05005

NORTH ANDALUCIA DRAINAGE EVALUATION

APRIL 2006

Prepared for:
Silverleaf Ventures, LLC
5321 Menaul Blvd NE
Albuquerque, NM 87110

JEFFREY TODD WOOTEN
NEW MEXICO
16892
LICENSED PROFESSIONAL ENGINEER
4/10/06

Bohannan ▲ Huston

ENGINEERING ▲
SPATIAL DATA ▲
ADVANCED TECHNOLOGIES ▲

Bohannan ▲ Huston INC.

Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

April 10, 2006

Brad Bingham, P.E.
City Hydrologist
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Re: North Andalucia Drainage Evaluation
SE Corner of Coors and Montano (Atlas Map E12)

Dear Brad:

The purpose of this letter is to submit the updated drainage analysis for the North Andalucia project. This analysis includes all of North Andalucia, La Luz, and the Bosque School. The enclosed 'Bosque School Drainage Study', AHYMO analysis, and Overflow Spillway Calculation comprise the submittal. The North Andalucia property is zoned for a mixed use commercial / retail / multifamily development.

Based on our previous discussions and your review of the above information, please provide a written response of approval for the project. If I can answer any questions regarding this matter, please feel free to contact me.

Sincerely,

Jeffrey T. Wooten, P.E.
Project Manager
Community Development and Planning

JTW/cc
Enclosures

Overflow Spillway from 'A' to 'B'

WEIR COEFFICIENT = 2.600 X-SECTION DISTANCE = 114.000

POINT	DIST	ELEV	POINT	DIST	ELEV	POINT	DIST	ELEV
1.0	0.0	4975.0	3.0	110.0	4974.0			
2.0	20.0	4974.0	4.0	114.0	4975.0			

WSEL FT.	DEPTH INC FT.	FLOW AREA SQ.FT.	FLOW RATE (CFS)	FLOW VEL (FPS)	TOPWID PLUS OBSTRUCTIONS
1.000	1.000	102.000	256.062	2.510	114.000

OK

Q_{ACTUAL} = 89.3 cfs @ 1.84 hours (Elev = 4974.02)

SEE AHYMO ANALYSIS.

```
    AHYMO PROGRAM (AHYMO_97) -                          - Version:  1997.02c
          RUN DATE (MON/DAY/YR) = 04/03/2006
          START TIME (HR:MIN:SEC) = 15:50:51     USER NO.= AHYMO-S-9702c1BohanHu-AH
          INPUT FILE = andaluci.hym

*S  AHYMO FILE FOR ANDALUCIA  - ALBUQUERQUE,NM , BH PROJ # 05 0052
*S  6HR, 100YR STORM  ← NORTH
*S
*S  INPUT FILE -- P:\050052\CDP\HYDRO\AHYMO\ANDALUCIA.HYM
*
*S  OUTPUT FILE -- P:\050052\CDP\HYDRO\AHYMO\ANDALUCIA.OUT
*
*S AHYMO FOR POST-DEVELOPED CONDITION AT SITE (W/ RETENTION POND)
*S   UPDATED NOVEMBER 29, 2005 BY JEFF WOOTEN
*S
*S
START                 TIME=0.0 HR  PUNCH CODE=0
*S
*S**********************************************************
*S
*S  100 YEAR - 6 HOUR RAINFALL TABLE
*S**********************************************************
RAINFALL              TYPE=1  RAIN QUARTER=0.0
                              RAIN ONE=1.87 IN  RAIN SIX=2.20 IN
                              RAIN DAY=2.66 IN  DT=0.0167

                COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.
                DT =    .016700 HOURS       END TIME =     5.995301 HOURS
                   .0000   .0008   .0016   .0025   .0033   .0041   .0050
                   .0059   .0067   .0076   .0085   .0094   .0103   .0113
                   .0122   .0131   .0141   .0151   .0160   .0170   .0180
                   .0191   .0201   .0212   .0222   .0233   .0244   .0255
                   .0266   .0278   .0289   .0301   .0313   .0325   .0337
                   .0350   .0363   .0376   .0389   .0402   .0416   .0430
                   .0444   .0459   .0473   .0488   .0504   .0519   .0535
                   .0552   .0568   .0585   .0603   .0621   .0639   .0658
                   .0677   .0697   .0718   .0739   .0761   .0786   .0813
                   .0840   .0868   .0898   .0928   .0967   .1066   .1196
                   .1361   .1564   .1811   .2107   .2456   .2863   .3333
                   .3872   .4484   .5175   .5950   .6814   .7772   .8830
                   .9993  1.1267  1.1889  1.2325  1.2719  1.3084  1.3426
                  1.3749  1.4055  1.4348  1.4629  1.4898  1.5157  1.5407
                  1.5649  1.5882  1.6107  1.6326  1.6538  1.6743  1.6943
                  1.7137  1.7325  1.7508  1.7686  1.7859  1.8028  1.8192
                  1.8351  1.8507  1.8658  1.8806  1.8950  1.9090  1.9226
                  1.9359  1.9465  1.9496  1.9526  1.9555  1.9583  1.9611
                  1.9637  1.9664  1.9689  1.9714  1.9739  1.9763  1.9786
```

1.9809	1.9832	1.9854	1.9876	1.9897	1.9918	1.9939
1.9959	1.9979	1.9998	2.0018	2.0037	2.0055	2.0074
2.0092	2.0110	2.0128	2.0145	2.0162	2.0179	2.0196
2.0213	2.0229	2.0245	2.0261	2.0277	2.0292	2.0308
2.0323	2.0338	2.0353	2.0368	2.0382	2.0397	2.0411
2.0425	2.0439	2.0453	2.0467	2.0480	2.0494	2.0507
2.0520	2.0533	2.0546	2.0559	2.0572	2.0584	2.0597
2.0609	2.0622	2.0634	2.0646	2.0658	2.0670	2.0682
2.0693	2.0705	2.0717	2.0728	2.0739	2.0751	2.0762
2.0773	2.0784	2.0795	2.0806	2.0817	2.0827	2.0838
2.0849	2.0859	2.0870	2.0880	2.0890	2.0900	2.0911
2.0921	2.0931	2.0941	2.0951	2.0960	2.0970	2.0980
2.0990	2.0999	2.1009	2.1018	2.1028	2.1037	2.1046
2.1056	2.1065	2.1074	2.1083	2.1092	2.1101	2.1110
2.1119	2.1128	2.1137	2.1146	2.1155	2.1163	2.1172
2.1180	2.1189	2.1198	2.1206	2.1214	2.1223	2.1231
2.1239	2.1248	2.1256	2.1264	2.1272	2.1280	2.1289
2.1297	2.1305	2.1312	2.1320	2.1328	2.1336	2.1344
2.1352	2.1360	2.1367	2.1375	2.1383	2.1390	2.1398
2.1405	2.1413	2.1420	2.1428	2.1435	2.1443	2.1450
2.1457	2.1465	2.1472	2.1479	2.1486	2.1493	2.1501
2.1508	2.1515	2.1522	2.1529	2.1536	2.1543	2.1550
2.1557	2.1564	2.1571	2.1577	2.1584	2.1591	2.1598
2.1605	2.1611	2.1618	2.1625	2.1631	2.1638	2.1645
2.1651	2.1658	2.1664	2.1671	2.1677	2.1684	2.1690
2.1697	2.1703	2.1709	2.1716	2.1722	2.1728	2.1735
2.1741	2.1747	2.1753	2.1760	2.1766	2.1772	2.1778
2.1784	2.1790	2.1797	2.1803	2.1809	2.1815	2.1821
2.1827	2.1833	2.1839	2.1845	2.1850	2.1856	2.1862
2.1868	2.1874	2.1880	2.1886	2.1891	2.1897	2.1903
2.1909	2.1914	2.1920	2.1926	2.1932	2.1937	2.1943
2.1948	2.1954	2.1960	2.1965	2.1971	2.1976	2.1982
2.1987	2.1993	2.1998				

```
*S
*S
*S
*S*************************************************************************
*S*  COMPUTE BASIN A DEVELOPED CONDITIONS
*S*************************************************************************

*S COMPUTE HYDROGRAPH FOR BASIN A-1
COMPUTE NM HYD        ID=1  HYD=A.1  AREA=0.00535SQ MI
                            PER A=0  PER B=0  PER C=10  PER D=90
                            TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   18.875    CFS   UNIT VOLUME =    .9993       B =   526.28       P60 = 1.8700
```

AREA = .004770 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .105629HR TP = .133000HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = 1.5467 CFS UNIT VOLUME = .9912 B = 388.14 P60 = 1.8700
AREA = .000530 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=1 CODE=5

