
18.000	.5	24.000	.4		
1.000	.0	7.000	.8	13.000	.6
19.000	.5	25.000	.0		

2.000	23.6	8.000	.7	14.000	.5
20.000	.4				
3.000	1.2	9.000	.7	15.000	.5
21.000	.4				
4.000	.7	10.000	.7	16.000	.5
22.000	.4				
5.000	.7	11.000	.6	17.000	.5
23.000	.4				

RUNOFF VOLUME = 2.15570 INCHES = 4.5850 ACRE-FEET
PEAK DISCHARGE RATE = 86.37 CFS AT 1.500 HOURS BASIN AREA = .0399 SQ. MI.

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.007

DIA=3.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.18	.19	.44	1.56
.36	.53	1.92	2.14
.55	.96	4.46	2.54
.73	1.45	8.01	2.84
.91	1.99	12.51	3.07
1.09	2.57	17.85	3.25
1.28	3.17	23.92	3.37
1.46	3.80	30.58	3.45
1.64	4.43	37.70	3.49
1.82	5.07	45.12	3.50
2.01	5.70	52.68	3.50
2.19	6.33	60.19	3.50
2.37	6.94	67.46	3.50
2.55	7.52	74.27	3.50
2.74	8.07	80.36	3.50
2.92	8.57	85.43	3.50
3.10	9.01	89.06	3.50

3.28 9.37 90.55
3.50
3.50 9.62 90.55
3.50

ROUTE MCUNGE ID=92 HYD=RTE.J14569 INFLOW ID=94

DT=0.0 L=650 NS=0 SLOPE=0.007

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

ZERO VALUE HYDROGRAPH OR SHORT ROUTE - ROUTING BYPASSED

*

PRINT HYD ID=92 CODE=0

HYDROGRAPH FROM AREA RTE.J14569

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.200	.7	10.400	.7
15.600 .5	20.800 .4				
.100	.0	5.300	.7	10.500	.6
15.700 .5	20.900 .4				
.200	.0	5.400	.7	10.600	.6
15.800 .5	21.000 .4				
.300	.0	5.500	.7	10.700	.6
15.900 .5	21.100 .4				
.400	.0	5.600	.7	10.800	.6
16.000 .5	21.200 .4				
.500	.0	5.700	.7	10.900	.6
16.100 .5	21.300 .4				
.600	.0	5.800	.8	11.000	.6
16.200 .5	21.400 .4				
.700	.0	5.900	.8	11.100	.6
16.300 .5	21.500 .4				
.800	.0	6.000	.8	11.200	.6
16.400 .5	21.600 .4				
.900	.0	6.100	.8	11.300	.6
16.500 .5	21.700 .4				
1.000	.0	6.200	.8	11.400	.6
16.600 .5	21.800 .4				
1.100	.3	6.300	.8	11.500	.6
16.700 .5	21.900 .4				
1.200	5.6	6.400	.8	11.600	.6
16.800 .5	22.000 .4				
1.300	23.8	6.500	.8	11.700	.6
16.900 .5	22.100 .4				
1.400	66.0	6.600	.8	11.800	.6
17.000 .5	22.200 .4				
1.500	86.4	6.700	.8	11.900	.6
17.100 .5	22.300 .4				
1.600	68.4	6.800	.8	12.000	.6
17.200 .5	22.400 .4				
1.700	47.2	6.900	.8	12.100	.6
17.300 .5	22.500 .4				
1.800	35.4	7.000	.8	12.200	.6
17.400 .5	22.600 .4				
1.900	28.5	7.100	.8	12.300	.6
17.500 .5	22.700 .4				

	2.000	23.6		7.200	.8		12.400	.6			
17.600	.5		22.800	.4							
	2.100	16.2		7.300	.8		12.500	.6			
17.700	.5		22.900	.4							
	2.200	9.3		7.400	.8		12.600	.6			
17.800	.5		23.000	.4							
	2.300	5.9		7.500	.8		12.700	.6			
17.900	.5		23.100	.4							
	2.400	4.3		7.600	.8		12.800	.6			
18.000	.5		23.200	.4							
	2.500	3.3		7.700	.8		12.900	.6			
18.100	.5		23.300	.4							
	2.600	2.6		7.800	.8		13.000	.6			
18.200	.5		23.400	.4							
	2.700	2.1		7.900	.8		13.100	.6			
18.300	.5		23.500	.4							
	2.800	1.7		8.000	.7		13.200	.6			
18.400	.5		23.600	.4							
	2.900	1.4		8.100	.7		13.300	.6			
18.500	.5		23.700	.4							
	3.000	1.2		8.200	.7		13.400	.6			
18.600	.5		23.800	.4							
	3.100	1.1		8.300	.7		13.500	.6			
18.700	.5		23.900	.4							
	3.200	1.0		8.400	.7		13.600	.6			
18.800	.5		24.000	.4							
	3.300	.9		8.500	.7		13.700	.6			
18.900	.5		24.100	.3							
	3.400	.8		8.600	.7		13.800	.6			
19.000	.5		24.200	.1							
	3.500	.8		8.700	.7		13.900	.6			
19.100	.5		24.300	.1							
	3.600	.7		8.800	.7		14.000	.5			
19.200	.5		24.400	.0							
	3.700	.7		8.900	.7		14.100	.5			
19.300	.4		24.500	.0							
	3.800	.7		9.000	.7		14.200	.5			
19.400	.4		24.600	.0							
	3.900	.7		9.100	.7		14.300	.5			
19.500	.4		24.700	.0							
	4.000	.7		9.200	.7		14.400	.5			
19.600	.4		24.800	.0							
	4.100	.7		9.300	.7		14.500	.5			
19.700	.4		24.900	.0							
	4.200	.6		9.400	.7		14.600	.5			
19.800	.4		25.000	.0							
	4.300	.6		9.500	.7		14.700	.5			
19.900	.4		25.100	.0							
	4.400	.6		9.600	.7		14.800	.5			
20.000	.4		25.200	.0							
	4.500	.6		9.700	.7		14.900	.5			
20.100	.4		25.300	.0							
	4.600	.6		9.800	.7		15.000	.5			
20.200	.4		25.400	.0							
	4.700	.6		9.900	.7		15.100	.5			
20.300	.4		25.500	.0							
	4.800	.6		10.000	.7		15.200	.5			
20.400	.4		25.600	.0							
	4.900	.7		10.100	.7		15.300	.5			
20.500	.4										
	5.000	.7		10.200	.7		15.400	.5			
20.600	.4										
	5.100	.7		10.300	.7		15.500	.5			

20.700 .4

RUNOFF VOLUME = 2.15570 INCHES = 4.5850 ACRE-FEET
PEAK DISCHARGE RATE = 86.37 CFS AT 1.500 HOURS BASIN AREA = .0399 SQ. MI.

*

*

ADD HYD ID=95 HYD=J2.J3 ID I=82 II=83

PRINT HYD ID=95 CODE=10

HYDROGRAPH FROM AREA J2.J3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.3	20.000	.2		
1.000	.0	6.000	.4	11.000	.3
16.000	.2	21.000	.2		
2.000	11.3	7.000	.4	12.000	.3
17.000	.2	22.000	.2		
3.000	.6	8.000	.4	13.000	.3
18.000	.2	23.000	.2		
4.000	.3	9.000	.3	14.000	.3
19.000	.2	24.000	.2		

RUNOFF VOLUME = 1.96692 INCHES = 2.3981 ACRE-FEET
PEAK DISCHARGE RATE = 48.10 CFS AT 1.500 HOURS BASIN AREA = .0229 SQ. MI.

*

*

ADD HYD ID=94 HYD=J2J3.J7 ID I=95 II=87

PRINT HYD ID=94 CODE=10

HYDROGRAPH FROM AREA J2J3.J7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.4	10.000	.4
15.000	.3	20.000	.3		
1.000	.0	6.000	.5	11.000	.4
16.000	.3	21.000	.3		
2.000	13.9	7.000	.5	12.000	.4
17.000	.3	22.000	.3		

```
          3.000        .7          8.000        .5          13.000        .4
18.000        .3          23.000        .2
          4.000        .4          9.000        .4          14.000        .3
19.000        .3          24.000        .2

         RUNOFF VOLUME =     2.01541 INCHES     =       2.9344 ACRE-FEET
         PEAK DISCHARGE RATE =      58.19 CFS  AT   1.500 HOURS   BASIN AREA =
.0273 SQ. MI.


     *

     *

     ADD HYD                      ID=96 HYD=J145679.J237 ID I=94 II=92

     PRINT HYD                    ID=96 CODE=10

                                                HYDROGRAPH FROM AREA J145679.J237

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           6.000       1.3          12.000       1.0
18.000        .7          24.000        .6
          1.000        .0           7.000       1.3          13.000        .9
19.000        .7          25.000        .0
          2.000      37.5           8.000       1.2          14.000        .9
20.000        .7
          3.000       2.0           9.000       1.1          15.000        .8
21.000        .7
          4.000       1.1          10.000       1.1          16.000        .8
22.000        .7
          5.000       1.1          11.000       1.0          17.000        .8
23.000        .6

         RUNOFF VOLUME =     2.09869 INCHES     =       7.5194 ACRE-FEET
         PEAK DISCHARGE RATE =     144.56 CFS  AT   1.500 HOURS   BASIN AREA =
.0672 SQ. MI.


     *

     ADD HYD                      ID=97 HYD=J1J7.J8 ID I=96 II=88

     PRINT HYD                    ID=97 CODE=10

                                                HYDROGRAPH FROM AREA J1J7.J8

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0           6.000       1.3          12.000       1.0
18.000        .7          24.000        .6
          1.000        .0           7.000       1.3          13.000        .9
```

```
19.000        .7         25.000         .0
         2.000      38.6           8.000       1.2         14.000        .9
20.000        .7
         3.000       2.0           9.000       1.1         15.000        .8
21.000        .7
         4.000       1.1          10.000       1.1         16.000        .8
22.000        .7
         5.000       1.1          11.000       1.0         17.000        .8
23.000        .6

         RUNOFF VOLUME =     1.93737 INCHES     =       7.8745 ACRE-FEET
         PEAK DISCHARGE RATE =     156.87 CFS  AT   1.500 HOURS   BASIN AREA =
.0762 SQ. MI.


     *

     *

     ADD HYD                      ID=98 HYD=J1J8.J12 ID I=97 II=12

     PRINT HYD                    ID=98 CODE=10

                                                HYDROGRAPH FROM AREA J1J8.J12

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS             HRS       CFS
          .000         .0          6.000       1.3         12.000       1.0
18.000        .7         24.000         .6
         1.000         .0          7.000       1.3         13.000        .9
19.000        .7         25.000         .0
         2.000      39.5           8.000       1.2         14.000        .9
20.000        .7
         3.000       2.1           9.000       1.1         15.000        .8
21.000        .7
         4.000       1.1          10.000       1.1         16.000        .8
22.000        .7
         5.000       1.1          11.000       1.0         17.000        .8
23.000        .6

         RUNOFF VOLUME =     1.69846 INCHES     =       8.1888 ACRE-FEET
         PEAK DISCHARGE RATE =     167.52 CFS  AT   1.500 HOURS   BASIN AREA =
.0904 SQ. MI.


     *

     *

     ************************************************************

     DIVIDE HYD                   ID=98 Q=26.34 ID I=83  HYD NO=BYPASSJ

                                                          ID II=84 HYD NO=SURGEJ

     PRINT HYD                    ID=83 CODE=10
```

HYDROGRAPH FROM AREA BYPASSJ

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	6.000	1.3	12.000	1.0
18.000	.7	24.000	.6		
1.000	.0	7.000	1.3	13.000	.9
19.000	.7	25.000	.0		
2.000	26.3	8.000	1.2	14.000	.9
20.000	.7				
3.000	2.1	9.000	1.1	15.000	.8
21.000	.7				
4.000	1.1	10.000	1.1	16.000	.8
22.000	.7				
5.000	1.1	11.000	1.0	17.000	.8
23.000	.6				

RUNOFF VOLUME = 1.69846 INCHES = 4.1292 ACRE-FEET
PEAK DISCHARGE RATE = 26.34 CFS AT 1.300 HOURS BASIN AREA = .0456 SQ. MI.

PRINT HYD ID=84 CODE=10

HYDROGRAPH FROM AREA SURGEJ

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.000	.0	2.000	13.2

RUNOFF VOLUME = 1.69846 INCHES = 4.0596 ACRE-FEET
PEAK DISCHARGE RATE = 141.18 CFS AT 1.500 HOURS BASIN AREA = .0448 SQ. MI.

