

**LONGFELLOW ELEMENTARY SCHOOL
AHYMO FILES**

JUNE 2006

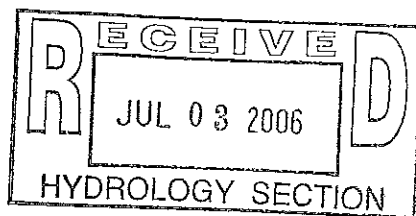
Prepared for:
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I, John A. Tellez, do hereby certify that this report was prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.



John A. Tellez
NMPE No. 16671



7-3-06
Date

WMHS.DAT

* WMHS.DAT

*S EXISTING & PROPOSED CONDITION MODELS FOR WMHS DRAINAGE IMPROVEMENTS

*S BASINS AREAS DO NOT CHANGE FROM THE EXISTING TO PROPOSED CONDITION

*S PONDS ARE NAMED FOR THE BASINS IN WHICH THEY ARE LOCATED

START TIME=0.0 PUNCH CODE=0 PRINT CODE=0
LOCATION BERNALILLO COUNTY

* RAINFALL FROM NOAA COA DEVELOPMENT PROCESS MANUAL

*S*****

*S 100 YEAR 24HR STORM

RAINFALL TYPE=2 ONE DAY RAINFALL, NOAA ATLAS TWO
QUARTER=0.00 IN
HOUR= 1.87 IN
SIX HR= 2.20 IN
DAY= 2.66 IN DT=0.05

* *S 10 YEAR 24HR STORM EXISTING CONDITION

*RAINFALL TYPE=2 0.0 1.08 1.41 1.78 DT=0.1

*S BASINS CONTRIBUTING TO POND 108

* **** SUB-BASIN 101 ****

* NW CORNER OF PARKING LOT @ NW CORNER OF SITE

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=381 FT SLOPE=0.003 K=2.0
KN=0.021 CENTROID DIST=153 FT
ID=1 HYD NO=101 DA=0.0011 SQ MI
PER A=5 PER B=0 PER C=0 PER D=95
TP=0.0 MASSRAIN=-1
PRINT HYD ID=1 CODE=1

* **** SUB-BASIN 102 ****

* PARKING LOT @ NW CORNER OF SITE

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=955 FT SLOPE=0.005 K=2.0
KN=0.021 CENTROID DIST=377 FT
ID=2 HYD NO=102 DA=0.01 SQ MI
PER A=5 PER B=10 PER C=0 PER D=85
TP=0.0 MASSRAIN=-1
PRINT HYD ID=2 CODE=1

* ADD 101 TO 102 TO GET 102.1

ADD HYD ID=3 HYD NO=102.1 ID I=1 ID II=2
PRINT HYD ID=3 CODE=1

* ROUTE 102.1 THRU 108 IN V-DITCH TO 108.1

COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
MIN ELEV=5096 MAX ELEV=5100
CH SLOPE=0.005 FP SLOPE=0.005
N=0.030 DIST=20
DIST ELEV DIST ELEV
0 5100 10 5096
20 5100

ROUTE MCUNGE ID=4 HYD NO=108.1 INFLOW ID=3
DT=0.0 L=570 FT NS=0 SLOPE=0.005
MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
PRINT HYD ID=4 CODE=1