HYDROGRAPH FROM AREA A.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	9.0	2.839	.2	4.258	.1
.084	.0	1.503	14.4	2.922	.2	4.342	.1
.167	.0	1.587	11.0	3.006	.2	4.425	.1
.251	.0	1.670	7.4	3.089	.1	4.509	.1
.334	.0	1.754	5.7	3.173	.1	4.592	.1
.418	.0	1.837	4.8	3.256	.1	4.676	.1
.501	.0	1.921	4.1	3.340	.1	4.759	.1
.585	.0	2.004	3.5	3.423	.1	4.843	.1
.668	.0	2.088	2.8	3.507	.1	4.926	.1
.752	.0	2.171	1.6	3.590	.1	5.010	.1
.835	.0	2.255	1.0	3.674	.1	5.093	.1
.919	.0	2.338	.7	3.757	.1	5.177	.1
1.002	.0	2.421	.6	3.841	.1	5.260	.1
1.086	.0	2.505	.5	3.924	.1	5.344	.1
1.169	.0	2.588	.4	4.008	.1	5.427	.1
1.253	1.0	2.672	.3	4.091	.1	5.511	.1
1.336	3.9	2.755	.2	4.175	.1	5.594	.1
1.420	9.0	2.839	.2	4.258	.1	5.678	.1
1.503	14.4	2.922	.2	4.342	.1	5.761	.1
1.587	11.0	3.006	.2	4.425	.1	5.845	.1
1.670	7.4	3.089	.1	4.509	.1	5.928	.1
1.754	5.7	3.173	.1	4.592	.1	6.012	.1
1.837	4.8	3.256	.1	4.676	.1	6.095	.1
1.921	4.1	3.340	.1	4.759	.1	6.179	.0
2.004	3.5	3.423	.1	4.843	.1	6.262	.0
2.088	2.8	3.507	.1	4.926	.1	6.346	.0
2.171	1.6	3.590	.1	5.010	.1	6.429	.0
2.255	1.0	3.674	.1	5.093	.1	6.513	.0
2.338	.7	3.757	.1	5.177	.1	6.596	.0
2.421	.6	3.841	.1	5.260	.1	6.680	.0
2.505	.5	3.924	.1	5.344	.1	6.763	.0
2.588	.4	4.008	.1	5.427	.1		
2.672	.3	4.091	.1	5.511	.1		
2.755	.2	4.175	.1	5.594	.1		

```
RUNOFF VOLUME =     1.86838 INCHES     =        .5281 ACRE-FEET
PEAK DISCHARGE RATE =      14.39 CFS  AT   1.503 HOURS   BASIN AREA =    .0053 SQ. MI.


*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-2
COMPUTE NM HYD        ID=2  HYD=A.2  AREA=0.012SQ MI
                            PER A=0  PER B=5  PER C=25  PER D=70
                            TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   33.238    CFS   UNIT VOLUME =    .9996       B =   526.28      P60 = 1.8700
     AREA =      .008400 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700


     K =   .109807HR    TP =   .133000HR    K/TP RATIO =   .825614     SHAPE CONSTANT, N =  4.323756
     UNIT PEAK =   10.183    CFS   UNIT VOLUME =    .9987       B =   376.21      P60 = 1.8700
     AREA =      .003600 SQ MI    IA =    .37500 INCHES    INF =    .90000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

PRINT HYD             ID=2     CODE=5
```

HYDROGRAPH FROM AREA A.2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	18.0	2.839	.4	4.258	.1
5.678	.2						
.084	.0	1.503	29.9	2.922	.3	4.342	.1
5.761	.2						
.167	.0	1.587	23.3	3.006	.3	4.425	.1
5.845	.2						
.251	.0	1.670	15.5	3.089	.3	4.509	.1
5.928	.2						
.334	.0	1.754	11.6	3.173	.2	4.592	.1
6.012	.2						
.418	.0	1.837	9.5	3.256	.2	4.676	.1
6.095	.1						
.501	.0	1.921	7.9	3.340	.2	4.759	.1
6.179	.1						
.585	.0	2.004	6.6	3.423	.2	4.843	.1
6.262	.0						

	.668	.0	2.088	5.2	3.507	.2	4.926	.1
6.346	.0							
	.752	.0	2.171	3.1	3.590	.2	5.010	.1
6.429	.0							
	.835	.0	2.255	1.9	3.674	.2	5.093	.1
6.513	.0							
	.919	.0	2.338	1.4	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	1.1	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.9	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.7	4.008	.1	5.427	.1
6.847	.0							
	1.253	1.8	2.672	.6	4.091	.1	5.511	.2
6.930	.0							
	1.336	7.1	2.755	.5	4.175	.1	5.594	.2

RUNOFF VOLUME = 1.65518 INCHES = 1.0593 ACRE-FEET
PEAK DISCHARGE RATE = 29.92 CFS AT 1.520 HOURS BASIN AREA = .0120 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-3
COMPUTE NM HYD ID=3 HYD=A.3 AREA=0.004SQ MI
PER A=0 PER B=0 PER C=10 PER D=90
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 14.245 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 1.8700
AREA = .003600 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .105629HR TP = .133000HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = 1.1673 CFS UNIT VOLUME = .9886 B = 388.14 P60 = 1.8700
AREA = .000400 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=3 CODE=5

HYDROGRAPH FROM AREA A.3

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

HRS	CFS							
	.000	.0	1.420	6.8	2.839	.2	4.258	.1
5.678	.1							
	.084	.0	1.503	10.9	2.922	.1	4.342	.1
5.761	.1							
	.167	.0	1.587	8.3	3.006	.1	4.425	.1
5.845	.1							
	.251	.0	1.670	5.6	3.089	.1	4.509	.1
5.928	.1							
	.334	.0	1.754	4.3	3.173	.1	4.592	.1
6.012	.1							
	.418	.0	1.837	3.6	3.256	.1	4.676	.1
6.095	.1							
	.501	.0	1.921	3.1	3.340	.1	4.759	.1
6.179	.0							
	.585	.0	2.004	2.6	3.423	.1	4.843	.1
6.262	.0							
	.668	.0	2.088	2.1	3.507	.1	4.926	.1
6.346	.0							
	.752	.0	2.171	1.2	3.590	.1	5.010	.1
6.429	.0							
	.835	.0	2.255	.7	3.674	.1	5.093	.1
6.513	.0							
	.919	.0	2.338	.6	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	.4	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.3	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.3	4.008	.1	5.427	.1
	1.253	.8	2.672	.2	4.091	.1	5.511	.1
	1.336	3.0	2.755	.2	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.86838 INCHES = .3986 ACRE-FEET
PEAK DISCHARGE RATE = 10.86 CFS AT 1.503 HOURS BASIN AREA = .0040 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-4
COMPUTE NM HYD ID=4 HYD=A.4 AREA=0.02485Q MI
PER A=0 PER B=5 PER C=20 PER D=75
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 73.599 CFS UNIT VOLUME = .9998 B = 526.28 P60 = 1.8700
AREA = .018600 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR

RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .110642HR TP = .133000HR K/TP RATIO = .831897 SHAPE CONSTANT, N = 4.287760
UNIT PEAK = 17.431 CFS UNIT VOLUME = .9992 B = 373.92 P60 = 1.8700
AREA = .006200 SQ MI IA = .38000 INCHES INF = .91400 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=4 CODE=5

HYDROGRAPH FROM AREA A.4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	63.0	3.006	.7	4.509	.3
6.012 .4							
.084	.0	1.587	48.9	3.089	.6	4.592	.3
6.095 .3							
.167	.0	1.670	32.5	3.173	.5	4.676	.3
6.179 .1							
.251	.0	1.754	24.6	3.256	.5	4.759	.3
6.262 .1							
.334	.0	1.837	20.2	3.340	.4	4.843	.3
6.346 .0							
.418	.0	1.921	16.9	3.423	.4	4.926	.3
6.429 .0							
.501	.0	2.004	14.2	3.507	.4	5.010	.3
6.513 .0							
.585	.0	2.088	11.2	3.590	.4	5.093	.3
6.596 .0							
.668	.0	2.171	6.6	3.674	.3	5.177	.3
6.680 .0							
.752	.0	2.255	4.2	3.757	.3	5.260	.3
6.763 .0							
.835	.0	2.338	3.1	3.841	.3	5.344	.3
6.847 .0							
.919	.0	2.421	2.4	3.924	.3	5.427	.3
6.930 .0							
1.002	.0	2.505	1.9	4.008	.3	5.511	.3
7.014 .0							
1.086	.0	2.588	1.5	4.091	.3	5.594	.3
7.097 .0							
1.169	.1	2.672	1.3	4.175	.3	5.678	.3
1.253	3.9	2.755	1.0	4.258	.3	5.761	.4
1.336	15.5	2.839	.9	4.342	.3	5.845	.4
1.420	38.3	2.922	.8	4.425	.3	5.928	.4

RUNOFF VOLUME = 1.70386 INCHES = 2.2536 ACRE-FEET
PEAK DISCHARGE RATE = 62.99 CFS AT 1.520 HOURS BASIN AREA = .0248 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-5
COMPUTE NM HYD ID=5 HYD=A.5 AREA=0.0076SQ MI
PER A=0 PER B=0 PER C=10 PER D=90
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 27.066 CFS UNIT VOLUME = .9996 B = 526.28 P60 = 1.8700
AREA = .006840 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .105629HR TP = .133000HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = 2.2180 CFS UNIT VOLUME = .9939 B = 388.14 P60 = 1.8700
AREA = .000760 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=5 CODE=5

HYDROGRAPH FROM AREA A.5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	12.9	2.839	.3	4.258	.1
.084	.0	1.503	20.6	2.922	.3	4.342	.1
.167	.0	1.587	15.8	3.006	.2	4.425	.1
.251	.0	1.670	10.6	3.089	.2	4.509	.1
.334	.0	1.754	8.2	3.173	.2	4.592	.1
.418	.0	1.837	6.8	3.256	.2	4.676	.1
.501	.0	1.921	5.8	3.340	.1	4.759	.1
.585	.0	2.004	5.0	3.423	.1	4.843	.1