****

*

*

ROUTE RESERVOIR ID=90 HYD=POND.J INFLOW ID=84 CODE=10

OUTFLOW		STORAGE	DEPTH
0		0	5414
3.82	1.96		5415
7.20	4.70		5416
10.28	7.94		5417

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5414.00	.000	.00
1.00	.00	5414.00	.000	.00
2.00	13.21	5415.66	3.767	6.05
3.00	.00	5415.50	3.341	5.52
4.00	.00	5415.35	2.907	4.99
5.00	.00	5415.20	2.515	4.50
6.00	.00	5415.07	2.161	4.07
7.00	.00	5414.94	1.843	3.59
8.00	.00	5414.80	1.569	3.06
9.00	.00	5414.68	1.335	2.60
10.00	.00	5414.58	1.137	2.22
11.00	.00	5414.49	.968	1.89
12.00	.00	5414.42	.824	1.61
13.00	.00	5414.36	.701	1.37
14.00	.00	5414.30	.597	1.16
15.00	.00	5414.26	.508	.99
16.00	.00	5414.22	.432	.84
17.00	.00	5414.19	.368	.72
18.00	.00	5414.16	.313	.61
19.00	.00	5414.14	.267	.52
20.00	.00	5414.12	.227	.44
21.00	.00	5414.10	.193	.38
22.00	.00	5414.08	.165	.32
23.00	.00	5414.07	.140	.27
24.00	.00	5414.06	.119	.23
25.00	.00	5414.05	.101	.20
26.00	.00	5414.04	.086	.17
27.00	.00	5414.04	.074	.14
28.00	.00	5414.03	.063	.12
29.00	.00	5414.03	.053	.10
30.00	.00	5414.02	.045	.09
31.00	.00	5414.02	.039	.08
32.00	.00	5414.02	.033	.06
33.00	.00	5414.01	.028	.05
34.00	.00	5414.01	.024	.05
35.00	.00	5414.01	.020	.04
36.00	.00	5414.01	.017	.03
37.00	.00	5414.01	.015	.03
38.00	.00	5414.01	.012	.02
39.00	.00	5414.01	.011	.02
40.00	.00	5414.00	.009	.02
41.00	.00	5414.00	.008	.02
42.00	.00	5414.00	.007	.01
43.00	.00	5414.00	.006	.01
44.00	.00	5414.00	.005	.01
45.00	.00	5414.00	.004	.01
46.00	.00	5414.00	.003	.01
47.00	.00	5414.00	.003	.01
48.00	.00	5414.00	.002	.00

PEAK DISCHARGE = 6.055 CFS - PEAK OCCURS AT HOUR 2.10
MAXIMUM WATER SURFACE ELEVATION = 5415.661
MAXIMUM STORAGE = 3.7714 AC-FT INCREMENTAL TIME= .100000HRS

*

PRINT HYD ID=90 CODE=0

HYDROGRAPH FROM AREA POND.J

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	11.600	1.7	23.200	.3
34.800	.0	46.400	.0		
.100	.0	11.700	1.7	23.300	.3
34.900	.0	46.500	.0		
.200	.0	11.800	1.7	23.400	.3
35.000	.0	46.600	.0		
.300	.0	11.900	1.6	23.500	.3
35.100	.0	46.700	.0		
.400	.0	12.000	1.6	23.600	.2
35.200	.0	46.800	.0		
.500	.0	12.100	1.6	23.700	.2
35.300	.0	46.900	.0		
.600	.0	12.200	1.6	23.800	.2
35.400	.0	47.000	.0		
.700	.0	12.300	1.5	23.900	.2
35.500	.0	47.100	.0		
.800	.0	12.400	1.5	24.000	.2
35.600	.0	47.200	.0		
.900	.0	12.500	1.5	24.100	.2
35.700	.0	47.300	.0		
1.000	.0	12.600	1.5	24.200	.2
35.800	.0	47.400	.0		
1.100	.0	12.700	1.4	24.300	.2
35.900	.0	47.500	.0		
1.200	.0	12.800	1.4	24.400	.2
36.000	.0	47.600	.0		
1.300	.1	12.900	1.4	24.500	.2
36.100	.0	47.700	.0		
1.400	1.1	13.000	1.4	24.600	.2
36.200	.0	47.800	.0		
1.500	3.1	13.100	1.3	24.700	.2
36.300	.0	47.900	.0		
1.600	4.5	13.200	1.3	24.800	.2
36.400	.0	48.000	.0		
1.700	5.3	13.300	1.3	24.900	.2
36.500	.0	48.100	.0		
1.800	5.7	13.400	1.3	25.000	.2
36.600	.0	48.200	.0		
1.900	5.9	13.500	1.3	25.100	.2
36.700	.0	48.300	.0		
2.000	6.0	13.600	1.2	25.200	.2
36.800	.0	48.400	.0		
2.100	6.1	13.700	1.2	25.300	.2
36.900	.0	48.500	.0		
2.200	6.0	13.800	1.2	25.400	.2
37.000	.0	48.600	.0		
2.300	5.9	13.900	1.2	25.500	.2
37.100	.0	48.700	.0		
2.400	5.9	14.000	1.2	25.600	.2
37.200	.0	48.800	.0		
2.500	5.8	14.100	1.1	25.700	.2
37.300	.0	48.900	.0		
2.600	5.8	14.200	1.1	25.800	.2

37.400	.0	49.000	.0				
	2.700	5.7	14.300	1.1	25.900	.2	
37.500	.0	49.100	.0				
	2.800	5.6	14.400	1.1	26.000	.2	
37.600	.0	49.200	.0				
	2.900	5.6	14.500	1.1	26.100	.2	
37.700	.0	49.300	.0				
	3.000	5.5	14.600	1.1	26.200	.2	
37.800	.0	49.400	.0				
	3.100	5.5	14.700	1.0	26.300	.2	
37.900	.0	49.500	.0				
	3.200	5.4	14.800	1.0	26.400	.2	
38.000	.0	49.600	.0				
	3.300	5.4	14.900	1.0	26.500	.2	
38.100	.0	49.700	.0				
	3.400	5.3	15.000	1.0	26.600	.2	
38.200	.0	49.800	.0				
	3.500	5.2	15.100	1.0	26.700	.2	
38.300	.0	49.900	.0				
	3.600	5.2	15.200	1.0	26.800	.1	
38.400	.0	50.000	.0				
	3.700	5.1	15.300	.9	26.900	.1	
38.500	.0	50.100	.0				
	3.800	5.1	15.400	.9	27.000	.1	
38.600	.0	50.200	.0				
	3.900	5.0	15.500	.9	27.100	.1	
38.700	.0	50.300	.0				
	4.000	5.0	15.600	.9	27.200	.1	
38.800	.0	50.400	.0				
	4.100	4.9	15.700	.9	27.300	.1	
38.900	.0	50.500	.0				
	4.200	4.9	15.800	.9	27.400	.1	
39.000	.0	50.600	.0				
	4.300	4.8	15.900	.9	27.500	.1	
39.100	.0	50.700	.0				
	4.400	4.8	16.000	.8	27.600	.1	
39.200	.0	50.800	.0				
	4.500	4.7	16.100	.8	27.700	.1	
39.300	.0	50.900	.0				
	4.600	4.7	16.200	.8	27.800	.1	
39.400	.0	51.000	.0				
	4.700	4.6	16.300	.8	27.900	.1	
39.500	.0	51.100	.0				
	4.800	4.6	16.400	.8	28.000	.1	
39.600	.0	51.200	.0				
	4.900	4.6	16.500	.8	28.100	.1	
39.700	.0	51.300	.0				
	5.000	4.5	16.600	.8	28.200	.1	
39.800	.0	51.400	.0				
	5.100	4.5	16.700	.8	28.300	.1	
39.900	.0	51.500	.0				
	5.200	4.4	16.800	.7	28.400	.1	
40.000	.0	51.600	.0				
	5.300	4.4	16.900	.7	28.500	.1	
40.100	.0	51.700	.0				
	5.400	4.3	17.000	.7	28.600	.1	
40.200	.0	51.800	.0				
	5.500	4.3	17.100	.7	28.700	.1	
40.300	.0	51.900	.0				
	5.600	4.2	17.200	.7	28.800	.1	
40.400	.0	52.000	.0				
	5.700	4.2	17.300	.7	28.900	.1	
40.500	.0	52.100	.0				

	5.800		4.2		17.400		.7	29.000	.1
40.600	.0		52.200		.0				
	5.900		4.1		17.500		.7	29.100	.1
40.700	.0		52.300		.0				
	6.000		4.1		17.600		.7	29.200	.1
40.800	.0		52.400		.0				
	6.100		4.0		17.700		.6	29.300	.1
40.900	.0		52.500		.0				
	6.200		4.0		17.800		.6	29.400	.1
41.000	.0		52.600		.0				
	6.300		3.9		17.900		.6	29.500	.1
41.100	.0		52.700		.0				
	6.400		3.9		18.000		.6	29.600	.1
41.200	.0		52.800		.0				
	6.500		3.9		18.100		.6	29.700	.1
41.300	.0		52.900		.0				
	6.600		3.8		18.200		.6	29.800	.1
41.400	.0		53.000		.0				
	6.700		3.8		18.300		.6	29.900	.1
41.500	.0		53.100		.0				
	6.800		3.7		18.400		.6	30.000	.1
41.600	.0		53.200		.0				
	6.900		3.7		18.500		.6	30.100	.1
41.700	.0		53.300		.0				
	7.000		3.6		18.600		.6	30.200	.1
41.800	.0		53.400		.0				
	7.100		3.5		18.700		.5	30.300	.1
41.900	.0		53.500		.0				
	7.200		3.5		18.800		.5	30.400	.1
42.000	.0		53.600		.0				
	7.300		3.4		18.900		.5	30.500	.1
42.100	.0		53.700		.0				
	7.400		3.4		19.000		.5	30.600	.1
42.200	.0		53.800		.0				
	7.500		3.3		19.100		.5	30.700	.1
42.300	.0		53.900		.0				
	7.600		3.3		19.200		.5	30.800	.1
42.400	.0		54.000		.0				
	7.700		3.2		19.300		.5	30.900	.1
42.500	.0		54.100		.0				
	7.800		3.2		19.400		.5	31.000	.1
42.600	.0		54.200		.0				
	7.900		3.1		19.500		.5	31.100	.1
42.700	.0		54.300		.0				
	8.000		3.1		19.600		.5	31.200	.1
42.800	.0		54.400		.0				
	8.100		3.0		19.700		.5	31.300	.1
42.900	.0		54.500		.0				
	8.200		3.0		19.800		.5	31.400	.1
43.000	.0		54.600		.0				
	8.300		2.9		19.900		.4	31.500	.1
43.100	.0		54.700		.0				
	8.400		2.9		20.000		.4	31.600	.1
43.200	.0		54.800		.0				
	8.500		2.8		20.100		.4	31.700	.1
43.300	.0		54.900		.0				
	8.600		2.8		20.200		.4	31.800	.1
43.400	.0		55.000		.0				
	8.700		2.7		20.300		.4	31.900	.1
43.500	.0		55.100		.0				
	8.800		2.7		20.400		.4	32.000	.1
43.600	.0		55.200		.0				
	8.900		2.6		20.500		.4	32.100	.1

43.700	.0	55.300	.0				
	9.000	2.6	20.600	.4	32.200	.1	
43.800	.0	55.400	.0				
	9.100	2.6	20.700	.4	32.300	.1	
43.900	.0	55.500	.0				
	9.200	2.5	20.800	.4	32.400	.1	
44.000	.0	55.600	.0				
	9.300	2.5	20.900	.4	32.500	.1	
44.100	.0	55.700	.0				
	9.400	2.4	21.000	.4	32.600	.1	
44.200	.0	55.800	.0				
	9.500	2.4	21.100	.4	32.700	.1	
44.300	.0	55.900	.0				
	9.600	2.4	21.200	.4	32.800	.1	
44.400	.0	56.000	.0				
	9.700	2.3	21.300	.4	32.900	.1	
44.500	.0	56.100	.0				
	9.800	2.3	21.400	.4	33.000	.1	
44.600	.0	56.200	.0				
	9.900	2.3	21.500	.3	33.100	.1	
44.700	.0	56.300	.0				
	10.000	2.2	21.600	.3	33.200	.1	
44.800	.0	56.400	.0				
	10.100	2.2	21.700	.3	33.300	.1	
44.900	.0	56.500	.0				
	10.200	2.1	21.800	.3	33.400	.1	
45.000	.0	56.600	.0				
	10.300	2.1	21.900	.3	33.500	.1	
45.100	.0	56.700	.0				
	10.400	2.1	22.000	.3	33.600	.0	
45.200	.0	56.800	.0				
	10.500	2.0	22.100	.3	33.700	.0	
45.300	.0	56.900	.0				
	10.600	2.0	22.200	.3	33.800	.0	
45.400	.0	57.000	.0				
	10.700	2.0	22.300	.3	33.900	.0	
45.500	.0	57.100	.0				
	10.800	1.9	22.400	.3	34.000	.0	
45.600	.0	57.200	.0				
	10.900	1.9	22.500	.3	34.100	.0	
45.700	.0	57.300	.0				
	11.000	1.9	22.600	.3	34.200	.0	
45.800	.0	57.400	.0				
	11.100	1.9	22.700	.3	34.300	.0	
45.900	.0	57.500	.0				
	11.200	1.8	22.800	.3	34.400	.0	
46.000	.0	57.600	.0				
	11.300	1.8	22.900	.3	34.500	.0	
46.100	.0	57.700	.0				
	11.400	1.8	23.000	.3	34.600	.0	
46.200	.0	57.800	.0				
	11.500	1.7	23.100	.3	34.700	.0	
46.300	.0						

RUNOFF VOLUME = 1.69831 INCHES = 4.0592 ACRE-FEET
PEAK DISCHARGE RATE = 6.05 CFS AT 2.100 HOURS BASIN AREA = .0448 SQ. MI.