	.668	.0	2.088	4.0	3.507	.1	4.926	.1
6.346	.0							
	.752	.0	2.171	2.3	3.590	.1	5.010	.1
6.429	.0							
	.835	.0	2.255	1.4	3.674	.1	5.093	.1
6.513	.0							
	.919	.0	2.338	1.0	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	.8	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.6	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.5	4.008	.1	5.427	.1
6.847	.0							
	1.253	1.4	2.672	.4	4.091	.1	5.511	.1
	1.336	5.6	2.755	.4	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.86838 INCHES = .7573 ACRE-FEET
PEAK DISCHARGE RATE = 20.63 CFS AT 1.503 HOURS BASIN AREA = .0076 SQ. MI.

```
*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-6
COMPUTE NM HYD        ID=6  HYD=A.6  AREA=0.0044SQ MI
                            PER A=0  PER B=5  PER C=10  PER D=85
                            TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   14.799    CFS   UNIT VOLUME =    .9992       B =   526.28      P60 = 1.8700
     AREA =      .003740 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700


     K =   .113985HR    TP =   .133000HR    K/TP RATIO =   .857028     SHAPE CONSTANT, N =  4.150447
     UNIT PEAK =   1.8117    CFS   UNIT VOLUME =    .9925       B =   365.08      P60 = 1.8700
     AREA =      .000660 SQ MI    IA =    .40000 INCHES    INF =    .97000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

PRINT HYD             ID=6     CODE=5
```

HYDROGRAPH FROM AREA A.6

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

	.000	.0	1.420	7.2	2.839	.2	4.258	.1
5.678	.1							
	.084	.0	1.503	11.6	2.922	.1	4.342	.1
5.761	.1							
	.167	.0	1.587	8.9	3.006	.1	4.425	.1
5.845	.1							
	.251	.0	1.670	6.0	3.089	.1	4.509	.1
5.928	.1							
	.334	.0	1.754	4.6	3.173	.1	4.592	.1
6.012	.1							
	.418	.0	1.837	3.8	3.256	.1	4.676	.1
6.095	.1							
	.501	.0	1.921	3.2	3.340	.1	4.759	.1
6.179	.0							
	.585	.0	2.004	2.7	3.423	.1	4.843	.1
6.262	.0							
	.668	.0	2.088	2.2	3.507	.1	4.926	.1
6.346	.0							
	.752	.0	2.171	1.3	3.590	.1	5.010	.1
6.429	.0							
	.835	.0	2.255	.8	3.674	.1	5.093	.1
6.513	.0							
	.919	.0	2.338	.6	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	.5	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.4	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.3	4.008	.1	5.427	.1
	1.253	.8	2.672	.2	4.091	.1	5.511	.1
	1.336	3.1	2.755	.2	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.80138 INCHES = .4227 ACRE-FEET
PEAK DISCHARGE RATE = 11.61 CFS AT 1.503 HOURS BASIN AREA = .0044 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-7
COMPUTE NM HYD ID=7 HYD=A.7 AREA=0.0024SQ MI
PER A=0 PER B=0 PER C=10 PER D=90
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 8.5470 CFS UNIT VOLUME = .9986 B = 526.28 P60 = 1.8700
AREA = .002160 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .105629HR TP = .133000HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = .70041 CFS UNIT VOLUME = .9806 B = 388.14 P60 = 1.8700
AREA = .000240 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=7 CODE=5

HYDROGRAPH FROM AREA A.7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.336	1.8	2.672	.1	4.008	.0
.084	.0	1.420	4.1	2.755	.1	4.091	.0
.167	.0	1.503	6.5	2.839	.1	4.175	.0
.251	.0	1.587	5.0	2.922	.1	4.258	.0
.334	.0	1.670	3.3	3.006	.1	4.342	.0
.418	.0	1.754	2.6	3.089	.1	4.425	.0
.501	.0	1.837	2.2	3.173	.1	4.509	.0
.585	.0	1.921	1.8	3.256	.0	4.592	.0
.668	.0	2.004	1.6	3.340	.0	4.676	.0
.752	.0	2.088	1.3	3.423	.0	4.759	.0
.835	.0	2.171	.7	3.507	.0	4.843	.0
.919	.0	2.255	.5	3.590	.0	4.926	.0
1.002	.0	2.338	.3	3.674	.0	5.010	.0
1.086	.0	2.421	.3	3.757	.0	5.093	.0
1.169	.0	2.505	.2	3.841	.0	5.177	.0
1.253	.5	2.588	.2	3.924	.0	5.260	.0
1.336	1.8	2.672	.1	4.008	.0	5.344	.0
1.420	4.1	2.755	.1	4.091	.0	5.427	.0
1.503	6.5	2.839	.1	4.175	.0	5.511	.0
1.587	5.0	2.922	.1	4.258	.0	5.594	.0
1.670	3.3	3.006	.1	4.342	.0	5.678	.0
1.754	2.6	3.089	.1	4.425	.0	5.761	.0
1.837	2.2	3.173	.1	4.509	.0	5.845	.0
1.921	1.8	3.256	.0	4.592	.0	5.928	.0
2.004	1.6	3.340	.0	4.676	.0	6.012	.0
2.088	1.3	3.423	.0	4.759	.0	6.095	.0
2.171	.7	3.507	.0	4.843	.0	6.179	.0
2.255	.5	3.590	.0	4.926	.0	6.262	.0
2.338	.3	3.674	.0	5.010	.0	6.346	.0
2.421	.3	3.757	.0	5.093	.0	6.429	.0
2.505	.2	3.841	.0	5.177	.0	6.513	.0
2.588	.2	3.924	.0	5.260	.0	6.596	.0

RUNOFF VOLUME = 1.86838 INCHES = .2392 ACRE-FEET
PEAK DISCHARGE RATE = 6.53 CFS AT 1.503 HOURS BASIN AREA = .0024 SQ. MI.

```
*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-8
COMPUTE NM HYD        ID=8  HYD=A.8  AREA=0.0019SQ MI
                            PER A=0  PER B=0  PER C=10  PER D=90
                            TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000    SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   6.7664    CFS   UNIT VOLUME =    .9982       B =   526.28      P60 = 1.8700
     AREA =      .001710 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

     K =   .105629HR    TP =   .133000HR    K/TP RATIO =   .794199    SHAPE CONSTANT, N =  4.514851
     UNIT PEAK =   .55449    CFS   UNIT VOLUME =    .9761       B =   388.14      P60 = 1.8700
     AREA =      .000190 SQ MI    IA =    .35000 INCHES    INF =    .83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

PRINT HYD             ID=8     CODE=5
```

HYDROGRAPH FROM AREA A.8

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.336	1.4	2.672	.1	4.008	.0
5.344	.0						
.084	.0	1.420	3.2	2.755	.1	4.091	.0
5.427	.0						
.167	.0	1.503	5.2	2.839	.1	4.175	.0
5.511	.0						
.251	.0	1.587	4.0	2.922	.1	4.258	.0
5.594	.0						
.334	.0	1.670	2.6	3.006	.1	4.342	.0
5.678	.0						
.418	.0	1.754	2.0	3.089	.0	4.425	.0
5.761	.0						
.501	.0	1.837	1.7	3.173	.0	4.509	.0
5.845	.0						
.585	.0	1.921	1.5	3.256	.0	4.592	.0
5.928	.0						
.668	.0	2.004	1.2	3.340	.0	4.676	.0

6.012	.0							
	.752	.0	2.088	1.0	3.423	.0	4.759	.0
6.095	.0							
	.835	.0	2.171	.6	3.507	.0	4.843	.0
6.179	.0							
	.919	.0	2.255	.4	3.590	.0	4.926	.0
6.262	.0							
	1.002	.0	2.338	.3	3.674	.0	5.010	.0
6.346	.0							
	1.086	.0	2.421	.2	3.757	.0	5.093	.0
6.429	.0							
	1.169	.0	2.505	.2	3.841	.0	5.177	.0
6.513	.0							
	1.253	.4	2.588	.1	3.924	.0	5.260	.0
6.596	.0							

RUNOFF VOLUME = 1.86838 INCHES = .1893 ACRE-FEET
PEAK DISCHARGE RATE = 5.17 CFS AT 1.503 HOURS BASIN AREA = .0019 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN A-9
COMPUTE NM HYD ID=9 HYD=A.9 AREA=0.0059SQ MI
PER A=0 PER B=5 PER C=10 PER D=85
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 19.844 CFS UNIT VOLUME = .9994 B = 526.28 P60 = 1.8700
AREA = .005015 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .113985HR TP = .133000HR K/TP RATIO = .857028 SHAPE CONSTANT, N = 4.150447
UNIT PEAK = 2.4293 CFS UNIT VOLUME = .9944 B = 365.08 P60 = 1.8700
AREA = .000885 SQ MI IA = .40000 INCHES INF = .97000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=9 CODE=5

HYDROGRAPH FROM AREA A.9

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	9.6	2.839	.2	4.258	.1

5.678	.1							
	.084	.0	1.503	15.6	2.922	.2	4.342	.1
5.761	.1							
	.167	.0	1.587	12.0	3.006	.2	4.425	.1
5.845	.1							
	.251	.0	1.670	8.0	3.089	.1	4.509	.1
5.928	.1							
	.334	.0	1.754	6.1	3.173	.1	4.592	.1
6.012	.1							
	.418	.0	1.837	5.1	3.256	.1	4.676	.1
6.095	.1							
	.501	.0	1.921	4.3	3.340	.1	4.759	.1
6.179	.0							
	.585	.0	2.004	3.7	3.423	.1	4.843	.1
6.262	.0							
	.668	.0	2.088	2.9	3.507	.1	4.926	.1
6.346	.0							
	.752	.0	2.171	1.7	3.590	.1	5.010	.1
6.429	.0							
	.835	.0	2.255	1.1	3.674	.1	5.093	.1
6.513	.0							
	.919	.0	2.338	.8	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	.6	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.5	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.4	4.008	.1	5.427	.1
6.847	.0							
	1.253	1.1	2.672	.3	4.091	.1	5.511	.1
	1.336	4.1	2.755	.3	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.80138 INCHES = .5668 ACRE-FEET
PEAK DISCHARGE RATE = 15.56 CFS AT 1.503 HOURS BASIN AREA = .0059 SQ. MI.

```
*S
*S**************************************************************
*S*   COMBINE HYDS FROM BASIN A
*S**************************************************************
*S
*S  COMBINE BASIN A.1 + BASIN A.2 FOR ANALYSIS POINT AP-1
ADD HYD               ID=10  HYD=AP.1
                      ID I=1 ID II=2
PRINT HYD             ID=10     CODE=5
```

HYDROGRAPH FROM AREA AP.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	27.0	2.839	.6	4.258	.2
5.678 .2							
.084	.0	1.503	44.3	2.922	.5	4.342	.2
5.761 .3							
.167	.0	1.587	34.3	3.006	.4	4.425	.2
5.845 .3							
.251	.0	1.670	22.8	3.089	.4	4.509	.2
5.928 .3							
.334	.0	1.754	17.3	3.173	.4	4.592	.2
6.012 .3							
.418	.0	1.837	14.2	3.256	.3	4.676	.2
6.095 .2							
.501	.0	1.921	11.9	3.340	.3	4.759	.2
6.179 .1							
.585	.0	2.004	10.1	3.423	.3	4.843	.2
6.262 .0							
.668	.0	2.088	8.0	3.507	.3	4.926	.2
6.346 .0							
.752	.0	2.171	4.7	3.590	.2	5.010	.2
6.429 .0							
.835	.0	2.255	2.9	3.674	.2	5.093	.2
6.513 .0							
.919	.0	2.338	2.2	3.757	.2	5.177	.2
6.596 .0							
1.002	.0	2.421	1.7	3.841	.2	5.260	.2
6.680 .0							
1.086	.0	2.505	1.3	3.924	.2	5.344	.2
6.763 .0							
1.169	.1	2.588	1.1	4.008	.2	5.427	.2
6.847 .0							
1.253	2.8	2.672	.9	4.091	.2	5.511	.2
6.930 .0							
1.336	11.0	2.755	.7	4.175	.2	5.594	.2

RUNOFF VOLUME = 1.72046 INCHES = 1.5874 ACRE-FEET
PEAK DISCHARGE RATE = 44.29 CFS AT 1.520 HOURS BASIN AREA = .0173 SQ. MI.

```
*S
*S
*S  COMBINE AP-1 + BASIN A.3 FOR ANALYSIS POINT AP-2
ADD HYD                ID=11  HYD=AP.2
```

PRINT HYD ID I=10 ID II=3 ID=11 CODE=5

HYDROGRAPH FROM AREA AP.2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	33.8	2.839	.8	4.258	.3
5.678 .3							
.084	.0	1.503	55.1	2.922	.7	4.342	.3
5.761 .3							
.167	.0	1.587	42.7	3.006	.6	4.425	.3
5.845 .3							
.251	.0	1.670	28.4	3.089	.5	4.509	.3
5.928 .3							
.334	.0	1.754	21.6	3.173	.4	4.592	.3
6.012 .3							
.418	.0	1.837	17.8	3.256	.4	4.676	.3
6.095 .3							
.501	.0	1.921	15.0	3.340	.4	4.759	.3
6.179 .1							
.585	.0	2.004	12.7	3.423	.3	4.843	.3
6.262 .1							
.668	.0	2.088	10.0	3.507	.3	4.926	.3
6.346 .0							
.752	.0	2.171	5.9	3.590	.3	5.010	.3
6.429 .0							
.835	.0	2.255	3.7	3.674	.3	5.093	.3
6.513 .0							
.919	.0	2.338	2.7	3.757	.3	5.177	.3
6.596 .0							
1.002	.0	2.421	2.1	3.841	.3	5.260	.3
6.680 .0							
1.086	.0	2.505	1.7	3.924	.3	5.344	.3
6.763 .0							
1.169	.1	2.588	1.3	4.008	.3	5.427	.3
6.847 .0							
1.253	3.5	2.672	1.1	4.091	.3	5.511	.3
6.930 .0							
1.336	14.0	2.755	.9	4.175	.3	5.594	.3

RUNOFF VOLUME = 1.74823 INCHES = 1.9860 ACRE-FEET
PEAK DISCHARGE RATE = 55.14 CFS AT 1.503 HOURS BASIN AREA = .0213 SQ. MI.

```
*S
*S
*S  COMBINE AP-2 + BASIN A.4 FOR ANALYSIS POINT AP-3
ADD HYD                ID=12  HYD=AP.3
                       ID I=11 ID II=4
PRINT HYD              ID=12     CODE=5
```

HYDROGRAPH FROM AREA AP.3

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	118.1	3.006	1.2	4.509	.6
.084	.0	1.587	91.5	3.089	1.1	4.592	.6
.167	.0	1.670	60.9	3.173	1.0	4.676	.6
.251	.0	1.754	46.3	3.256	.9	4.759	.6
.334	.0	1.837	38.0	3.340	.8	4.843	.6
.418	.0	1.921	31.9	3.423	.7	4.926	.6
.501	.0	2.004	26.9	3.507	.7	5.010	.6
.585	.0	2.088	21.3	3.590	.7	5.093	.6
.668	.0	2.171	12.5	3.674	.6	5.177	.6
.752	.0	2.255	7.8	3.757	.6	5.260	.6
.835	.0	2.338	5.8	3.841	.6	5.344	.6
.919	.0	2.421	4.5	3.924	.6	5.427	.6
1.002	.0	2.505	3.6	4.008	.6	5.511	.6
1.086	.0	2.588	2.9	4.091	.6	5.594	.7
1.169	.1	2.672	2.4	4.175	.6	5.678	.7
1.253	7.5	2.755	2.0	4.258	.6	5.761	.7
1.336	29.5	2.839	1.6	4.342	.6	5.845	.7
1.420	72.2	2.922	1.4	4.425	.6	5.928	.7

RUNOFF VOLUME = 1.72435 INCHES = 4.2396 ACRE-FEET
PEAK DISCHARGE RATE = 118.13 CFS AT 1.520 HOURS BASIN AREA = .0461 SQ. MI.

```
*S
*S
*S  COMBINE AP-3 + BASIN A.5 FOR ANALYSIS POINT AP-4
ADD HYD                ID=13  HYD=AP.4
                       ID I=12 ID II=5
PRINT HYD              ID=13     CODE=5
```

HYDROGRAPH FROM AREA AP.4

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	138.7	3.006	1.4	4.509	.7
.084	.0	1.587	107.3	3.089	1.3	4.592	.7
.167	.0	1.670	71.4	3.173	1.1	4.676	.7
.251	.0	1.754	54.5	3.256	1.0	4.759	.7
.334	.0	1.837	44.9	3.340	1.0	4.843	.7
.418	.0	1.921	37.7	3.423	.9	4.926	.7
.501	.0	2.004	31.8	3.507	.8	5.010	.7
.585	.0	2.088	25.2	3.590	.8	5.093	.7
.668	.0	2.171	14.8	3.674	.8	5.177	.7
.752	.0	2.255	9.3	3.757	.7	5.260	.7
.835	.0	2.338	6.9	3.841	.7	5.344	.7
.919	.0	2.421	5.3	3.924	.7	5.427	.8
1.002	.0	2.505	4.2	4.008	.7	5.511	.8
1.086	.0	2.588	3.4	4.091	.7	5.594	.8
1.169	.2	2.672	2.8	4.175	.7	5.678	.8
1.253	8.9	2.755	2.3	4.258	.7	5.761	.8
1.336	35.1	2.839	1.9	4.342	.7	5.845	.8
1.420	85.1	2.922	1.7	4.425	.7	5.928	.8

RUNOFF VOLUME = 1.74473 INCHES = 4.9969 ACRE-FEET
PEAK DISCHARGE RATE = 138.73 CFS AT 1.520 HOURS BASIN AREA = .0537 SQ. MI.

```
*S
*S
*S  COMBINE BASIN A.6 + BASIN A.7 FOR ANALYSIS POINT AP-5
ADD HYD                ID=14  HYD=AP.5
                       ID I=6 ID II=7
PRINT HYD              ID=14     CODE=5
```

HYDROGRAPH FROM AREA AP.5

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	11.3	2.839	.2	4.258	.1
5.678 .1							
.084	.0	1.503	18.1	2.922	.2	4.342	.1
5.761 .1							
.167	.0	1.587	14.0	3.006	.2	4.425	.1
5.845 .1							
.251	.0	1.670	9.3	3.089	.2	4.509	.1
5.928 .1							
.334	.0	1.754	7.2	3.173	.1	4.592	.1
6.012 .1							
.418	.0	1.837	6.0	3.256	.1	4.676	.1
6.095 .1							
.501	.0	1.921	5.0	3.340	.1	4.759	.1
6.179 .0							
.585	.0	2.004	4.3	3.423	.1	4.843	.1
6.262 .0							
.668	.0	2.088	3.4	3.507	.1	4.926	.1
6.346 .0							
.752	.0	2.171	2.0	3.590	.1	5.010	.1
6.429 .0							
.835	.0	2.255	1.2	3.674	.1	5.093	.1
6.513 .0							
.919	.0	2.338	.9	3.757	.1	5.177	.1
6.596 .0							
1.002	.0	2.421	.7	3.841	.1	5.260	.1
6.680 .0							
1.086	.0	2.505	.6	3.924	.1	5.344	.1
6.763 .0							
1.169	.0	2.588	.4	4.008	.1	5.427	.1