*

*

```
     ADD HYD                        ID=97 HYD=BYPASS.SURGEPONDJ ID I=90 II=83

     PRINT HYD                      ID=97 CODE=10
```

HYDROGRAPH FROM AREA BYPASS.SURGEPONDJ

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	2.6	24.000	.9
36.000	.0	48.000	.0		
1.000	.0	13.000	2.3	25.000	.2
37.000	.0	49.000	.0		
2.000	32.4	14.000	2.0	26.000	.2
38.000	.0	50.000	.0		
3.000	7.7	15.000	1.8	27.000	.1
39.000	.0	51.000	.0		
4.000	6.1	16.000	1.7	28.000	.1
40.000	.0	52.000	.0		
5.000	5.6	17.000	1.5	29.000	.1
41.000	.0	53.000	.0		
6.000	5.3	18.000	1.4	30.000	.1
42.000	.0	54.000	.0		
7.000	4.9	19.000	1.2	31.000	.1
43.000	.0	55.000	.0		
8.000	4.3	20.000	1.1	32.000	.1
44.000	.0	56.000	.0		
9.000	3.7	21.000	1.1	33.000	.1
45.000	.0	57.000	.0		
10.000	3.3	22.000	1.0	34.000	.0
46.000	.0				
11.000	2.9	23.000	.9	35.000	.0
47.000	.0				

```
          RUNOFF VOLUME =     1.69835 INCHES     =       8.1883 ACRE-FEET
          PEAK DISCHARGE RATE =      32.39 CFS  AT   2.000 HOURS   BASIN AREA =
.0904 SQ. MI.


     *

     *

     COMPUTE RATING CURVE CID=1  VS NO=1  CODE=-1   SLP=0.007

                                          DIA=4.0  N=0.013
```

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.21	.25	.63	1.78
.42	.69	2.74	

2.44	.63	1.25	6.36
2.91	.83	1.90	11.44
3.25	1.04	2.60	17.87
3.51	1.25	3.36	25.49
3.71	1.46	4.15	34.15
3.85	1.67	4.96	43.66
3.94	1.88	5.79	53.83
3.99	2.08	6.62	64.42
4.00	2.29	7.45	75.21
4.00	2.50	8.27	85.93
4.00	2.71	9.06	96.31
4.00	2.92	9.82	106.03
4.00	3.13	10.54	114.73
4.00	3.34	11.20	121.97
4.00	3.54	11.77	127.15
4.00	3.75	12.24	129.28
4.00	4.00	12.57	129.28

ROUTE MCUNGE ID=91 HYD=RTE.J5J6 INFLOW ID=97

DT=0.0 L=1100 NS=0 SLOPE=0.007

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 579 TABLE PTS= 19
DT= .100000 QMED= 16.19 CKMED= 9.0998
WIDTH MED= 3.44 NREACH= 1 DX= 1100.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.165	.0	3.06	1.19	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.21	.2	.6	.121	1.8	4.15	2.52	1.359	.011	.991	.156	-.147	.1	.999	.025	-.023
.42	.7	2.7	.078	2.4	5.73	3.94	1.876	.025	.983	.311	-.293	1.5	.985	.223	-.208
.63	1.3	6.4	.060	2.9	7.26	5.07	2.375	.039	.977	.414	-.391	4.4	.979	.366	-.346
.83	1.9	11.4	.051	3.2	8.54	6.03	2.795	.054	.972	.480	-.453	8.8	.974	.450	-.424
1.04	2.6	17.9	.045	3.5	9.64	6.86	3.154	.069	.968	.526	-.494	14.5	.970	.505	-.475
1.25	3.4	25.5	.040	3.7	10.57	7.59	3.458	.084	.963						

.560	-.523	21.6	.965	.545	-.510						
	1.46	4.1	34.2	.037	3.9	11.35	8.24	3.714	.101	.958	
.585	-.543	29.7	.960	.574	-.534						
	1.67	5.0	43.7	.035	3.9	11.99	8.80	3.924	.120	.952	
.603	-.556	38.8	.955	.595	-.551						
	1.88	5.8	53.8	.033	4.0	12.49	9.30	4.089	.140	.946	
.618	-.564	48.7	.950	.612	-.561						
	2.08	6.6	64.4	.031	4.0	12.84	9.73	4.203	.163	.939	
.627	-.567	59.1	.943	.624	-.567						
	2.29	7.5	75.2	.030	4.0	12.93	10.09	4.230	.189	.930	
.631	-.561	69.8	.935	.630	-.566						
	2.50	8.3	85.9	.029	4.0	12.68	10.39	4.151	.220	.918	
.628	-.546	80.5	.925	.631	-.555						
	2.71	9.1	96.3	.029	4.0	12.08	10.63	3.955	.259	.901	
.616	-.517	91.1	.911	.624	-.534						
	2.92	9.8	106.0	.028	4.0	11.08	10.79	3.625	.311	.874	
.595	-.469	101.2	.889	.608	-.497						
	3.13	10.5	114.7	.028	4.0	9.58	10.89	3.136	.389	.828	
.558	-.386	110.4	.856	.580	-.435						
	3.34	11.2	122.0	.028	4.0	7.46	10.90	2.442	.531	.733	
.497	-.229	118.4	.793	.533	-.326						
	3.54	11.8	127.2	.028	4.0	4.37	10.80	1.430	.945	.440	
.407	.152	124.6	.646	.457	-.104						
	3.75	12.2	129.3	.029	4.0	2.49	10.56	.815	1.685	.037	
.429	.534	128.2	.059	.423	.518						

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 5 TIMES.
AVERAGE NUMBER ITERATIONS = 1.1868

DEPTH	AREA	Q	TRAVEL	WIDTH	ck	VEL	C	D	C1	C2	C3
(FT)	(SQ FT)	(CFS)	TIME(HR)	(FT)		(FPS)					
		(CFS)									
.00	.0	.0	.165	.0	3.06	1.19	1.000	.000	1.000	.000	.000
		.0	1.000	.000	.000						
.21	.2	.6	.121	1.8	3.10	2.52	1.015	.015	.985	.015	.000
		.1	.995	.005	.000						
.42	.7	2.7	.078	2.4	3.19	3.94	1.046	.046	.956	.044	.000
		1.5	.971	.029	.000						
.63	1.3	6.4	.060	2.9	3.32	5.07	1.086	.086	.921	.079	.000
		4.4	.939	.061	.000						
.83	1.9	11.4	.051	3.2	3.46	6.03	1.132	.132	.883	.117	.000
		8.8	.902	.098	.000						
1.04	2.6	17.9	.045	3.5	3.61	6.86	1.183	.183	.845	.155	.000
		14.5	.864	.136	.000						
1.25	3.4	25.5	.040	3.7	3.78	7.59	1.236	.236	.809	.191	.000
		21.6	.827	.173	.000						
1.46	4.1	34.2	.037	3.9	3.95	8.24	1.292	.292	.774	.226	.000
		29.7	.791	.209	.000						
1.67	5.0	43.7	.035	3.9	4.12	8.80	1.349	.349	.741	.259	.000
		38.8	.757	.243	.000						
1.88	5.8	53.8	.033	4.0	4.30	9.30	1.407	.407	.711	.289	.000
		48.7	.726	.274	.000						
2.08	6.6	64.4	.031	4.0	4.48	9.73	1.467	.467	.682	.318	.000
		59.1	.696	.304	.000						
2.29	7.5	75.2	.030	4.0	4.66	10.09	1.524	.524	.656	.344	.000
		69.8	.669	.331	.000						
2.50	8.3	85.9	.029	4.0	4.82	10.39	1.578	.578	.634	.366	.000
		80.5	.645	.355	.000						
2.71	9.1	96.3	.029	4.0	4.98	10.63	1.628	.628	.614	.386	.000
		91.1	.624	.376	.000						
2.92	9.8	106.0	.028	4.0	5.11	10.79	1.673	.673	.598	.402	.000
		101.2	.606	.394	.000						
3.13	10.5	114.7	.028	4.0	5.23	10.89	1.712	.712	.584	.416	.000
		110.4	.591	.409	.000						

```
        3.34   11.2    122.0    .028    4.0     5.33  10.90    1.743   .743   .574
 .426   .000   118.4    .579   .421   .000
        3.54   11.8    127.2    .028    4.0     4.37  10.80    1.430   .945   .440
 .407   .152   124.6    .570   .430   .000
        3.75   12.2    129.3    .029    4.0     2.49  10.56     .815  1.685   .037
 .429   .534   128.2    .059   .423   .518
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   3 OCCURRED       3 TIMES.
AVERAGE NUMBER ITERATIONS =  1.0543
     Equations solved with two passes: first using the Ponce correction to C1,
second using the Fread correction to C1, C2 and C3
     *

     PRINT HYD            ID=91 CODE=0

                                                  HYDROGRAPH FROM AREA RTE.J5J6

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          11.600       2.7          23.200        .9
34.800       .0          46.400        .0
          .100        .0          11.700       2.7          23.300        .9
34.900       .0          46.500        .0
          .200        .0          11.800       2.7          23.400        .9
35.000       .0          46.600        .0
          .300        .0          11.900       2.6          23.500        .9
35.100       .0          46.700        .0
          .400        .0          12.000       2.6          23.600        .9
35.200       .0          46.800        .0
          .500        .0          12.100       2.6          23.700        .9
35.300       .0          46.900        .0
          .600        .0          12.200       2.5          23.800        .9
35.400       .0          47.000        .0
          .700        .0          12.300       2.5          23.900        .9
35.500       .0          47.100        .0
          .800        .0          12.400       2.5          24.000        .9
35.600       .0          47.200        .0
          .900        .0          12.500       2.4          24.100        .9
35.700       .0          47.300        .0
         1.000        .0          12.600       2.4          24.200        .6
35.800       .0          47.400        .0
         1.100        .0          12.700       2.4          24.300        .4
35.900       .0          47.500        .0
         1.200       1.2          12.800       2.4          24.400        .3
36.000       .0          47.600        .0
         1.300      12.7          12.900       2.3          24.500        .3
36.100       .0          47.700        .0
         1.400      26.7          13.000       2.3          24.600        .2
36.200       .0          47.800        .0
         1.500      27.9          13.100       2.3          24.700        .2
36.300       .0          47.900        .0
         1.600      29.7          13.200       2.3          24.800        .2
36.400       .0          48.000        .0
         1.700      31.0          13.300       2.2          24.900        .2
36.500       .0          48.100        .0
         1.800      31.7          13.400       2.2          25.000        .2
36.600       .0          48.200        .0
         1.900      32.1          13.500       2.2          25.100        .2
36.700       .0          48.300        .0
         2.000      32.3          13.600       2.2          25.200        .2
```

36.800	.0	48.400	.0				
	2.100	32.3	13.700	2.1	25.300	.2	
36.900	.0	48.500	.0				
	2.200	29.9	13.800	2.1	25.400	.2	
37.000	.0	48.600	.0				
	2.300	20.3	13.900	2.1	25.500	.2	
37.100	.0	48.700	.0				
	2.400	15.7	14.000	2.1	25.600	.2	
37.200	.0	48.800	.0				
	2.500	13.2	14.100	2.0	25.700	.2	
37.300	.0	48.900	.0				
	2.600	11.5	14.200	2.0	25.800	.2	
37.400	.0	49.000	.0				
	2.700	10.2	14.300	2.0	25.900	.2	
37.500	.0	49.100	.0				
	2.800	9.3	14.400	2.0	26.000	.2	
37.600	.0	49.200	.0				
	2.900	8.6	14.500	2.0	26.100	.2	
37.700	.0	49.300	.0				
	3.000	8.1	14.600	1.9	26.200	.2	
37.800	.0	49.400	.0				
	3.100	7.6	14.700	1.9	26.300	.2	
37.900	.0	49.500	.0				
	3.200	7.3	14.800	1.9	26.400	.2	
38.000	.0	49.600	.0				
	3.300	7.1	14.900	1.9	26.500	.2	
38.100	.0	49.700	.0				
	3.400	6.9	15.000	1.9	26.600	.2	
38.200	.0	49.800	.0				
	3.500	6.7	15.100	1.8	26.700	.2	
38.300	.0	49.900	.0				
	3.600	6.6	15.200	1.8	26.800	.2	
38.400	.0	50.000	.0				
	3.700	6.4	15.300	1.8	26.900	.1	
38.500	.0	50.100	.0				
	3.800	6.3	15.400	1.8	27.000	.1	
38.600	.0	50.200	.0				
	3.900	6.2	15.500	1.8	27.100	.1	
38.700	.0	50.300	.0				
	4.000	6.1	15.600	1.7	27.200	.1	
38.800	.0	50.400	.0				
	4.100	6.1	15.700	1.7	27.300	.1	
38.900	.0	50.500	.0				
	4.200	6.0	15.800	1.7	27.400	.1	
39.000	.0	50.600	.0				
	4.300	5.9	15.900	1.7	27.500	.1	
39.100	.0	50.700	.0				
	4.400	5.9	16.000	1.7	27.600	.1	
39.200	.0	50.800	.0				
	4.500	5.8	16.100	1.7	27.700	.1	
39.300	.0	50.900	.0				
	4.600	5.8	16.200	1.6	27.800	.1	
39.400	.0	51.000	.0				
	4.700	5.7	16.300	1.6	27.900	.1	
39.500	.0	51.100	.0				
	4.800	5.7	16.400	1.6	28.000	.1	
39.600	.0	51.200	.0				
	4.900	5.6	16.500	1.6	28.100	.1	
39.700	.0	51.300	.0				
	5.000	5.6	16.600	1.6	28.200	.1	
39.800	.0	51.400	.0				
	5.100	5.6	16.700	1.6	28.300	.1	
39.900	.0	51.500	.0				