1.253	1.2	2.672	.4	4.091	.1	5.511	.1
1.336	4.9	2.755	.3	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.82494 INCHES = .6618 ACRE-FEET
PEAK DISCHARGE RATE = 18.13 CFS AT 1.503 HOURS BASIN AREA = .0068 SQ. MI.

```
*S
*S
*S  COMBINE AP-4 + AP-5 FOR ANALYSIS POINT AP-6
ADD HYD                ID=15  HYD=AP.6
                       ID I=13 ID II=14
PRINT HYD              ID=15     CODE=5
```

HYDROGRAPH FROM AREA AP.6

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	156.9	3.006	1.6	4.509	.8
6.012	1.0						
.084	.0	1.587	121.3	3.089	1.4	4.592	.8
6.095	.8						
.167	.0	1.670	80.7	3.173	1.3	4.676	.8
6.179	.4						
.251	.0	1.754	61.6	3.256	1.2	4.759	.8
6.262	.2						
.334	.0	1.837	50.8	3.340	1.1	4.843	.8
6.346	.1						
.418	.0	1.921	42.7	3.423	1.0	4.926	.8
6.429	.1						
.501	.0	2.004	36.1	3.507	1.0	5.010	.8
6.513	.0						
.585	.0	2.088	28.7	3.590	.9	5.093	.8
6.596	.0						
.668	.0	2.171	16.7	3.674	.9	5.177	.8
6.680	.0						
.752	.0	2.255	10.5	3.757	.8	5.260	.8
6.763	.0						
.835	.0	2.338	7.8	3.841	.8	5.344	.8
6.847	.0						
.919	.0	2.421	6.0	3.924	.8	5.427	.9
6.930	.0						
1.002	.0	2.505	4.8	4.008	.8	5.511	.9
7.014	.0						
1.086	.0	2.588	3.9	4.091	.8	5.594	.9

7.097	.0						
1.169	.2	2.672	3.2	4.175	.8	5.678	.9
1.253	10.1	2.755	2.6	4.258	.8	5.761	.9
1.336	40.0	2.839	2.2	4.342	.8	5.845	.9
1.420	96.3	2.922	1.9	4.425	.8	5.928	1.0

RUNOFF VOLUME = 1.75375 INCHES = 5.6587 ACRE-FEET
PEAK DISCHARGE RATE = 156.86 CFS AT 1.503 HOURS BASIN AREA = .0605 SQ. MI.

```
*S
*S
*S  COMBINE AP-6 + BASIN A.9 FOR ANALYSIS POINT AP-7
ADD HYD                ID=16  HYD=AP.7
                       ID I=15 ID II=9
PRINT HYD              ID=16     CODE=5
```

HYDROGRAPH FROM AREA AP.7

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	172.4	3.006	1.8	4.509	.8
6.012	1.1						
.084	.0	1.587	133.3	3.089	1.6	4.592	.8
6.095	.9						
.167	.0	1.670	88.7	3.173	1.4	4.676	.8
6.179	.4						
.251	.0	1.754	67.8	3.256	1.3	4.759	.9
6.262	.2						
.334	.0	1.837	55.9	3.340	1.2	4.843	.9
6.346	.1						
.418	.0	1.921	47.0	3.423	1.1	4.926	.9
6.429	.1						
.501	.0	2.004	39.8	3.507	1.1	5.010	.9
6.513	.1						
.585	.0	2.088	31.6	3.590	1.0	5.093	.9
6.596	.0						
.668	.0	2.171	18.4	3.674	1.0	5.177	.9
6.680	.0						
.752	.0	2.255	11.6	3.757	.9	5.260	.9
6.763	.0						
.835	.0	2.338	8.6	3.841	.9	5.344	.9
6.847	.0						
.919	.0	2.421	6.7	3.924	.9	5.427	.9
6.930	.0						

	1.002	.0	2.505	5.3	4.008	.9	5.511	1.0
7.014	.0							
	1.086	.0	2.588	4.2	4.091	.9	5.594	1.0
7.097	.0							
	1.169	.2	2.672	3.5	4.175	.8	5.678	1.0
	1.253	11.2	2.755	2.9	4.258	.8	5.761	1.0
	1.336	44.1	2.839	2.4	4.342	.8	5.845	1.0
	1.420	106.0	2.922	2.1	4.425	.8	5.928	1.1

RUNOFF VOLUME = 1.75797 INCHES = 6.2255 ACRE-FEET
PEAK DISCHARGE RATE = 172.42 CFS AT 1.503 HOURS BASIN AREA = .0664 SQ. MI.

```
*S
*S
*S  COMBINE AP-6 + BASIN A.8 FOR ANALYSIS POINT AP-8
ADD HYD                ID=17  HYD=AP.8
                       ID I=16 ID II=8
PRINT HYD              ID=17     CODE=5
```

HYDROGRAPH FROM AREA AP.8

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	177.6	3.006	1.8	4.509	.9
6.012	1.1						
.084	.0	1.587	137.3	3.089	1.6	4.592	.9
6.095	.9						
.167	.0	1.670	91.4	3.173	1.5	4.676	.9
6.179	.4						
.251	.0	1.754	69.8	3.256	1.3	4.759	.9
6.262	.2						
.334	.0	1.837	57.6	3.340	1.2	4.843	.9
6.346	.1						
.418	.0	1.921	48.5	3.423	1.1	4.926	.9
6.429	.1						
.501	.0	2.004	41.1	3.507	1.1	5.010	.9
6.513	.1						
.585	.0	2.088	32.6	3.590	1.0	5.093	.9
6.596	.0						
.668	.0	2.171	19.0	3.674	1.0	5.177	.9
6.680	.0						
.752	.0	2.255	11.9	3.757	1.0	5.260	.9
6.763	.0						
.835	.0	2.338	8.8	3.841	.9	5.344	1.0

6.847	.0							
	.919	.0	2.421	6.9	3.924	.9	5.427	1.0
6.930	.0							
	1.002	.0	2.505	5.4	4.008	.9	5.511	1.0
7.014	.0							
	1.086	.0	2.588	4.4	4.091	.9	5.594	1.0
7.097	.0							
	1.169	.2	2.672	3.6	4.175	.9	5.678	1.0
	1.253	11.6	2.755	3.0	4.258	.9	5.761	1.1
	1.336	45.5	2.839	2.5	4.342	.9	5.845	1.1
	1.420	109.2	2.922	2.1	4.425	.9	5.928	1.1

RUNOFF VOLUME = 1.76104 INCHES = 6.4148 ACRE-FEET
PEAK DISCHARGE RATE = 177.59 CFS AT 1.503 HOURS BASIN AREA = .0683 SQ. MI.

```
*S
*S**************************************************************************
*S*  COMPUTE BASIN B DEVELOPED CONDITIONS
*S**************************************************************************

*S COMPUTE HYDROGRAPH FOR BASIN B-1
COMPUTE NM HYD        ID=18  HYD=B.1  AREA=0.0270SQ MI
                             PER A=0  PER B=5  PER C=10  PER D=85
                             TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   90.812    CFS   UNIT VOLUME =    .9999       B =   526.28      P60 = 1.8700
     AREA =      .022950 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700


     K =   .113985HR    TP =   .133000HR    K/TP RATIO =   .857028     SHAPE CONSTANT, N =  4.150447
     UNIT PEAK =   11.117    CFS   UNIT VOLUME =    .9988       B =   365.08      P60 = 1.8700
     AREA =      .004050 SQ MI    IA =    .40000 INCHES    INF =    .97000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

PRINT HYD             ID=18     CODE=5
```

HYDROGRAPH FROM AREA B.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	71.1	3.006	.8	4.509	.4
6.012	.5						

	.084	.0	1.587	54.8	3.089	.7	4.592	.4
6.095	.4							
	.167	.0	1.670	36.6	3.173	.6	4.676	.4
6.179	.2							
	.251	.0	1.754	28.1	3.256	.6	4.759	.4
6.262	.1							
	.334	.0	1.837	23.3	3.340	.5	4.843	.4
6.346	.0							
	.418	.0	1.921	19.7	3.423	.5	4.926	.4
6.429	.0							
	.501	.0	2.004	16.8	3.507	.5	5.010	.4
6.513	.0							
	.585	.0	2.088	13.4	3.590	.4	5.093	.4
6.596	.0							
	.668	.0	2.171	7.8	3.674	.4	5.177	.4
6.680	.0							
	.752	.0	2.255	4.9	3.757	.4	5.260	.4
6.763	.0							
	.835	.0	2.338	3.6	3.841	.4	5.344	.4
6.847	.0							
	.919	.0	2.421	2.8	3.924	.4	5.427	.4
6.930	.0							
	1.002	.0	2.505	2.2	4.008	.4	5.511	.4
7.014	.0							
	1.086	.0	2.588	1.8	4.091	.4	5.594	.4
7.097	.0							
	1.169	.1	2.672	1.5	4.175	.4	5.678	.4
7.181	.0							
	1.253	4.8	2.755	1.2	4.258	.4	5.761	.4
	1.336	18.8	2.839	1.0	4.342	.4	5.845	.5
	1.420	44.0	2.922	.9	4.425	.4	5.928	.5

RUNOFF VOLUME = 1.80138 INCHES = 2.5940 ACRE-FEET
PEAK DISCHARGE RATE = 71.15 CFS AT 1.503 HOURS BASIN AREA = .0270 SQ. MI.