5.200	5.5	16.800	1.5	28.400	.1
40.000	.0	51.600	.0		
5.300	5.5	16.900	1.5	28.500	.1
40.100	.0	51.700	.0		
5.400	5.5	17.000	1.5	28.600	.1
40.200	.0	51.800	.0		
5.500	5.4	17.100	1.5	28.700	.1
40.300	.0	51.900	.0		
5.600	5.4	17.200	1.5	28.800	.1
40.400	.0	52.000	.0		
5.700	5.4	17.300	1.5	28.900	.1
40.500	.0	52.100	.0		
5.800	5.4	17.400	1.5	29.000	.1
40.600	.0	52.200	.0		
5.900	5.4	17.500	1.4	29.100	.1
40.700	.0	52.300	.0		
6.000	5.3	17.600	1.4	29.200	.1
40.800	.0	52.400	.0		
6.100	5.3	17.700	1.4	29.300	.1
40.900	.0	52.500	.0		
6.200	5.3	17.800	1.4	29.400	.1
41.000	.0	52.600	.0		
6.300	5.3	17.900	1.4	29.500	.1
41.100	.0	52.700	.0		
6.400	5.3	18.000	1.4	29.600	.1
41.200	.0	52.800	.0		
6.500	5.2	18.100	1.4	29.700	.1
41.300	.0	52.900	.0		
6.600	5.2	18.200	1.4	29.800	.1
41.400	.0	53.000	.0		
6.700	5.1	18.300	1.3	29.900	.1
41.500	.0	53.100	.0		
6.800	5.1	18.400	1.3	30.000	.1
41.600	.0	53.200	.0		
6.900	5.0	18.500	1.3	30.100	.1
41.700	.0	53.300	.0		
7.000	4.9	18.600	1.3	30.200	.1
41.800	.0	53.400	.0		
7.100	4.9	18.700	1.3	30.300	.1
41.900	.0	53.500	.0		
7.200	4.8	18.800	1.3	30.400	.1
42.000	.0	53.600	.0		
7.300	4.7	18.900	1.3	30.500	.1
42.100	.0	53.700	.0		
7.400	4.7	19.000	1.3	30.600	.1
42.200	.0	53.800	.0		
7.500	4.6	19.100	1.2	30.700	.1
42.300	.0	53.900	.0		
7.600	4.5	19.200	1.2	30.800	.1
42.400	.0	54.000	.0		
7.700	4.5	19.300	1.2	30.900	.1
42.500	.0	54.100	.0		
7.800	4.4	19.400	1.2	31.000	.1
42.600	.0	54.200	.0		
7.900	4.4	19.500	1.2	31.100	.1
42.700	.0	54.300	.0		
8.000	4.3	19.600	1.2	31.200	.1
42.800	.0	54.400	.0		
8.100	4.3	19.700	1.2	31.300	.1
42.900	.0	54.500	.0		
8.200	4.2	19.800	1.2	31.400	.1
43.000	.0	54.600	.0		
8.300	4.1	19.900	1.2	31.500	.1

43.100	.0	54.700	.0				
	8.400	4.1	20.000	1.2	31.600	.1	
43.200	.0	54.800	.0				
	8.500	4.0	20.100	1.1	31.700	.1	
43.300	.0	54.900	.0				
	8.600	4.0	20.200	1.1	31.800	.1	
43.400	.0	55.000	.0				
	8.700	3.9	20.300	1.1	31.900	.1	
43.500	.0	55.100	.0				
	8.800	3.9	20.400	1.1	32.000	.1	
43.600	.0	55.200	.0				
	8.900	3.8	20.500	1.1	32.100	.1	
43.700	.0	55.300	.0				
	9.000	3.8	20.600	1.1	32.200	.1	
43.800	.0	55.400	.0				
	9.100	3.7	20.700	1.1	32.300	.1	
43.900	.0	55.500	.0				
	9.200	3.7	20.800	1.1	32.400	.1	
44.000	.0	55.600	.0				
	9.300	3.6	20.900	1.1	32.500	.1	
44.100	.0	55.700	.0				
	9.400	3.6	21.000	1.1	32.600	.1	
44.200	.0	55.800	.0				
	9.500	3.5	21.100	1.1	32.700	.1	
44.300	.0	55.900	.0				
	9.600	3.5	21.200	1.0	32.800	.1	
44.400	.0	56.000	.0				
	9.700	3.5	21.300	1.0	32.900	.1	
44.500	.0	56.100	.0				
	9.800	3.4	21.400	1.0	33.000	.1	
44.600	.0	56.200	.0				
	9.900	3.4	21.500	1.0	33.100	.1	
44.700	.0	56.300	.0				
	10.000	3.3	21.600	1.0	33.200	.1	
44.800	.0	56.400	.0				
	10.100	3.3	21.700	1.0	33.300	.1	
44.900	.0	56.500	.0				
	10.200	3.2	21.800	1.0	33.400	.1	
45.000	.0	56.600	.0				
	10.300	3.2	21.900	1.0	33.500	.1	
45.100	.0	56.700	.0				
	10.400	3.2	22.000	1.0	33.600	.1	
45.200	.0	56.800	.0				
	10.500	3.1	22.100	1.0	33.700	.0	
45.300	.0	56.900	.0				
	10.600	3.1	22.200	1.0	33.800	.0	
45.400	.0	57.000	.0				
	10.700	3.0	22.300	1.0	33.900	.0	
45.500	.0	57.100	.0				
	10.800	3.0	22.400	1.0	34.000	.0	
45.600	.0	57.200	.0				
	10.900	3.0	22.500	.9	34.100	.0	
45.700	.0	57.300	.0				
	11.000	2.9	22.600	.9	34.200	.0	
45.800	.0	57.400	.0				
	11.100	2.9	22.700	.9	34.300	.0	
45.900	.0	57.500	.0				
	11.200	2.9	22.800	.9	34.400	.0	
46.000	.0	57.600	.0				
	11.300	2.8	22.900	.9	34.500	.0	
46.100	.0	57.700	.0				
	11.400	2.8	23.000	.9	34.600	.0	
46.200	.0	57.800	.0				

```
        11.500       2.8         23.100        .9         34.700        .0
46.300        .0         57.900        .0

         RUNOFF VOLUME =     1.69667 INCHES     =       8.1801 ACRE-FEET
         PEAK DISCHARGE RATE =      32.34 CFS  AT   2.100 HOURS   BASIN AREA =
.0904 SQ. MI.



     *

     ****TAOS******

     *

     COMPUTE NM HYD      ID=30  HYD NO=BASIN.K5  DA=.02364 SQ MI

                                          %A=0.0  %B=19.0  %C=19.0 %D=62.0

                                          TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   57.866    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .014657 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   23.886    CFS   UNIT VOLUME =    1.007       B =   354.44
  P60 = 1.8400
          AREA =      .008983 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD           ID=30 CODE=10


                                                HYDROGRAPH FROM AREA BASIN.K5


          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0          5.000        .3         10.000        .3
15.000        .2         20.000        .2
         1.000        .0          6.000        .3         11.000        .3
16.000        .2         21.000        .2
         2.000      10.5          7.000        .4         12.000        .3
17.000        .2         22.000        .2
         3.000        .6          8.000        .3         13.000        .3
18.000        .2         23.000        .2
         4.000        .3          9.000        .3         14.000        .2
19.000        .2         24.000        .2

         RUNOFF VOLUME =     1.80886 INCHES     =       2.2806 ACRE-FEET
```

PEAK DISCHARGE RATE = 47.63 CFS AT 1.500 HOURS BASIN AREA = .0236 SQ. MI.

*

*

COMPUTE NM HYD ID=31 HYD NO=BASIN.K6 DA=.00220 SQ MI

%A=0.0 %B=5.0 %C=5.0 %D=90.0

TP=-.1333 HR RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 7.8171 CFS UNIT VOLUME = 1.029 B = 526.28 P60 = 1.8400
AREA = .001980 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

K = .118524HR TP = .133300HR K/TP RATIO = .889153 SHAPE CONSTANT, N = 3.989065
UNIT PEAK = .58497 CFS UNIT VOLUME = .9881 B = 354.44 P60 = 1.8400
AREA = .000220 SQ MI IA = .42500 INCHES INF = 1.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .100000

PRINT HYD ID=31 CODE=10

HYDROGRAPH FROM AREA BASIN.K6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.0	10.000	.0
15.000	.0	20.000	.0		
1.000	.0	6.000	.0	11.000	.0
16.000	.0	21.000	.0		
2.000	1.3	7.000	.0	12.000	.0
17.000	.0	22.000	.0		
3.000	.1	8.000	.0	13.000	.0
18.000	.0	23.000	.0		
4.000	.0	9.000	.0	14.000	.0
19.000	.0	24.000	.0		

RUNOFF VOLUME = 2.26512 INCHES = .2658 ACRE-FEET
PEAK DISCHARGE RATE = 5.01 CFS AT 1.500 HOURS BASIN AREA = .0022 SQ. MI.

*

```
     *
     ADD HYD                      ID=41 HYD=K5.K6 ID I=30 II=31
     PRINT HYD                    ID=41 CODE=10
```

HYDROGRAPH FROM AREA K5.K6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.3	10.000	.3
15.000	.3	20.000	.2		
1.000	.0	6.000	.4	11.000	.3
16.000	.3	21.000	.2		
2.000	11.8	7.000	.4	12.000	.3
17.000	.2	22.000	.2		
3.000	.6	8.000	.4	13.000	.3
18.000	.2	23.000	.2		
4.000	.3	9.000	.4	14.000	.3
19.000	.2	24.000	.2		

RUNOFF VOLUME = 1.84768 INCHES = 2.5463 ACRE-FEET
PEAK DISCHARGE RATE = 52.64 CFS AT 1.500 HOURS BASIN AREA = .0258 SQ. MI.

```
     *
     *
     *ADD HYD                     ID=83 HYD=1ADCFG.JK6 ID I=27 II=91
     *PRINT HYD                   ID=83 CODE=10
     *
     *
     ADD HYD                      ID=43 HYD=K5K6.PONDJ I=41 II=91
     PRINT HYD                    ID=43 CODE=10
```

HYDROGRAPH FROM AREA K5K6.PONDJ

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	2.9	24.000	1.1
36.000	.0	48.000	.0		
1.000	.0	13.000	2.6	25.000	.2
37.000	.0	49.000	.0		
2.000	44.1	14.000	2.3	26.000	.2
38.000	.0	50.000	.0		
3.000	8.7	15.000	2.1	27.000	.1

39.000	.0	51.000	.0				
	4.000	6.5	16.000	1.9	28.000	.1	
40.000	.0	52.000	.0				
	5.000	5.9	17.000	1.8	29.000	.1	
41.000	.0	53.000	.0				
	6.000	5.7	18.000	1.6	30.000	.1	
42.000	.0	54.000	.0				
	7.000	5.3	19.000	1.5	31.000	.1	
43.000	.0	55.000	.0				
	8.000	4.7	20.000	1.4	32.000	.1	
44.000	.0	56.000	.0				
	9.000	4.1	21.000	1.3	33.000	.1	
45.000	.0	57.000	.0				
	10.000	3.7	22.000	1.2	34.000	.0	
46.000	.0						
	11.000	3.3	23.000	1.1	35.000	.0	
47.000	.0						

RUNOFF VOLUME = 1.73022 INCHES = 10.7264 ACRE-FEET
PEAK DISCHARGE RATE = 80.50 CFS AT 1.500 HOURS BASIN AREA = .1162 SQ. MI.

*

*

ADD HYD ID=44 HYD=K5K6PONDJ.K3K4 I=43 II=25

PRINT HYD ID=44 CODE=10

HYDROGRAPH FROM AREA K5K6PONDJ.K3K4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	27.6	24.000	9.1
1.000	.1	13.000	27.2	25.000	2.2
2.000	.1	14.000	26.8	26.000	1.0
3.000	.1	15.000	26.4	27.000	.5
4.000	.0	16.000	26.0	28.000	.4
5.000	.0	17.000	25.6	29.000	.3
6.000	.0	18.000	25.0	30.000	.2
7.000	.0	19.000	24.4	31.000	.2
8.000	.0	20.000	22.2	32.000	.1
9.000	.0	21.000	19.1	33.000	.1
10.000	.0	22.000	16.3	34.000	.1
11.000	.0	23.000	13.6	35.000	.1
24.000	9.1	36.000	.1	48.000	.0
25.000	2.2	37.000	.1	49.000	.0
26.000	1.0	38.000	.1	50.000	.0
27.000	.5	39.000	.0	51.000	.0
28.000	.4	40.000	.0	52.000	.0
29.000	.3	41.000	.0	53.000	.0
30.000	.2	42.000	.0	54.000	.0
31.000	.2	43.000	.0	55.000	.0
32.000	.1	44.000	.0	56.000	.0
33.000	.1	45.000	.0	57.000	.0
34.000	.1	46.000	.0		
35.000	.1	47.000	.0		

47.000 .0

RUNOFF VOLUME = 1.37905 INCHES = 55.0409 ACRE-FEET
PEAK DISCHARGE RATE = 131.59 CFS AT 1.500 HOURS BASIN AREA = .7484 SQ. MI.