*S
*S
*S COMPUTE HYDROGRAPH FOR BASIN B-2
COMPUTE NM HYD ID=19 HYD=B.2 AREA=0.00135Q MI
PER A=0 PER B=0 PER C=10 PER D=90
TP=-0.133 HR MASS RAIN=-1

K = .072485HR TP = .133000HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 4.6296 CFS UNIT VOLUME = .9973 B = 526.28 P60 = 1.8700
AREA = .001170 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

K = .105629HR TP = .133000HR K/TP RATIO = .794199 SHAPE CONSTANT, N = 4.514851
UNIT PEAK = .37939 CFS UNIT VOLUME = .9635 B = 388.14 P60 = 1.8700
AREA = .000130 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .016700

PRINT HYD ID=19 CODE=5

HYDROGRAPH FROM AREA B.2

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.336	1.0	2.672	.1	4.008	.0
5.344 .0							
.084	.0	1.420	2.2	2.755	.1	4.091	.0
5.427 .0							
.167	.0	1.503	3.5	2.839	.0	4.175	.0
5.511 .0							
.251	.0	1.587	2.7	2.922	.0	4.258	.0
5.594 .0							
.334	.0	1.670	1.8	3.006	.0	4.342	.0
5.678 .0							
.418	.0	1.754	1.4	3.089	.0	4.425	.0
5.761 .0							
.501	.0	1.837	1.2	3.173	.0	4.509	.0
5.845 .0							
.585	.0	1.921	1.0	3.256	.0	4.592	.0
5.928 .0							
.668	.0	2.004	.9	3.340	.0	4.676	.0
6.012 .0							
.752	.0	2.088	.7	3.423	.0	4.759	.0
6.095 .0							
.835	.0	2.171	.4	3.507	.0	4.843	.0
6.179 .0							
.919	.0	2.255	.2	3.590	.0	4.926	.0
6.262 .0							
1.002	.0	2.338	.2	3.674	.0	5.010	.0
6.346 .0							
1.086	.0	2.421	.1	3.757	.0	5.093	.0
6.429 .0							
1.169	.0	2.505	.1	3.841	.0	5.177	.0
6.513 .0							
1.253	.2	2.588	.1	3.924	.0	5.260	.0

RUNOFF VOLUME = 1.86838 INCHES = .1295 ACRE-FEET

PEAK DISCHARGE RATE = 3.54 CFS AT 1.503 HOURS BASIN AREA = .0013 SQ. MI.

```
*S
*S**************************************************************************
*S*   COMBINE HYDS FROM BASIN B AND COMBINE WITH BASIN A
*S**************************************************************************
*S
*S  COMBINE BASIN B.1 + BASIN B.2 FOR ANALYSIS POINT AP-9
ADD HYD              ID=20  HYD=AP.9
                     ID I=18 ID II=19
PRINT HYD            ID=20     CODE=5
```

HYDROGRAPH FROM AREA AP.9

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	74.7	3.006	.8	4.509	.4
6.012 .5							
.084	.0	1.587	57.6	3.089	.7	4.592	.4
6.095 .4							
.167	.0	1.670	38.4	3.173	.6	4.676	.4
6.179 .2							
.251	.0	1.754	29.5	3.256	.6	4.759	.4
6.262 .1							
.334	.0	1.837	24.5	3.340	.5	4.843	.4
6.346 .1							
.418	.0	1.921	20.7	3.423	.5	4.926	.4
6.429 .0							
.501	.0	2.004	17.6	3.507	.5	5.010	.4
6.513 .0							
.585	.0	2.088	14.0	3.590	.5	5.093	.4
6.596 .0							
.668	.0	2.171	8.2	3.674	.4	5.177	.4
6.680 .0							
.752	.0	2.255	5.1	3.757	.4	5.260	.4
6.763 .0							
.835	.0	2.338	3.8	3.841	.4	5.344	.4
6.847 .0							
.919	.0	2.421	2.9	3.924	.4	5.427	.4
6.930 .0							
1.002	.0	2.505	2.3	4.008	.4	5.511	.4
7.014 .0							
1.086	.0	2.588	1.9	4.091	.4	5.594	.4
7.097 .0							

	1.169	.1	2.672	1.5	4.175	.4	5.678	.5
7.181	.0							
	1.253	5.1	2.755	1.3	4.258	.4	5.761	.5
	1.336	19.8	2.839	1.1	4.342	.4	5.845	.5
	1.420	46.3	2.922	.9	4.425	.4	5.928	.5

RUNOFF VOLUME = 1.80444 INCHES = 2.7235 ACRE-FEET
PEAK DISCHARGE RATE = 74.69 CFS AT 1.503 HOURS BASIN AREA = .0283 SQ. MI.

```
*S
*S
*S  COMBINE AP-8 + AP-9 FOR ANALYSIS POINT AP-10
ADD HYD                ID=21  HYD=AP.10
                       ID I=17 ID II=20
PRTNT HYD              ID=21     CODE=5
```

HYDROGRAPH FROM AREA AP.10

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.503	252.3	3.006	2.7	4.509	1.2
6.012 1.6							
.084	.0	1.587	194.8	3.089	2.3	4.592	1.3
6.095 1.3							
.167	.0	1.670	129.7	3.173	2.1	4.676	1.3
6.179 .6							
.251	.0	1.754	99.3	3.256	1.9	4.759	1.3
6.262 .3							
.334	.0	1.837	82.1	3.340	1.8	4.843	1.3
6.346 .2							
.418	.0	1.921	69.1	3.423	1.7	4.926	1.3
6.429 .1							
.501	.0	2.004	58.7	3.507	1.6	5.010	1.3
6.513 .1							
.585	.0	2.088	46.6	3.590	1.5	5.093	1.3
6.596 .1							
.668	.0	2.171	27.2	3.674	1.4	5.177	1.3
6.680 .0							
.752	.0	2.255	17.0	3.757	1.4	5.260	1.4
6.763 .0							
.835	.0	2.338	12.6	3.841	1.3	5.344	1.4
6.847 .0							
.919	.0	2.421	9.8	3.924	1.3	5.427	1.4
6.930 .0							

	1.002	.0	2.505	7.7	4.008	1.3	5.511	1.4
7.014	.0							
	1.086	.0	2.588	6.2	4.091	1.3	5.594	1.5
7.097	.0							
	1.169	.3	2.672	5.1	4.175	1.3	5.678	1.5
7.181	.0							
	1.253	16.6	2.755	4.3	4.258	1.3	5.761	1.5
	1.336	65.3	2.839	3.6	4.342	1.2	5.845	1.5
	1.420	155.5	2.922	3.1	4.425	1.3	5.928	1.6

RUNOFF VOLUME = 1.77376 INCHES = 9.1383 ACRE-FEET
PEAK DISCHARGE RATE = 252.28 CFS AT 1.503 HOURS BASIN AREA = .0966 SQ. MI.

```
*S
*S**************************************************************************
*S*  COMPUTE BASIN C DEVELOPED CONDITIONS
*S**************************************************************************

*S COMPUTE HYDROGRAPH FOR BASIN C-1
COMPUTE NM HYD        ID=22  HYD=C.1  AREA=0.0138SQ MI
                             PER A=0  PER B=35  PER C=35  PER D=30
                             TP=-0.133 HR  MASS RAIN=-1

     K =   .072485HR    TP =   .133000HR    K/TP RATIO =   .545000     SHAPE CONSTANT, N =  7.106420
     UNIT PEAK =   16.382    CFS   UNIT VOLUME =    .9993       B =   526.28      P60 = 1.8700
     AREA =      .004140 SQ MI    IA =    .10000 INCHES    INF =    .04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700


     K =   .118163HR    TP =   .133000HR    K/TP RATIO =   .888442     SHAPE CONSTANT, N =  3.992480
     UNIT PEAK =   25.760    CFS   UNIT VOLUME =    .9995       B =   354.67      P60 = 1.8700
     AREA =      .009660 SQ MI    IA =    .42500 INCHES    INF =   1.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =   .016700

PRINT HYD             ID=22     CODE=5
```

HYDROGRAPH FROM AREA C.1

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	1.420	14.2	2.839	.3	4.258	.1
5.678	.1						
.084	.0	1.503	26.7	2.922	.2	4.342	.1
5.761	.1						

	.167	.0	1.587	21.8	3.006	.2	4.425	.1
5.845	.1							
	.251	.0	1.670	14.4	3.089	.2	4.509	.1
5.928	.1							
	.334	.0	1.754	9.9	3.173	.2	4.592	.1
6.012	.1							
	.418	.0	1.837	7.2	3.256	.1	4.676	.1
6.095	.1							
	.501	.0	1.921	5.5	3.340	.1	4.759	.1
6.179	.0							
	.585	.0	2.004	4.4	3.423	.1	4.843	.1
6.262	.0							
	.668	.0	2.088	3.4	3.507	.1	4.926	.1
6.346	.0							
	.752	.0	2.171	2.2	3.590	.1	5.010	.1
6.429	.0							
	.835	.0	2.255	1.5	3.674	.1	5.093	.1
6.513	.0							
	.919	.0	2.338	1.1	3.757	.1	5.177	.1
6.596	.0							
	1.002	.0	2.421	.9	3.841	.1	5.260	.1
6.680	.0							
	1.086	.0	2.505	.7	3.924	.1	5.344	.1
6.763	.0							
	1.169	.0	2.588	.6	4.008	.1	5.427	.1
	1.253	.9	2.672	.5	4.091	.1	5.511	.1
	1.336	3.8	2.755	.4	4.175	.1	5.594	.1