*

*

ADD HYD ID=96 HYD=PONDJK13.K1K4 ID I=34 II=44

PRINT HYD ID=96 CODE=10

HYDROGRAPH FROM AREA PONDJK13.K1K4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	34.8	24.000	10.8
36.000	.1	48.000	.0		
1.000	.0	13.000	33.6	25.000	2.6
37.000	.1	49.000	.0		
2.000	121.2	14.000	32.5	26.000	1.3
38.000	.1	50.000	.0		
3.000	57.9	15.000	31.3	27.000	.8
39.000	.1	51.000	.0		
4.000	51.7	16.000	30.2	28.000	.6
40.000	.1	52.000	.0		
5.000	49.5	17.000	29.2	29.000	.4
41.000	.0	53.000	.0		
6.000	47.9	18.000	28.2	30.000	.3
42.000	.0	54.000	.0		
7.000	44.6	19.000	27.2	31.000	.3
43.000	.0	55.000	.0		
8.000	40.6	20.000	24.8	32.000	.2
44.000	.0	56.000	.0		
9.000	39.0	21.000	21.4	33.000	.2
45.000	.0	57.000	.0		
10.000	37.7	22.000	18.4	34.000	.2
46.000	.0				
11.000	36.1	23.000	15.5	35.000	.1
47.000	.0				

RUNOFF VOLUME = 1.35962 INCHES = 76.2057 ACRE-FEET
PEAK DISCHARGE RATE = 234.44 CFS AT 1.500 HOURS BASIN AREA = 1.0509 SQ. MI.

*

****

DIVIDE HYD ID=96 Q=44.91 ID I=97 HYD NO=BYPASS.K
ID II=98 HYD NO=SURGE.K

PRINT HYD ID=97 CODE=10

HYDROGRAPH FROM AREA BYPASS.K

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	34.8	24.000	10.8
36.000	.1	48.000	.0		
1.000	.0	13.000	33.6	25.000	2.6
37.000	.1	49.000	.0		
2.000	44.9	14.000	32.5	26.000	1.3
38.000	.1	50.000	.0		
3.000	44.9	15.000	31.3	27.000	.8
39.000	.1	51.000	.0		
4.000	44.9	16.000	30.2	28.000	.6
40.000	.1	52.000	.0		
5.000	44.9	17.000	29.2	29.000	.4
41.000	.0	53.000	.0		
6.000	44.9	18.000	28.2	30.000	.3
42.000	.0	54.000	.0		
7.000	44.6	19.000	27.2	31.000	.3
43.000	.0	55.000	.0		
8.000	40.6	20.000	24.8	32.000	.2
44.000	.0	56.000	.0		
9.000	39.0	21.000	21.4	33.000	.2
45.000	.0	57.000	.0		
10.000	37.7	22.000	18.4	34.000	.2
46.000	.0				
11.000	36.1	23.000	15.5	35.000	.1
47.000	.0				

RUNOFF VOLUME = 1.35962 INCHES = 64.5923 ACRE-FEET
PEAK DISCHARGE RATE = 44.91 CFS AT 1.300 HOURS BASIN AREA = .8908 SQ. MI.

PRINT HYD ID=98 CODE=10

HYDROGRAPH FROM AREA SURGE.K

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.000	76.3	4.000	6.8
6.000	3.0				
1.000	.0	3.000	13.0	5.000	4.6

RUNOFF VOLUME = 1.35962 INCHES = 11.6134 ACRE-FEET
PEAK DISCHARGE RATE = 189.53 CFS AT 1.500 HOURS BASIN AREA = .1602 SQ. MI.

****

*

*

*

ROUTE RESERVOIR ID=70 HYD=POND.K INFLOW ID=98 CODE=5

OUTFLOW	STORAGE	DEPTH
0.00	0	5404.85
6.79	2.60	5406
12.04	5.29	5407
16.84	9.24	5408
21.30	14.84	5409
25.48	21.67	5410

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	5404.85	.000	.00
.50	.00	5404.85	.000	.00
1.00	.00	5404.85	.000	.00
1.50	189.53	5405.87	2.310	6.03
2.00	76.30	5407.36	6.718	13.78
2.50	26.15	5407.70	8.054	15.40
3.00	12.95	5407.73	8.188	15.56
3.50	8.67	5407.68	7.981	15.31
4.00	6.79	5407.60	7.672	14.93
4.50	5.52	5407.51	7.316	14.50
5.00	4.63	5407.42	6.935	14.04
5.50	3.84	5407.32	6.539	13.56
6.00	3.00	5407.21	6.130	13.06
6.50	1.93	5407.11	5.706	12.55
7.00	.00	5406.98	5.236	11.93
7.50	.00	5406.80	4.762	11.01
8.00	.00	5406.64	4.325	10.16
8.50	.00	5406.49	3.922	9.37
9.00	.00	5406.35	3.550	8.64
9.50	.00	5406.23	3.207	7.97
10.00	.00	5406.11	2.890	7.36
10.50	.00	5406.00	2.598	6.78
11.00	.00	5405.88	2.332	6.09
11.50	.00	5405.78	2.094	5.47
12.00	.00	5405.68	1.879	4.91
12.50	.00	5405.60	1.687	4.41
13.00	.00	5405.52	1.515	3.96
13.50	.00	5405.45	1.360	3.55
14.00	.00	5405.39	1.221	3.19
14.50	.00	5405.33	1.096	2.86
15.00	.00	5405.29	.984	2.57
15.50	.00	5405.24	.883	2.31
16.00	.00	5405.20	.793	2.07
16.50	.00	5405.17	.712	1.86
17.00	.00	5405.13	.639	1.67

17.50	.00	5405.10	.573	1.50
18.00	.00	5405.08	.515	1.34
18.50	.00	5405.05	.462	1.21
19.00	.00	5405.03	.415	1.08
19.50	.00	5405.01	.372	.97
20.00	.00	5405.00	.334	.87
20.50	.00	5404.98	.300	.78
21.00	.00	5404.97	.269	.70
21.50	.00	5404.96	.242	.63
22.00	.00	5404.95	.217	.57
22.50	.00	5404.94	.195	.51
23.00	.00	5404.93	.175	.46
23.50	.00	5404.92	.157	.41
24.00	.00	5404.91	.141	.37
24.50	.00	5404.91	.127	.33
25.00	.00	5404.90	.114	.30
25.50	.00	5404.90	.102	.27
26.00	.00	5404.89	.092	.24
26.50	.00	5404.89	.082	.21
27.00	.00	5404.88	.074	.19
27.50	.00	5404.88	.066	.17

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
28.00	.00	5404.88	.059	.16
28.50	.00	5404.87	.053	.14
29.00	.00	5404.87	.048	.13
29.50	.00	5404.87	.043	.11
30.00	.00	5404.87	.039	.10
30.50	.00	5404.87	.035	.09
31.00	.00	5404.86	.031	.08
31.50	.00	5404.86	.028	.07
32.00	.00	5404.86	.025	.07
32.50	.00	5404.86	.023	.06
33.00	.00	5404.86	.020	.05
33.50	.00	5404.86	.018	.05
34.00	.00	5404.86	.016	.04
34.50	.00	5404.86	.015	.04
35.00	.00	5404.86	.013	.03
35.50	.00	5404.86	.012	.03
36.00	.00	5404.85	.011	.03
36.50	.00	5404.85	.009	.02
37.00	.00	5404.85	.009	.02
37.50	.00	5404.85	.008	.02
38.00	.00	5404.85	.007	.02
38.50	.00	5404.85	.006	.02
39.00	.00	5404.85	.006	.01
39.50	.00	5404.85	.005	.01
40.00	.00	5404.85	.004	.01
40.50	.00	5404.85	.004	.01
41.00	.00	5404.85	.004	.01
41.50	.00	5404.85	.003	.01
42.00	.00	5404.85	.003	.01
42.50	.00	5404.85	.003	.01
43.00	.00	5404.85	.002	.01
43.50	.00	5404.85	.002	.01
44.00	.00	5404.85	.002	.00

PEAK DISCHARGE = 15.579 CFS - PEAK OCCURS AT HOUR 2.90
MAXIMUM WATER SURFACE ELEVATION = 5407.737
MAXIMUM STORAGE = 8.2026 AC-FT INCREMENTAL TIME= .100000HRS

*

```
     PRINT HYD                    ID=70 CODE=10

                                                  HYDROGRAPH FROM AREA POND.K

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          11.000       6.1          22.000        .6
33.000        .1          44.000        .0
         1.000        .0          12.000       4.9          23.000        .5
34.000        .0          45.000        .0
         2.000      13.8          13.000       4.0          24.000        .4
35.000        .0          46.000        .0
         3.000      15.6          14.000       3.2          25.000        .3
36.000        .0          47.000        .0
         4.000      14.9          15.000       2.6          26.000        .2
37.000        .0          48.000        .0
         5.000      14.0          16.000       2.1          27.000        .2
38.000        .0          49.000        .0
         6.000      13.1          17.000       1.7          28.000        .2
39.000        .0          50.000        .0
         7.000      11.9          18.000       1.3          29.000        .1
40.000        .0          51.000        .0
         8.000      10.2          19.000       1.1          30.000        .1
41.000        .0
         9.000       8.6          20.000        .9          31.000        .1
42.000        .0
        10.000       7.4          21.000        .7          32.000        .1
43.000        .0

         RUNOFF VOLUME =     1.35961 INCHES     =      11.6134 ACRE-FEET
         PEAK DISCHARGE RATE =      15.58 CFS  AT   2.900 HOURS   BASIN AREA =
.1602 SQ. MI.


     *

     ADD HYD                      ID=99 HYD=BYPASS.ROUTE.K ID I=70 II=97

     PRINT HYD                    ID=99 CODE=5

                                                  HYDROGRAPH FROM AREA BYPASS.ROUTE.K

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS             HRS       CFS             HRS       CFS
 HRS       CFS             HRS       CFS
          .000        .0          12.000      39.7          24.000      11.2
36.000        .1          48.000        .0
          .500        .0          12.500      38.5          24.500       4.6
36.500        .1          48.500        .0
         1.000        .0          13.000      37.5          25.000       2.9
37.000        .1          49.000        .0
         1.500      50.9          13.500      36.6          25.500       2.0
37.500        .1          49.500        .0
         2.000      58.7          14.000      35.7          26.000       1.5
```

38.000	.1	50.000	.0						
	2.500	60.3	14.500	34.8	26.500	1.2			
38.500	.1	50.500	.0						
	3.000	60.5	15.000	33.8	27.000	1.0			
39.000	.1	51.000	.0						
	3.500	60.2	15.500	33.0	27.500	.8			
39.500	.1	51.500	.0						
	4.000	59.8	16.000	32.3	28.000	.7			
40.000	.1	52.000	.0						
	4.500	59.4	16.500	31.6	28.500	.6			
40.500	.1	52.500	.0						
	5.000	58.9	17.000	30.9	29.000	.6			
41.000	.1	53.000	.0						
	5.500	58.5	17.500	30.3	29.500	.5			
41.500	.1	53.500	.0						
	6.000	58.0	18.000	29.6	30.000	.5			
42.000	.0	54.000	.0						
	6.500	57.5	18.500	29.0	30.500	.4			
42.500	.0	54.500	.0						
	7.000	56.6	19.000	28.3	31.000	.4			
43.000	.0	55.000	.0						
	7.500	53.1	19.500	27.1	31.500	.3			
43.500	.0	55.500	.0						
	8.000	50.8	20.000	25.7	32.000	.3			
44.000	.0	56.000	.0						
	8.500	49.1	20.500	23.9	32.500	.3			
44.500	.0	56.500	.0						
	9.000	47.7	21.000	22.1	33.000	.2			
45.000	.0	57.000	.0						
	9.500	46.3	21.500	20.5	33.500	.2			
45.500	.0	57.500	.0						
	10.000	45.0	22.000	19.0	34.000	.2			
46.000	.0								
	10.500	43.6	22.500	17.6	34.500	.2			
46.500	.0								
	11.000	42.2	23.000	16.0	35.000	.2			
47.000	.0								
	11.500	40.8	23.500	13.7	35.500	.2			
47.500	.0								

RUNOFF VOLUME = 1.35961 INCHES = 76.2053 ACRE-FEET
PEAK DISCHARGE RATE = 60.49 CFS AT 2.900 HOURS BASIN AREA = 1.0509 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.005

DIA=2.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.13	.10	.15	

1.11	.26	.27	.66	
1.53	.39	.49	1.54	
1.82	.52	.74	2.76	
2.03	.65	1.02	4.31	
2.19	.78	1.31	6.15	
2.32	.91	1.62	8.24	
2.41	1.04	1.94	10.54	
2.47	1.17	2.26	12.99	
2.50	1.30	2.59	15.55	
2.50	1.43	2.91	18.15	
2.50	1.56	3.23	20.74	
2.50	1.69	3.54	23.24	
2.50	1.82	3.84	25.59	
2.50	1.95	4.12	27.69	
2.50	2.08	4.37	29.44	
2.50	2.21	4.60	30.69	
2.50	2.35	4.78	31.20	
2.50	2.50	4.91	31.20	

ROUTE MCUNGE ID=1 HYD=RTE.PONDK INFLOW ID=99

DT=0.0 L=2000 NS=0 SLOPE=0.005

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 580 TABLE PTS= 19
DT= .100000 QMED= 30.24 CKMED= 5.5384
WIDTH MED= 2.50 NREACH= 2 DX= 1000.00

DEPTH (FT)	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3	Q-M (CFS)	C1-M	C2-M	C3-M
.00	.0	.0	.484	.0	2.78	.74	1.000	.000	1.000	.000	.000	.0	1.000	.000	.000
.13	.1	.2	.356	1.1	2.75	1.56	.990	.010	.990	.000	.010	.0	.998	.000	.002
.26	.3	.7	.228	1.5	3.54	2.43	1.275	.024	.979	.130	-.109	.4	.982	.037	-.018
.39	.5	1.5	.177	1.8	4.48	3.13	1.614	.038	.972	.246	-.217	1.1	.974	.192	-.166
.52	.7	2.8	.149	2.0	5.28	3.72	1.900	.052	.965	.322	-.287	2.1	.968	.287	-.255
.65	1.0	4.3	.131	2.2	5.95	4.24	2.143	.066	.959						

```
 .377  -.336      3.5    .962   .352  -.314
         .78    1.3      6.2    .118    2.3     6.53   4.69    2.350   .081   .953
 .417  -.370      5.2    .956   .399  -.355
         .91    1.6      8.2    .109    2.4     7.01   5.09    2.524   .098   .946
 .448  -.394      7.2    .949   .434  -.384
        1.04    1.9     10.5    .102    2.5     7.41   5.44    2.667   .115   .939
 .471  -.410      9.4    .943   .461  -.404
        1.17    2.3     13.0    .097    2.5     7.72   5.75    2.779   .135   .931
 .489  -.420     11.7    .935   .482  -.417
        1.30    2.6     15.5    .092    2.5     7.94   6.01    2.857   .157   .922
 .502  -.424     14.3    .927   .497  -.424
        1.43    2.9     18.1    .089    2.5     7.99   6.24    2.875   .182   .910
 .507  -.417     16.8    .917   .506  -.422
        1.56    3.2     20.7    .087    2.5     7.84   6.42    2.821   .212   .895
 .504  -.399     19.4    .904   .507  -.411
        1.69    3.5     23.2    .085    2.5     7.47   6.57    2.688   .249   .873
 .492  -.365     22.0    .886   .500  -.385
        1.82    3.8     25.6    .083    2.5     6.84   6.67    2.463   .299   .841
 .468  -.309     24.4    .860   .482  -.342
        1.95    4.1     27.7    .083    2.5     5.92   6.73    2.131   .374   .787
 .429  -.216     26.6    .819   .452  -.271
        2.08    4.4     29.4    .083    2.5     4.61   6.73    1.660   .511   .678
 .369  -.047     28.6    .746   .404  -.150
        2.21    4.6     30.7    .083    2.5     2.70   6.67     .972   .909   .369
 .306   .325     30.1    .583   .335   .082
        2.35    4.8     31.2    .085    2.5     1.54   6.52     .554  1.622  -.021
 .370   .651     30.9    .171   .338   .490
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   4 OCCURRED       3 TIMES.
AVERAGE NUMBER ITERATIONS =  1.4357
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=1 CODE=0

                                                  HYDROGRAPH FROM AREA RTE.PONDK

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
          .000        .0         11.700      41.3         23.400      14.6
35.100       .2         46.800        .0
          .100        .0         11.800      41.0         23.500      14.0
35.200       .2         46.900        .0
          .200        .0         11.900      40.8         23.600      13.6
35.300       .2         47.000        .0
          .300        .0         12.000      40.5         23.700      13.0
35.400       .2         47.100        .0
          .400        .0         12.100      40.3         23.800      12.5
35.500       .2         47.200        .0
          .500        .0         12.200      40.0         23.900      12.0
35.600       .2         47.300        .0
          .600        .0         12.300      39.8         24.000      11.5
35.700       .2         47.400        .0
          .700        .0         12.400      39.6         24.100      10.9
35.800       .2         47.500        .0
          .800        .0         12.500      39.4         24.200       9.5
35.900       .1         47.600        .0
          .900        .0         12.600      39.1         24.300       7.5
36.000       .1         47.700        .0
         1.000        .0         12.700      38.9         24.400       5.9
```

36.100	.1	47.800	.0				
	1.100	.0	12.800	38.7	24.500	5.1	
36.200	.1	47.900	.0				
	1.200	8.9	12.900	38.5	24.600	4.6	
36.300	.1	48.000	.0				
	1.300	28.6	13.000	38.3	24.700	4.1	
36.400	.1	48.100	.0				
	1.400	30.9	13.100	38.1	24.800	3.7	
36.500	.1	48.200	.0				
	1.500	34.5	13.200	37.9	24.900	3.4	
36.600	.1	48.300	.0				
	1.600	38.4	13.300	37.7	25.000	3.1	
36.700	.1	48.400	.0				
	1.700	42.3	13.400	37.5	25.100	2.9	
36.800	.1	48.500	.0				
	1.800	45.7	13.500	37.3	25.200	2.7	
36.900	.1	48.600	.0				
	1.900	48.7	13.600	37.1	25.300	2.5	
37.000	.1	48.700	.0				
	2.000	51.2	13.700	36.9	25.400	2.3	
37.100	.1	48.800	.0				
	2.100	53.2	13.800	36.8	25.500	2.2	
37.200	.1	48.900	.0				
	2.200	54.9	13.900	36.6	25.600	2.1	
37.300	.1	49.000	.0				
	2.300	56.2	14.000	36.4	25.700	1.9	
37.400	.1	49.100	.0				
	2.400	57.3	14.100	36.2	25.800	1.8	
37.500	.1	49.200	.0				
	2.500	58.1	14.200	36.0	25.900	1.7	
37.600	.1	49.300	.0				
	2.600	58.7	14.300	35.8	26.000	1.6	
37.700	.1	49.400	.0				
	2.700	59.2	14.400	35.6	26.100	1.5	
37.800	.1	49.500	.0				
	2.800	59.6	14.500	35.4	26.200	1.5	
37.900	.1	49.600	.0				
	2.900	59.8	14.600	35.2	26.300	1.4	
38.000	.1	49.700	.0				
	3.000	60.0	14.700	35.1	26.400	1.3	
38.100	.1	49.800	.0				
	3.100	60.1	14.800	34.9	26.500	1.3	
38.200	.1	49.900	.0				
	3.200	60.2	14.900	34.7	26.600	1.2	
38.300	.1	50.000	.0				
	3.300	60.3	15.000	34.5	26.700	1.2	
38.400	.1	50.100	.0				
	3.400	60.3	15.100	34.3	26.800	1.1	
38.500	.1	50.200	.0				
	3.500	60.3	15.200	34.2	26.900	1.1	
38.600	.1	50.300	.0				
	3.600	60.3	15.300	34.0	27.000	1.0	
38.700	.1	50.400	.0				
	3.700	60.2	15.400	33.8	27.100	1.0	
38.800	.1	50.500	.0				
	3.800	60.2	15.500	33.6	27.200	1.0	
38.900	.1	50.600	.0				
	3.900	60.1	15.600	33.5	27.300	.9	
39.000	.1	50.700	.0				
	4.000	60.1	15.700	33.3	27.400	.9	
39.100	.1	50.800	.0				
	4.100	60.0	15.800	33.2	27.500	.9	
39.200	.1	50.900	.0				

	4.200	59.9	15.900	33.0	27.600	.8
39.300	.1	51.000	.0			
	4.300	59.9	16.000	32.8	27.700	.8
39.400	.1	51.100	.0			
	4.400	59.8	16.100	32.7	27.800	.8
39.500	.1	51.200	.0			
	4.500	59.7	16.200	32.5	27.900	.8
39.600	.1	51.300	.0			
	4.600	59.6	16.300	32.4	28.000	.8
39.700	.1	51.400	.0			
	4.700	59.5	16.400	32.2	28.100	.7
39.800	.1	51.500	.0			
	4.800	59.5	16.500	32.1	28.200	.7
39.900	.1	51.600	.0			
	4.900	59.4	16.600	31.9	28.300	.7
40.000	.1	51.700	.0			
	5.000	59.3	16.700	31.8	28.400	.7
40.100	.1	51.800	.0			
	5.100	59.2	16.800	31.7	28.500	.7
40.200	.1	51.900	.0			
	5.200	59.1	16.900	31.5	28.600	.6
40.300	.1	52.000	.0			
	5.300	59.0	17.000	31.4	28.700	.6
40.400	.1	52.100	.0			
	5.400	58.9	17.100	31.2	28.800	.6
40.500	.1	52.200	.0			
	5.500	58.8	17.200	31.1	28.900	.6
40.600	.1	52.300	.0			
	5.600	58.7	17.300	30.9	29.000	.6
40.700	.1	52.400	.0			
	5.700	58.6	17.400	30.7	29.100	.6
40.800	.1	52.500	.0			
	5.800	58.5	17.500	30.5	29.200	.6
40.900	.1	52.600	.0			
	5.900	58.4	17.600	30.4	29.300	.5
41.000	.1	52.700	.0			
	6.000	58.3	17.700	30.2	29.400	.5
41.100	.1	52.800	.0			
	6.100	58.2	17.800	30.1	29.500	.5
41.200	.1	52.900	.0			
	6.200	58.1	17.900	29.9	29.600	.5
41.300	.1	53.000	.0			
	6.300	58.0	18.000	29.8	29.700	.5
41.400	.1	53.100	.0			
	6.400	57.9	18.100	29.6	29.800	.5
41.500	.1	53.200	.0			
	6.500	57.8	18.200	29.5	29.900	.5
41.600	.1	53.300	.0			
	6.600	57.7	18.300	29.4	30.000	.5
41.700	.1	53.400	.0			
	6.700	57.6	18.400	29.2	30.100	.5
41.800	.0	53.500	.0			
	6.800	57.5	18.500	29.1	30.200	.4
41.900	.0	53.600	.0			
	6.900	57.4	18.600	29.0	30.300	.4
42.000	.0	53.700	.0			
	7.000	57.3	18.700	28.8	30.400	.4
42.100	.0	53.800	.0			
	7.100	57.0	18.800	28.7	30.500	.4
42.200	.0	53.900	.0			
	7.200	56.7	18.900	28.6	30.600	.4
42.300	.0	54.000	.0			
	7.300	56.3	19.000	28.4	30.700	.4

42.400	.0	54.100	.0				
	7.400	55.8	19.100	28.3	30.800	.4	
42.500	.0	54.200	.0				
	7.500	55.2	19.200	28.2	30.900	.4	
42.600	.0	54.300	.0				
	7.600	54.6	19.300	28.0	31.000	.4	
42.700	.0	54.400	.0				
	7.700	54.1	19.400	27.7	31.100	.4	
42.800	.0	54.500	.0				
	7.800	53.5	19.500	27.3	31.200	.4	
42.900	.0	54.600	.0				
	7.900	53.0	19.600	27.0	31.300	.4	
43.000	.0	54.700	.0				
	8.000	52.5	19.700	26.8	31.400	.4	
43.100	.0	54.800	.0				
	8.100	52.0	19.800	26.5	31.500	.3	
43.200	.0	54.900	.0				
	8.200	51.6	19.900	26.2	31.600	.3	
43.300	.0	55.000	.0				
	8.300	51.2	20.000	25.9	31.700	.3	
43.400	.0	55.100	.0				
	8.400	50.8	20.100	25.6	31.800	.3	
43.500	.0	55.200	.0				
	8.500	50.4	20.200	25.3	31.900	.3	
43.600	.0	55.300	.0				
	8.600	50.0	20.300	25.0	32.000	.3	
43.700	.0	55.400	.0				
	8.700	49.7	20.400	24.6	32.100	.3	
43.800	.0	55.500	.0				
	8.800	49.4	20.500	24.2	32.200	.3	
43.900	.0	55.600	.0				
	8.900	49.1	20.600	23.8	32.300	.3	
44.000	.0	55.700	.0				
	9.000	48.7	20.700	23.4	32.400	.3	
44.100	.0	55.800	.0				
	9.100	48.4	20.800	23.0	32.500	.3	
44.200	.0	55.900	.0				
	9.200	48.1	20.900	22.6	32.600	.3	
44.300	.0	56.000	.0				
	9.300	47.9	21.000	22.3	32.700	.3	
44.400	.0	56.100	.0				
	9.400	47.6	21.100	22.0	32.800	.3	
44.500	.0	56.200	.0				
	9.500	47.3	21.200	21.7	32.900	.3	
44.600	.0	56.300	.0				
	9.600	47.0	21.300	21.3	33.000	.3	
44.700	.0	56.400	.0				
	9.700	46.7	21.400	21.0	33.100	.3	
44.800	.0	56.500	.0				
	9.800	46.5	21.500	20.7	33.200	.2	
44.900	.0	56.600	.0				
	9.900	46.2	21.600	20.4	33.300	.2	
45.000	.0	56.700	.0				
	10.000	45.9	21.700	20.1	33.400	.2	
45.100	.0	56.800	.0				
	10.100	45.7	21.800	19.8	33.500	.2	
45.200	.0	56.900	.0				
	10.200	45.4	21.900	19.5	33.600	.2	
45.300	.0	57.000	.0				
	10.300	45.2	22.000	19.2	33.700	.2	
45.400	.0	57.100	.0				
	10.400	44.9	22.100	18.9	33.800	.2	
45.500	.0	57.200	.0				

```
        10.500      44.6          22.200      18.6          33.900        .2
45.600        .0          57.300        .0
        10.600      44.4          22.300      18.4          34.000        .2
45.700        .0          57.400        .0
        10.700      44.1          22.400      18.1          34.100        .2
45.800        .0          57.500        .0
        10.800      43.8          22.500      17.8          34.200        .2
45.900        .0          57.600        .0
        10.900      43.5          22.600      17.5          34.300        .2
46.000        .0          57.700        .0
        11.000      43.2          22.700      17.2          34.400        .2
46.100        .0          57.800        .0
        11.100      42.9          22.800      16.9          34.500        .2
46.200        .0          57.900        .0
        11.200      42.6          22.900      16.6          34.600        .2
46.300        .0          58.000        .0
        11.300      42.4          23.000      16.3          34.700        .2
46.400        .0          58.100        .0
        11.400      42.1          23.100      15.9          34.800        .2
46.500        .0
        11.500      41.8          23.200      15.5          34.900        .2
46.600        .0
        11.600      41.5          23.300      15.1          35.000        .2
46.700        .0

         RUNOFF VOLUME =     1.35542 INCHES     =      75.9700 ACRE-FEET
         PEAK DISCHARGE RATE =      60.30 CFS  AT   3.400 HOURS   BASIN AREA =
1.0509 SQ. MI.


     *

     *

     COMPUTE NM HYD       ID=2  HYD NO=UNIVROWNORTH  DA=.007266 SQ MI

                                        %A=0.0  %B=5.0  %C=5.0 %D=90.0

                                        TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   25.818    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .006539 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.9320    CFS   UNIT VOLUME =    1.001       B =   354.44
  P60 = 1.8400
          AREA =      .000727 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD            ID=2 CODE=5
```