RUNOFF VOLUME = 1.16077 INCHES = .8543 ACRE-FEET
PEAK DISCHARGE RATE = 26.90 CFS AT 1.520 HOURS BASIN AREA = .0138 SQ. MI.

```
*S
*S*************************************************************************
*S*   COMBINE HYDS FROM AP-9 AND BASIN C
*S*************************************************************************
*S
*S  COMBINE AP-10 + BASIN C FOR ANALYSIS POINT AP-11
ADD HYD                ID=23  HYD=AP.11
                       ID I=21 ID II=22
PRINT HYD              ID=23     CODE=5
```

HYDROGRAPH FROM AREA AP.11

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

HRS	CFS							
	.000	.0	1.503	279.0	3.006	2.9	4.509	1.3
6.012	1.7							
	.084	.0	1.587	216.6	3.089	2.5	4.592	1.3
6.095	1.4							
	.167	.0	1.670	144.1	3.173	2.3	4.676	1.3
6.179	.6							
	.251	.0	1.754	109.2	3.256	2.0	4.759	1.3
6.262	.3							
	.334	.0	1.837	89.3	3.340	1.9	4.843	1.3
6.346	.2							
	.418	.0	1.921	74.6	3.423	1.8	4.926	1.4
6.429	.1							
	.501	.0	2.004	63.0	3.507	1.7	5.010	1.4
6.513	.1							
	.585	.0	2.088	50.0	3.590	1.6	5.093	1.4
6.596	.1							
	.668	.0	2.171	29.4	3.674	1.5	5.177	1.4
6.680	.0							
	.752	.0	2.255	18.5	3.757	1.5	5.260	1.4
6.763	.0							
	.835	.0	2.338	13.7	3.841	1.4	5.344	1.5
6.847	.0							
	.919	.0	2.421	10.7	3.924	1.4	5.427	1.5
6.930	.0							
	1.002	.0	2.505	8.4	4.008	1.4	5.511	1.5
7.014	.0							
	1.086	.0	2.588	6.8	4.091	1.3	5.594	1.5
7.097	.0							
	1.169	.3	2.672	5.6	4.175	1.3	5.678	1.6
7.181	.0							
	1.253	17.5	2.755	4.6	4.258	1.3	5.761	1.6
	1.336	69.1	2.839	3.9	4.342	1.3	5.845	1.6
	1.420	169.7	2.922	3.3	4.425	1.3	5.928	1.7

RUNOFF VOLUME = 1.69713 INCHES = 9.9926 ACRE-FEET
PEAK DISCHARGE RATE = 279.13 CFS AT 1.520 HOURS BASIN AREA = .1104 SQ. MI.

```
*S
*S
*S
*S**************************************************************
*S*    ROUTE THROUGH RETENTION POND
*S   OUTFALL IS MINIMAL TO ALLOW PROGRAM TO EXECUTE
*S**************************************************************
*S
```

*S
ROUTE RESERVOIR ID=24 HYD=RET1 INFLOW ID=23 CODE=5

OUTFLOW(CFS)	STORAGE(AC FT)	ELEVATION(FT)
0.00	0.01	66.00
0.01	0.21	67.00
0.02	0.53	68.00
0.03	1.01	69.00
0.04	1.67	70.00
0.05	2.55	71.00
0.06	3.66	72.00
0.07	4.99	73.00
0.08	7.20	74.00
0.09	10.20	75.00

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

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
.00	.00	66.00	.010	.00
.08	.00	66.00	.010	.00
.17	.00	66.00	.010	.00
.25	.00	66.00	.010	.00
.33	.00	66.00	.010	.00
.42	.00	66.00	.010	.00
.50	.00	66.00	.010	.00
.58	.00	66.00	.010	.00
.67	.00	66.00	.010	.00
.75	.00	66.00	.010	.00
.84	.00	66.00	.010	.00
.92	.00	66.00	.010	.00
1.00	.00	66.00	.010	.00
1.09	.00	66.00	.010	.00
1.17	.32	66.00	.010	.00
1.25	17.52	66.22	.053	.00
1.34	69.09	67.38	.332	.01
1.42	169.70	69.17	1.124	.03
1.50	278.96	71.16	2.728	.05

1.59	216.61	72.64	4.506	.07
1.67	144.11	73.33	5.723	.07
1.75	109.22	73.72	6.582	.08
1.84	89.30	74.02	7.262	.08
1.92	74.64	74.21	7.825	.08
2.00	63.02	74.37	8.298	.08
2.09	50.03	74.50	8.693	.08
2.17	29.36	74.59	8.964	.09
2.25	18.51	74.64	9.124	.09
2.34	13.70	74.68	9.232	.09
2.42	10.67	74.71	9.315	.09
2.51	8.44	74.73	9.380	.09
2.59	6.79	74.74	9.432	.09
2.67	5.56	74.76	9.474	.09
2.76	4.62	74.77	9.508	.09
2.84	3.88	74.78	9.537	.09
2.92	3.32	74.79	9.561	.09
3.01	2.86	74.79	9.582	.09
3.09	2.51	74.80	9.600	.09
3.17	2.25	74.81	9.615	.09
3.26	2.05	74.81	9.630	.09
3.34	1.89	74.81	9.643	.09
3.42	1.76	74.82	9.655	.09
3.51	1.66	74.82	9.666	.09
3.59	1.59	74.83	9.676	.09
3.67	1.51	74.83	9.686	.09
3.76	1.46	74.83	9.696	.09
3.84	1.42	74.84	9.705	.09
3.92	1.38	74.84	9.714	.09
4.01	1.37	74.84	9.723	.09
4.09	1.34	74.84	9.732	.09
4.18	1.33	74.85	9.741	.09
4.26	1.33	74.85	9.749	.09
4.34	1.31	74.85	9.758	.09
4.43	1.32	74.86	9.766	.09
4.51	1.31	74.86	9.775	.09
4.59	1.32	74.86	9.783	.09

Q = 89.30 cfs @ 1.84 hrs.
Elev = 4974.02

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
4.68	1.32	74.86	9.792	.09
4.76	1.34	74.87	9.800	.09
4.84	1.35	74.87	9.809	.09
4.93	1.35	74.87	9.817	.09
5.01	1.38	74.88	9.826	.09
5.09	1.40	74.88	9.835	.09
5.18	1.41	74.88	9.844	.09

5.26	1.43	74.88	9.854	.09
5.34	1.46	74.89	9.863	.09
5.43	1.48	74.89	9.872	.09
5.51	1.52	74.89	9.882	.09
5.59	1.55	74.90	9.892	.09
5.68	1.55	74.90	9.902	.09
5.76	1.60	74.90	9.913	.09
5.85	1.63	74.91	9.923	.09
5.93	1.66	74.91	9.934	.09
6.01	1.69	74.91	9.945	.09
6.10	1.39	74.92	9.955	.09
6.18	.60	74.92	9.961	.09
6.26	.28	74.92	9.964	.09
6.35	.18	74.92	9.964	.09
6.43	.12	74.92	9.965	.09
6.51	.08	74.92	9.965	.09
6.60	.06	74.92	9.965	.09
6.68	.04	74.92	9.964	.09
6.76	.02	74.92	9.964	.09
6.85	.01	74.92	9.964	.09
6.93	.01	74.92	9.963	.09
7.01	.00	74.92	9.962	.09
7.10	.00	74.92	9.962	.09
7.18	.00	74.92	9.961	.09
7.26	.00	74.92	9.961	.09
7.35	.00	74.92	9.960	.09
7.43	.00	74.92	9.959	.09
7.52	.00	74.92	9.959	.09
7.60	.00	74.92	9.958	.09
7.68	.00	74.92	9.958	.09
7.77	.00	74.92	9.957	.09
7.85	.00	74.92	9.956	.09
7.93	.00	74.92	9.956	.09
8.02	.00	74.92	9.955	.09
8.10	.00	74.92	9.954	.09
8.18	.00	74.92	9.954	.09
8.27	.00	74.92	9.953	.09
8.35	.00	74.92	9.953	.09
8.43	.00	74.92	9.952	.09
8.52	.00	74.92	9.951	.09
8.60	.00	74.92	9.951	.09
8.68	.00	74.92	9.950	.09
8.77	.00	74.92	9.950	.09
8.85	.00	74.92	9.949	.09
8.93	.00	74.92	9.948	.09
9.02	.00	74.92	9.948	.09
9.10	.00	74.92	9.947	.09
9.19	.00	74.92	9.946	.09

9.27	.00	74.92	9.946	.09

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
9.35	.00	74.92	9.945	.09
9.44	.00	74.91	9.945	.09
9.52	.00	74.91	9.944	.09
9.60	.00	74.91	9.943	.09
9.69	.00	74.91	9.943	.09
9.77	.00	74.91	9.942	.09
9.85	.00	74.91	9.942	.09
9.94	.00	74.91	9.941	.09

PEAK DISCHARGE = .089 CFS - PEAK OCCURS AT HOUR 6.50
MAXIMUM WATER SURFACE ELEVATION = 74.922
MAXIMUM STORAGE = 9.9650 AC-FT INCREMENTAL TIME= .016700HRS