HYDROGRAPH FROM AREA UNIVROWNORTH

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
.500	.0	5.500	.1	10.500	.1
15.500	.1	20.500	.1		
1.000	.0	6.000	.2	11.000	.1
16.000	.1	21.000	.1		
1.500	16.5	6.500	.2	11.500	.1
16.500	.1	21.500	.1		
2.000	4.3	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
2.500	.6	7.500	.2	12.500	.1
17.500	.1	22.500	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
3.500	.2	8.500	.1	13.500	.1
18.500	.1	23.500	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		
4.500	.1	9.500	.1	14.500	.1
19.500	.1	24.500	.0		

RUNOFF VOLUME = 2.26512 INCHES = .8778 ACRE-FEET
PEAK DISCHARGE RATE = 16.51 CFS AT 1.500 HOURS BASIN AREA = .0073 SQ. MI.

```
*
ADD HYD                    ID=3 HYD=UNIVN.PONDK ID I=1 II=2
PRINT HYD                  ID=3 CODE=5
```

HYDROGRAPH FROM AREA UNIVN.PONDK

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	40.7	24.000	11.6
36.000	.1	48.000	.0		
.500	.0	12.500	39.5	24.500	5.1
36.500	.1	48.500	.0		
1.000	.0	13.000	38.4	25.000	3.1
37.000	.1	49.000	.0		
1.500	51.0	13.500	37.4	25.500	2.2
37.500	.1	49.500	.0		
2.000	55.5	14.000	36.5	26.000	1.6
38.000	.1	50.000	.0		
2.500	58.6	14.500	35.5	26.500	1.3
38.500	.1	50.500	.0		
3.000	60.2	15.000	34.6	27.000	1.0
39.000	.1	51.000	.0		

	3.500	60.5	15.500	33.7	27.500	.9	
39.500	.1	51.500	.0				
	4.000	60.2	16.000	32.9	28.000	.8	
40.000	.1	52.000	.0				
	4.500	59.8	16.500	32.2	28.500	.7	
40.500	.1	52.500	.0				
	5.000	59.4	17.000	31.5	29.000	.6	
41.000	.1	53.000	.0				
	5.500	59.0	17.500	30.6	29.500	.5	
41.500	.1	53.500	.0				
	6.000	58.5	18.000	29.9	30.000	.5	
42.000	.0	54.000	.0				
	6.500	58.0	18.500	29.2	30.500	.4	
42.500	.0	54.500	.0				
	7.000	57.4	19.000	28.5	31.000	.4	
43.000	.0	55.000	.0				
	7.500	55.4	19.500	27.4	31.500	.3	
43.500	.0	55.500	.0				
	8.000	52.6	20.000	26.0	32.000	.3	
44.000	.0	56.000	.0				
	8.500	50.5	20.500	24.3	32.500	.3	
44.500	.0	56.500	.0				
	9.000	48.9	21.000	22.4	33.000	.3	
45.000	.0	57.000	.0				
	9.500	47.4	21.500	20.8	33.500	.2	
45.500	.0	57.500	.0				
	10.000	46.1	22.000	19.3	34.000	.2	
46.000	.0	58.000	.0				
	10.500	44.8	22.500	17.9	34.500	.2	
46.500	.0						
	11.000	43.3	23.000	16.3	35.000	.2	
47.000	.0						
	11.500	41.9	23.500	14.1	35.500	.2	
47.500	.0						

RUNOFF VOLUME = 1.36166 INCHES = 76.8477 ACRE-FEET
PEAK DISCHARGE RATE = 60.46 CFS AT 3.400 HOURS BASIN AREA = 1.0582 SQ. MI.

*

*

COMPUTE RATING CURVE CID=1 VS NO=1 CODE=-1 SLP=0.005

DIA=2.5 N=0.013

RATING CURVE PIPE SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	MAX WIDTH FT
.00	.00	.00	.00
.13	.10	.15	1.11
.26	.27	.66	1.53
.39	.49	1.54	1.82

		.52	.74	2.76	2.03
		.65	1.02	4.31	2.19
		.78	1.31	6.15	2.32
		.91	1.62	8.24	2.41
		1.04	1.94	10.54	2.47
		1.17	2.26	12.99	2.50
		1.30	2.59	15.55	2.50
		1.43	2.91	18.15	2.50
		1.56	3.23	20.74	2.50
		1.69	3.54	23.24	2.50
		1.82	3.84	25.59	2.50
		1.95	4.12	27.69	2.50
		2.08	4.37	29.44	2.50
		2.21	4.60	30.69	2.50
		2.35	4.78	31.20	2.50
		2.50	4.91	31.20	2.50

ROUTE MCUNGE ID=4 HYD=RTE.UNIVN INFLOW ID=3

DT=0.0 L=2000 NS=0 SLOPE=0.005

MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 582 TABLE PTS= 19
DT= .100000 QMED= 30.23 CKMED= 5.5384
WIDTH MED= 2.50 NREACH= 2 DX= 1000.00

DEPTH (FT)	AREA Q-M (SQ FT)	Q C1-M (CFS)	TRAVEL C2-M TIME(HR)	WIDTH C3-M (FT)	ck (FPS)	VEL (FPS)	C	D	C1	C2	C3
.00	.0	.0	.484	.0	2.78	.74	1.000	.000	1.000	.000	.000
.13	.1	.2	.356	1.1	2.75	1.56	.990	.010	.990	.000	.010
.26	.3	.7	.228	1.5	3.54	2.43	1.275	.024	.979	.130	-.109
.39	.5	1.5	.177	1.8	4.48	3.13	1.614	.038	.972	.246	-.217
.52	.7	2.8	.149	2.0	5.28	3.72	1.900	.052	.965	.322	-.287
.65	1.0	4.3	.131	2.2	5.95	4.24	2.143	.066	.959	.377	-.336
.78	1.3	6.2	.118	2.3	6.53	4.69	2.350	.081	.953	.417	-.370
.91	1.6	8.2	.109	2.4	7.01	5.09	2.524	.098	.946	.448	-.394
		7.2	.949							.434	-.384

```
        1.04    1.9     10.5     .102    2.5     7.41    5.44    2.667   .115   .939
 .471  -.410     9.4     .943    .461  -.404
        1.17    2.3     13.0     .097    2.5     7.72    5.75    2.779   .135   .931
 .489  -.420    11.7     .935    .482  -.417
        1.30    2.6     15.5     .092    2.5     7.94    6.01    2.857   .157   .922
 .502  -.424    14.3     .927    .497  -.424
        1.43    2.9     18.1     .089    2.5     7.99    6.24    2.875   .182   .910
 .507  -.417    16.8     .917    .506  -.422
        1.56    3.2     20.7     .087    2.5     7.84    6.42    2.821   .212   .895
 .504  -.399    19.4     .904    .507  -.411
        1.69    3.5     23.2     .085    2.5     7.47    6.57    2.688   .249   .873
 .492  -.365    22.0     .886    .500  -.385
        1.82    3.8     25.6     .083    2.5     6.84    6.67    2.463   .299   .841
 .468  -.309    24.4     .860    .482  -.342
        1.95    4.1     27.7     .083    2.5     5.92    6.73    2.131   .374   .787
 .429  -.216    26.6     .819    .452  -.271
        2.08    4.4     29.4     .083    2.5     4.61    6.73    1.660   .511   .678
 .369  -.047    28.6     .746    .404  -.150
        2.21    4.6     30.7     .083    2.5     2.70    6.67     .972   .909   .369
 .306   .325    30.1     .583    .335   .082
        2.35    4.8     31.2     .085    2.5     1.54    6.52     .554  1.622  -.021
 .370   .651    30.9     .171    .338   .490
     MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) =   5 OCCURRED       1 TIMES.
AVERAGE NUMBER ITERATIONS =  1.4373
     Equations solved using the Ponce correction to C2
     *

     PRINT HYD            ID=4 CODE=0

                                                    HYDROGRAPH FROM AREA RTE.UNIVN

          TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
           HRS       CFS            HRS       CFS            HRS       CFS
 HRS       CFS            HRS       CFS
           .000        .0          11.700      42.4         23.400      15.1
35.100        .2          46.800        .0
           .100        .0          11.800      42.1         23.500      14.5
35.200        .2          46.900        .0
           .200        .0          11.900      41.9         23.600      14.0
35.300        .2          47.000        .0
           .300        .0          12.000      41.6         23.700      13.5
35.400        .2          47.100        .0
           .400        .0          12.100      41.3         23.800      12.9
35.500        .2          47.200        .0
           .500        .0          12.200      41.1         23.900      12.4
35.600        .2          47.300        .0
           .600        .0          12.300      40.8         24.000      11.9
35.700        .2          47.400        .0
           .700        .0          12.400      40.6         24.100      11.5
35.800        .2          47.500        .0
           .800        .0          12.500      40.3         24.200      10.6
35.900        .2          47.600        .0
           .900        .0          12.600      40.1         24.300       9.2
36.000        .2          47.700        .0
          1.000        .0          12.700      39.9         24.400       7.2
36.100        .1          47.800        .0
          1.100        .0          12.800      39.6         24.500       5.8
36.200        .1          47.900        .0
          1.200        .8          12.900      39.4         24.600       5.0
36.300        .1          48.000        .0
```

	1.300		15.6		13.000		39.2	24.700	4.5
36.400		.1		48.100		.0			
	1.400		31.8		13.100		39.0	24.800	4.1
36.500		.1		48.200		.0			
	1.500		34.6		13.200		38.8	24.900	3.7
36.600		.1		48.300		.0			
	1.600		37.6		13.300		38.5	25.000	3.4
36.700		.1		48.400		.0			
	1.700		40.4		13.400		38.3	25.100	3.2
36.800		.1		48.500		.0			
	1.800		43.0		13.500		38.1	25.200	2.9
36.900		.1		48.600		.0			
	1.900		45.5		13.600		37.9	25.300	2.7
37.000		.1		48.700		.0			
	2.000		47.8		13.700		37.7	25.400	2.5
37.100		.1		48.800		.0			
	2.100		49.7		13.800		37.6	25.500	2.3
37.200		.1		48.900		.0			
	2.200		51.3		13.900		37.4	25.600	2.2
37.300		.1		49.000		.0			
	2.300		52.8		14.000		37.2	25.700	2.1
37.400		.1		49.100		.0			
	2.400		54.0		14.100		37.0	25.800	1.9
37.500		.1		49.200		.0			
	2.500		55.1		14.200		36.8	25.900	1.8
37.600		.1		49.300		.0			
	2.600		56.1		14.300		36.6	26.000	1.7
37.700		.1		49.400		.0			
	2.700		56.9		14.400		36.4	26.100	1.6
37.800		.1		49.500		.0			
	2.800		57.6		14.500		36.2	26.200	1.6
37.900		.1		49.600		.0			
	2.900		58.2		14.600		36.0	26.300	1.5
38.000		.1		49.700		.0			
	3.000		58.7		14.700		35.8	26.400	1.4
38.100		.1		49.800		.0			
	3.100		59.2		14.800		35.7	26.500	1.3
38.200		.1		49.900		.0			
	3.200		59.5		14.900		35.5	26.600	1.3
38.300		.1		50.000		.0			
	3.300		59.7		15.000		35.3	26.700	1.2
38.400		.1		50.100		.0			
	3.400		59.9		15.100		35.1	26.800	1.2
38.500		.1		50.200		.0			
	3.500		60.1		15.200		34.9	26.900	1.1
38.600		.1		50.300		.0			
	3.600		60.2		15.300		34.7	27.000	1.1
38.700		.1		50.400		.0			
	3.700		60.3		15.400		34.6	27.100	1.0
38.800		.1		50.500		.0			
	3.800		60.3		15.500		34.4	27.200	1.0
38.900		.1		50.600		.0			
	3.900		60.3		15.600		34.2	27.300	1.0
39.000		.1		50.700		.0			
	4.000		60.3		15.700		34.0	27.400	.9
39.100		.1		50.800		.0			
	4.100		60.3		15.800		33.9	27.500	.9
39.200		.1		50.900		.0			
	4.200		60.2		15.900		33.7	27.600	.9
39.300		.1		51.000		.0			
	4.300		60.2		16.000		33.5	27.700	.9
39.400		.1		51.100		.0			
	4.400		60.1		16.100		33.4	27.800	.8

39.500	.1	51.200	.0								
	4.500	60.1		16.200	33.2	27.900	.8				
39.600	.1	51.300	.0								
	4.600	60.0		16.300	33.0	28.000	.8				
39.700	.1	51.400	.0								
	4.700	59.9		16.400	32.9	28.100	.8				
39.800	.1	51.500	.0								
	4.800	59.9		16.500	32.7	28.200	.7				
39.900	.1	51.600	.0								
	4.900	59.8		16.600	32.6	28.300	.7				
40.000	.1	51.700	.0								
	5.000	59.7		16.700	32.4	28.400	.7				
40.100	.1	51.800	.0								
	5.100	59.6		16.800	32.3	28.500	.7				
40.200	.1	51.900	.0								
	5.200	59.5		16.900	32.1	28.600	.7				
40.300	.1	52.000	.0								
	5.300	59.5		17.000	32.0	28.700	.7				
40.400	.1	52.100	.0								
	5.400	59.4		17.100	31.9	28.800	.6				
40.500	.1	52.200	.0								
	5.500	59.3		17.200	31.7	28.900	.6				
40.600	.1	52.300	.0								
	5.600	59.2		17.300	31.6	29.000	.6				
40.700	.1	52.400	.0								
	5.700	59.1		17.400	31.4	29.100	.6				
40.800	.1	52.500	.0								
	5.800	59.0		17.500	31.2	29.200	.6				
40.900	.1	52.600	.0								
	5.900	58.9		17.600	30.9	29.300	.6				
41.000	.1	52.700	.0								
	6.000	58.8		17.700	30.7	29.400	.6				
41.100	.1	52.800	.0								
	6.100	58.7		17.800	30.4	29.500	.5				
41.200	.1	52.900	.0								
	6.200	58.6		17.900	30.3	29.600	.5				
41.300	.1	53.000	.0								
	6.300	58.5		18.000	30.1	29.700	.5				
41.400	.1	53.100	.0								
	6.400	58.4		18.100	29.9	29.800	.5				
41.500	.1	53.200	.0								
	6.500	58.3		18.200	29.8	29.900	.5				
41.600	.1	53.300	.0								
	6.600	58.2		18.300	29.6	30.000	.5				
41.700	.1	53.400	.0								
	6.700	58.1		18.400	29.5	30.100	.5				
41.800	.1	53.500	.0								
	6.800	58.0		18.500	29.3	30.200	.5				
41.900	.1	53.600	.0								
	6.900	57.9		18.600	29.2	30.300	.5				
42.000	.0	53.700	.0								
	7.000	57.8		18.700	29.1	30.400	.4				
42.100	.0	53.800	.0								
	7.100	57.7		18.800	28.9	30.500	.4				
42.200	.0	53.900	.0								
	7.200	57.5		18.900	28.8	30.600	.4				
42.300	.0	54.000	.0								
	7.300	57.3		19.000	28.7	30.700	.4				
42.400	.0	54.100	.0								
	7.400	57.1		19.100	28.5	30.800	.4				
42.500	.0	54.200	.0								
	7.500	56.7		19.200	28.4	30.900	.4				
42.600	.0	54.300	.0								

	7.600	56.4		19.300	28.3		31.000	.4	
42.700	.0	54.400	.0						
	7.700	55.9		19.400	28.1		31.100	.4	
42.800	.0	54.500	.0						
	7.800	55.5		19.500	27.7		31.200	.4	
42.900	.0	54.600	.0						
	7.900	55.0		19.600	27.4		31.300	.4	
43.000	.0	54.700	.0						
	8.000	54.5		19.700	27.1		31.400	.4	
43.100	.0	54.800	.0						
	8.100	54.0		19.800	26.8		31.500	.4	
43.200	.0	54.900	.0						
	8.200	53.5		19.900	26.5		31.600	.4	
43.300	.0	55.000	.0						
	8.300	53.0		20.000	26.2		31.700	.3	
43.400	.0	55.100	.0						
	8.400	52.5		20.100	25.9		31.800	.3	
43.500	.0	55.200	.0						
	8.500	52.1		20.200	25.6		31.900	.3	
43.600	.0	55.300	.0						
	8.600	51.7		20.300	25.3		32.000	.3	
43.700	.0	55.400	.0						
	8.700	51.3		20.400	25.0		32.100	.3	
43.800	.0	55.500	.0						
	8.800	50.9		20.500	24.6		32.200	.3	
43.900	.0	55.600	.0						
	8.900	50.5		20.600	24.2		32.300	.3	
44.000	.0	55.700	.0						
	9.000	50.1		20.700	23.7		32.400	.3	
44.100	.0	55.800	.0						
	9.100	49.8		20.800	23.3		32.500	.3	
44.200	.0	55.900	.0						
	9.200	49.5		20.900	23.0		32.600	.3	
44.300	.0	56.000	.0						
	9.300	49.1		21.000	22.6		32.700	.3	
44.400	.0	56.100	.0						
	9.400	48.8		21.100	22.3		32.800	.3	
44.500	.0	56.200	.0						
	9.500	48.5		21.200	22.0		32.900	.3	
44.600	.0	56.300	.0						
	9.600	48.2		21.300	21.7		33.000	.3	
44.700	.0	56.400	.0						
	9.700	47.9		21.400	21.3		33.100	.3	
44.800	.0	56.500	.0						
	9.800	47.6		21.500	21.0		33.200	.3	
44.900	.0	56.600	.0						
	9.900	47.3		21.600	20.7		33.300	.3	
45.000	.0	56.700	.0						
	10.000	47.1		21.700	20.4		33.400	.2	
45.100	.0	56.800	.0						
	10.100	46.8		21.800	20.1		33.500	.2	
45.200	.0	56.900	.0						
	10.200	46.5		21.900	19.8		33.600	.2	
45.300	.0	57.000	.0						
	10.300	46.3		22.000	19.5		33.700	.2	
45.400	.0	57.100	.0						
	10.400	46.0		22.100	19.2		33.800	.2	
45.500	.0	57.200	.0						
	10.500	45.7		22.200	18.9		33.900	.2	
45.600	.0	57.300	.0						
	10.600	45.4		22.300	18.6		34.000	.2	
45.700	.0	57.400	.0						
	10.700	45.2		22.400	18.4		34.100	.2	

```
45.800        .0         57.500         .0
        10.800      44.9          22.500      18.1          34.200         .2
45.900        .0         57.600         .0
        10.900      44.6          22.600      17.8          34.300         .2
46.000        .0         57.700         .0
        11.000      44.3          22.700      17.5          34.400         .2
46.100        .0         57.800         .0
        11.100      44.1          22.800      17.2          34.500         .2
46.200        .0         57.900         .0
        11.200      43.8          22.900      16.9          34.600         .2
46.300        .0         58.000         .0
        11.300      43.5          23.000      16.6          34.700         .2
46.400        .0         58.100         .0
        11.400      43.2          23.100      16.2          34.800         .2
46.500        .0         58.200         .0
        11.500      42.9          23.200      15.8          34.900         .2
46.600        .0         58.300         .0
        11.600      42.7          23.300      15.5          35.000         .2
46.700        .0

         RUNOFF VOLUME =     1.35983 INCHES     =      76.7446 ACRE-FEET
         PEAK DISCHARGE RATE =      60.30 CFS  AT   3.900 HOURS   BASIN AREA =
1.0582 SQ. MI.


     *

     *

     COMPUTE NM HYD       ID=5  HYD NO=UNIVROWSOUTH  DA=.007266 SQ MI

                                        %A=0.0  %B=5.0  %C=5.0 %D=90.0

                                        TP=-.1333 HR  RAIN=-1


          K =   .072649HR    TP =   .133300HR    K/TP RATIO =   .545000     SHAPE
CONSTANT, N =  7.106420
          UNIT PEAK =   25.818    CFS   UNIT VOLUME =    1.030       B =   526.28
  P60 = 1.8400
          AREA =      .006539 SQ MI    IA =    .10000 INCHES    INF =    .04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000


          K =   .118524HR    TP =   .133300HR    K/TP RATIO =   .889153     SHAPE
CONSTANT, N =  3.989065
          UNIT PEAK =   1.9320    CFS   UNIT VOLUME =    1.001       B =   354.44
  P60 = 1.8400
          AREA =      .000727 SQ MI    IA =    .42500 INCHES    INF =   1.04000
INCHES PER HOUR
          RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
.100000

     PRINT HYD            ID=5 CODE=5


                                        HYDROGRAPH FROM AREA UNIVROWSOUTH


          TIME      FLOW           TIME      FLOW           TIME      FLOW
```

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	5.000	.1	10.000	.1
15.000	.1	20.000	.1		
.500	.0	5.500	.1	10.500	.1
15.500	.1	20.500	.1		
1.000	.0	6.000	.2	11.000	.1
16.000	.1	21.000	.1		
1.500	16.5	6.500	.2	11.500	.1
16.500	.1	21.500	.1		
2.000	4.3	7.000	.2	12.000	.1
17.000	.1	22.000	.1		
2.500	.6	7.500	.2	12.500	.1
17.500	.1	22.500	.1		
3.000	.2	8.000	.1	13.000	.1
18.000	.1	23.000	.1		
3.500	.2	8.500	.1	13.500	.1
18.500	.1	23.500	.1		
4.000	.1	9.000	.1	14.000	.1
19.000	.1	24.000	.1		
4.500	.1	9.500	.1	14.500	.1
19.500	.1	24.500	.0		

RUNOFF VOLUME = 2.26512 INCHES = .8778 ACRE-FEET
PEAK DISCHARGE RATE = 16.51 CFS AT 1.500 HOURS BASIN AREA = .0073 SQ. MI.

```
*
ADD HYD                    ID=6 HYD=UNIVNS.PONDK ID I=4 II=5
PRINT HYD                  ID=6 CODE=5
```

HYDROGRAPH FROM AREA UNIVNS.PONDK

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	12.000	41.7	24.000	12.0
36.000	.2	48.000	.0		
.500	.0	12.500	40.4	24.500	5.8
36.500	.1	48.500	.0		
1.000	.0	13.000	39.3	25.000	3.4
37.000	.1	49.000	.0		
1.500	51.1	13.500	38.2	25.500	2.3
37.500	.1	49.500	.0		
2.000	52.0	14.000	37.3	26.000	1.7
38.000	.1	50.000	.0		
2.500	55.7	14.500	36.3	26.500	1.3
38.500	.1	50.500	.0		
3.000	59.0	15.000	35.4	27.000	1.1
39.000	.1	51.000	.0		
3.500	60.2	15.500	34.5	27.500	.9
39.500	.1	51.500	.0		
4.000	60.4	16.000	33.6	28.000	.8
40.000	.1	52.000	.0		
4.500	60.2	16.500	32.8	28.500	.7

```
40.500        .1         52.500         .0
          5.000      59.8          17.000      32.1          29.000         .6
41.000        .1         53.000         .0
          5.500      59.4          17.500      31.3          29.500         .5
41.500        .1         53.500         .0
          6.000      59.0          18.000      30.2          30.000         .5
42.000        .0         54.000         .0
          6.500      58.5          18.500      29.4          30.500         .4
42.500        .0         54.500         .0
          7.000      58.0          19.000      28.8          31.000         .4
43.000        .0         55.000         .0
          7.500      56.9          19.500      27.8          31.500         .4
43.500        .0         55.500         .0
          8.000      54.6          20.000      26.3          32.000         .3
44.000        .0         56.000         .0
          8.500      52.2          20.500      24.7          32.500         .3
44.500        .0         56.500         .0
          9.000      50.3          21.000      22.7          33.000         .3
45.000        .0         57.000         .0
          9.500      48.6          21.500      21.1          33.500         .2
45.500        .0         57.500         .0
         10.000      47.2          22.000      19.5          34.000         .2
46.000        .0         58.000         .0
         10.500      45.8          22.500      18.2          34.500         .2
46.500        .0
         11.000      44.5          23.000      16.7          35.000         .2
47.000        .0
         11.500      43.1          23.500      14.6          35.500         .2
47.500        .0

         RUNOFF VOLUME =     1.36600 INCHES     =      77.6222 ACRE-FEET
         PEAK DISCHARGE RATE =      60.44 CFS  AT   3.900 HOURS   BASIN AREA =
1.0655 SQ. MI.


     *
     PUNCH HYD            ID=6
     *
     *S**************************************************************
     *
     *S******END OF TRAILS DRAINAGE ANALYSIS
     *
     FINISH

         NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 08:55:54
```