PRINT HYD ID=24 CODE=5

HYDROGRAPH FROM AREA RET1

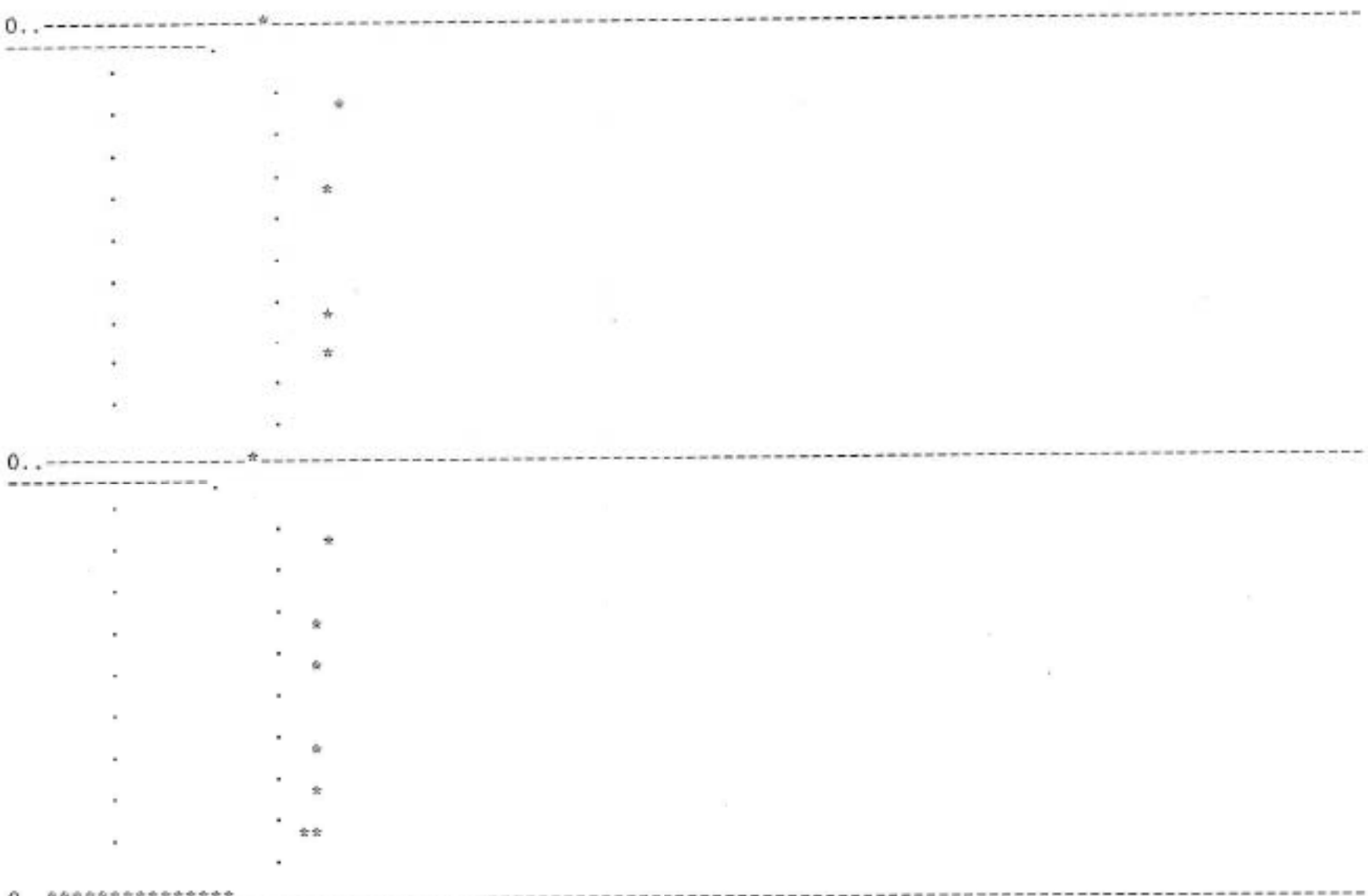
TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
.000	.0	2.004	.1	4.008	.1	6.012	.1
8.016 .1 .084	.0	2.088	.1	4.091	.1	6.095	.1
8.099 .1 .167	.0	2.171	.1	4.175	.1	6.179	.1
8.183 .1 .251	.0	2.255	.1	4.258	.1	6.262	.1
8.266 .1 .334	.0	2.338	.1	4.342	.1	6.346	.1
8.350 .1 .418	.0	2.421	.1	4.425	.1	6.429	.1
8.433 .1 .501	.0	2.505	.1	4.509	.1	6.513	.1
8.517 .1 .585	.0	2.588	.1	4.592	.1	6.596	.1
8.600 .1 .668	.0	2.672	.1	4.676	.1	6.680	.1
8.684 .1 .752	.0	2.755	.1	4.759	.1	6.763	.1
8.767 .1 .835	.0	2.839	.1	4.843	.1	6.847	.1
8.851 .1 .919	.0	2.922	.1	4.926	.1	6.930	.1

8.934	.1								
	1.002	.0	3.006	.1	5.010	.1	7.014	.1	
9.018	.1								
	1.086	.0	3.089	.1	5.093	.1	7.097	.1	
9.101	.1								
	1.169	.0	3.173	.1	5.177	.1	7.181	.1	
9.185	.1								
	1.253	.0	3.256	.1	5.260	.1	7.264	.1	
9.268	.1								
	1.336	.0	3.340	.1	5.344	.1	7.348	.1	
9.352	.1								
	1.420	.0	3.423	.1	5.427	.1	7.431	.1	
9.435	.1								
	1.503	.1	3.507	.1	5.511	.1	7.515	.1	
9.519	.1								
	1.587	.1	3.590	.1	5.594	.1	7.598	.1	
9.602	.1								
	1.670	.1	3.674	.1	5.678	.1	7.682	.1	
9.686	.1								
	1.754	.1	3.757	.1	5.761	.1	7.765	.1	
9.769	.1								
	1.837	.1	3.841	.1	5.845	.1	7.849	.1	
9.853	.1								
	1.921	.1	3.924	.1	5.928	.1	7.932	.1	
9.936	.1								

RUNOFF VOLUME = .01058 INCHES = .0623 ACRE-FEET
PEAK DISCHARGE RATE = .09 CFS AT 6.496 HOURS BASIN AREA = .1104 SQ. MI.

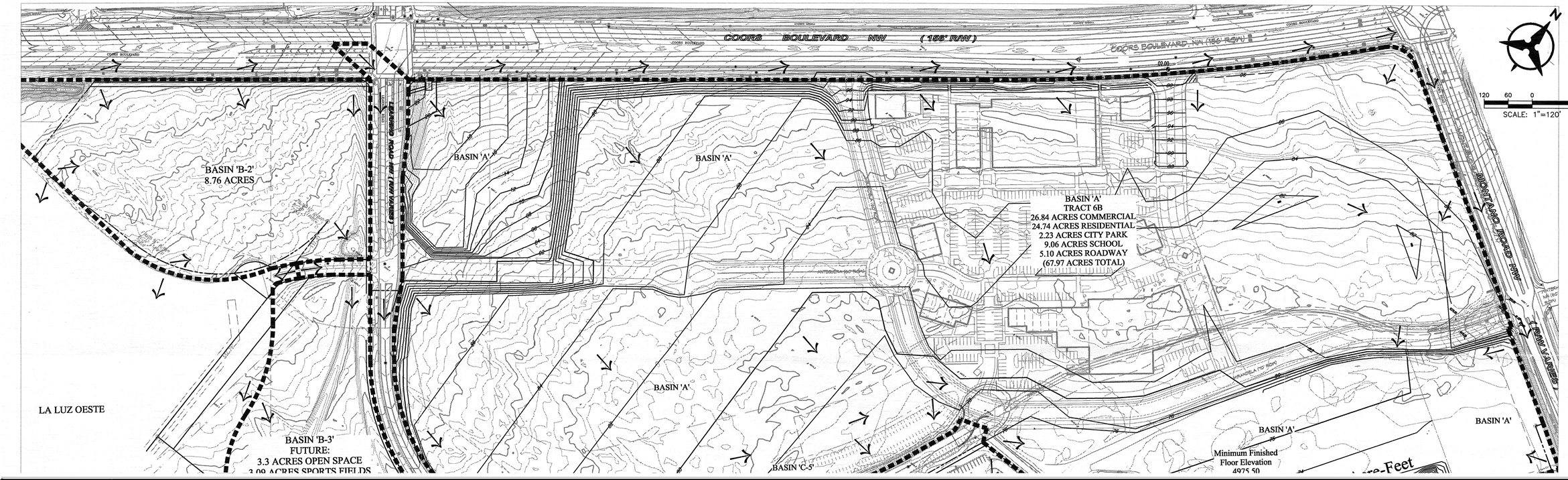
PLOT HYD ID=24
FLOW RATE (CFS)


0.
0.


0.
0.
0.
.00
.83
1.67
2.50
3.33
4.17
5.00
5.84
6.67
7.50
8.34
9.17
10.00
TIME HOURS

```
*S
*S
*S**************************************************************************
FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 15:50:51
```



architecture
interiors
planning
engineering

Dekker
Perich
Sabatini

6801 Jefferson NE
Suite 100
Albuquerque, NM 87109

505 761-9700
fax 761-4222
dps@dpsabq.com

ARCHITECT

ENGINEER

JEFFREY TODD WOOTEN
NEW MEXICO
16892
LICENSED PROFESSIONAL ENGINEER
4/10/06

PROJECT