* **** SUB-BASIN 108 ****

* WEST BASEBALL FIELD

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0

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                                WMHS.DAT
                                LENGTH=423 FT SLOPE=0.004 K=2.0
                                KN=0.021 CENTROID DIST=220 FT
COMPUTE NM HYD ID=1 HYD NO=108 DA=0.0035 SQ MI
                                PER A=70 PER B=25 PER C=0 PER D=5
                                TP=0.0 MASSRAIN=-1
PRINT HYD ID=1 CODE=1
*
* ADD 108.1 TO 108 TO GET 108.2
ADD HYD ID=2 HYD NO=108.2 ID I=1 ID II=4
PRINT HYD ID=2 CODE=1
*
*
*S BASINS CONTRIBUTING TO POND 111
* **** SUB-BASIN 111 ****
* EAST BASEBALL FIELD
COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
                                NK=1 ISLOPE=0
                                LENGTH=382 FT SLOPE=0.012 K=2.0
                                KN=0.021 CENTROID DIST=209 FT
COMPUTE NM HYD ID=1 HYD NO=111 DA=.0034 SQ MI
                                PER A=75 PER B=15 PER C=5 PER D=5
                                TP=0.0 MASSRAIN=-1
PRINT HYD ID=1 CODE=1
*
*
*S BASINS CONTRIBUTING TO POND 107
* **** SUB-BASIN 107 ****
* MAIN BLDG
COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
                                NK=1 ISLOPE=0
                                LENGTH=373 FT SLOPE=0.01 K=2.0
                                KN=0.021 CENTROID DIST=237 FT
COMPUTE NM HYD ID=1 HYD NO=107 DA=.004 SQ MI
                                PER A=35 PER B=15 PER C=5 PER D=45
                                TP=0.0 MASSRAIN=-1
PRINT HYD ID=1 CODE=1
*
*
*S BASINS CONTRIBUTING TO POND 110
* **** SUB-BASIN 103 ****
* SW CORNER OF SITE
COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
                                NK=1 ISLOPE=0
                                LENGTH=1667 FT SLOPE=0.004 K=2.0
                                KN=0.021 CENTROID DIST=337 FT
COMPUTE NM HYD ID=3 HYD NO=103 DA=0.0099 SQ MI
                                PER A=5 PER B=10 PER C=0 PER D=85
                                TP=0.0 MASSRAIN=-1
PRINT HYD ID=3 CODE=1
*
* **** SUB-BASIN 104 ****
* COURTYARD AREA
COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
                                NK=1 ISLOPE=0
                                LENGTH=282 FT SLOPE=0.007 K=2.0
                                KN=0.021 CENTROID DIST=146 FT
COMPUTE NM HYD ID=1 HYD NO=104 DA=0.0015 SQ MI
                                PER A=0 PER B=45 PER C=10 PER D=55
                                TP=0.0 MASSRAIN=-1

```

PRINT HYD ID=1 CODE=1

*
 * ROUTE 104 THRU 105 IN OPEN CHANNEL TO 105.1
 COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
 MIN ELEV=5097 MAX ELEV=5100
 CH SLOPE=0.005 FP SLOPE=0.005
 N=0.015 DIST=20
 DIST ELEV DIST ELEV
 0 5100 0 5099
 10 5097 20 5099
 20 5100

ROUTE MCUNGE ID=2 HYD NO=105.1 INFLOW ID=1
 DT=0.0 L=270 FT NS=0 SLOPE=0.005
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
 PRINT HYD ID=2 CODE=1

* **** SUB-BASIN 105 ****

* FRONT YARD AND PARKING AREA

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=430 FT SLOPE=0.007 K=2.0
 KN=0.021 CENTROID DIST=220 FT
 COMPUTE NM HYD ID=4 HYD NO=105 DA=0.0018 SQ MI
 PER A=15 PER B=0 PER C=0 PER D=85
 TP=0.0 MASSRAIN=-1
 PRINT HYD ID=4 CODE=1

* ADD 103 TO 105 TO GET 105.2
 ADD HYD ID=1 HYD NO=105.2 ID I=3 ID II=4
 PRINT HYD ID=1 CODE=1

* ADD 105.1 TO 105.2 TO GET 105.3
 ADD HYD ID=3 HYD NO=105.3 ID I=1 ID II=2
 PRINT HYD ID=3 CODE=1

* ROUTE 104 THRU 105 IN OPEN CHANNEL TO 105.1
 COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
 MIN ELEV=5097 MAX ELEV=5100
 CH SLOPE=0.005 FP SLOPE=0.005
 N=0.015 DIST=20
 DIST ELEV DIST ELEV
 0 5100 0 5099
 10 5097 20 5099
 20 5100

ROUTE MCUNGE ID=4 HYD NO=110.1 INFLOW ID=3
 DT=0.0 L=500 FT NS=0 SLOPE=0.005
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0
 PRINT HYD ID=4 CODE=1

* **** SUB-BASIN 110 ****

* SOUTH HALF OF SOCCER FIELD

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=497 FT SLOPE=0.008 K=2.0
 KN=0.021 CENTROID DIST=301 FT
 COMPUTE NM HYD ID=5 HYD NO=110 DA=0.005 SQ MI
 PER A=90 PER B=0 PER C=5 PER D=5
 TP=0.0 MASSRAIN=-1
 PRINT HYD ID=5 CODE=1

* **** SUB-BASIN 112 ****

* WEST SIDE OF TRACK & FIELD

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD

```

                                WMHS.DAT
                                NK=1  ISLOPE=0
                                LENGTH=318 FT  SLOPE=0.006  K=2.0
                                KN=0.021  CENTROID DIST=266 FT
COMPUTE NM HYD  ID=1  HYD NO=112  DA=0.002 SQ MI
                                PER A=95 PER B=0 PER C=0 PER D=5
                                TP=0.0  MASSRAIN=-1
PRINT HYD  ID=1  CODE=1
*
* **** SUB-BASIN 113 ****
* EAST SIDE OF TRACK & FIELD
COMPUTE LT TP  LCODE=1  UPLAND/LAG TIME METHOD
                                NK=1  ISLOPE=0
                                LENGTH=315 FT  SLOPE=0.006  K=2.0
                                KN=0.021  CENTROID DIST=273 FT
COMPUTE NM HYD  ID=2  HYD NO=113  DA=0.0023 SQ MI
                                PER A=95 PER B=0 PER C=0 PER D=5
                                TP=0.0  MASSRAIN=-1
PRINT HYD  ID=2  CODE=1
*
* ADD 112 TO 113 TO GET 110.2
ADD HYD  ID=3  HYD NO=113.1  ID I=1  ID II=2
PRINT HYD  ID=3  CODE=1
*
* ADD 110.1 TO 110.2 TO GET 110.3
ADD HYD  ID=1  HYD NO=110.3  ID I=3  ID II=4
PRINT HYD  ID=1  CODE=1
*
* ADD 110 TO 110.3 TO GET 110.4
ADD HYD  ID=2  HYD NO=110.4  ID I=1  ID II=5
PRINT HYD  ID=2  CODE=1
*
*
*
* S BASINS CONTRIBUTING TO POND 109
* **** SUB-BASIN 106 ****
* TENNIS & BASKETBALL COURTS
COMPUTE LT TP  LCODE=1  UPLAND/LAG TIME METHOD
                                NK=1  ISLOPE=0
                                LENGTH=863 FT  SLOPE=0.005  K=2.0
                                KN=0.021  CENTROID DIST=492 FT
COMPUTE NM HYD  ID=1  HYD NO=106  DA=0.0076 SQ MI
                                PER A=35 PER B=15 PER C=5 PER D=45
                                TP=0.0  MASSRAIN=-1
PRINT HYD  ID=1  CODE=1
*
* ROUTE 106 THRU 109 IN OPEN CHANNEL TO 109.1
COMPUTE RATING CURVE  CID=1  VS NO=1  NO SEGS=1
                                MIN ELEV=5096  MAX ELEV=5100
                                CH SLOPE=0.005  FP SLOPE=0.005
                                N=0.035  DIST=20
                                DIST  ELEV  DIST  ELEV
                                0  5100  10  5096
                                20  5100
ROUTE MCUNGE  ID=2  HYD NO=109.1  INFLOW ID=1
                                DT=0.0  L=680 FT  NS=0  SLOPE=0.005
                                MATCODE=0  REGCODE=0  CCODE=0  MM CODE=0
PRINT HYD  ID=2  CODE=1
*
* **** SUB-BASIN 109 ****
* NORTH HALF OF SOCCER FIELD
COMPUTE LT TP  LCODE=1  UPLAND/LAG TIME METHOD
                                NK=1  ISLOPE=0

```

```
WMHS.DAT
LENGTH=689 FT  SLOPE=0.006  K=2.0
KN=0.021  CENTROID DIST=321 FT
COMPUTE NM HYD  ID=3  HYD NO=109  DA=0.0058 SQ MI
PER A=75 PER B=15 PER C=5 PER D=5
TP=0.0  MASSRAIN=-1
PRINT HYD  ID=3  CODE=1
*
* ADD 109.1 TO 109 TO GET 109.2
ADD HYD  ID=1  HYD NO=109.2  ID I=2  ID II=3
PRINT HYD  ID=1  CODE=1
*
FINISH
```

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
 INPUT FILE = WMHS.DAT

AHYMO.SUM
 - VERSION: 1997.02c

RUN DATE (MON/DAY/YR) =06/30/2006
USER NO.= AHYMO-C-9803C01UNMLIB-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE =	NOTATION
*S EXISTING & PROPOSED CONDITION MODELS FOR WHHS DRAINAGE IMPROVEMENTS											
*S BASINS AREAS DO NOT CHANGE FROM THE EXISTING TO PROPOSED CONDITION											
*S PONDS ARE NAMED FOR THE BASINS IN WHICH THEY ARE LOCATED											
START											
LOCATION											
***** BERNALILLO COUNTY *****											
*S*****											
*S 100 YEAR 24HR STORM											
RAINFALL TYPE= 2											
*S											
*S BASINS CONTRIBUTING TO POND 108											
COMPUTE NM HYD	101.00	-	1	.00110	2.93	.137	2.32785	1.500	4.166	PER IMP=	95.00
COMPUTE NM HYD	102.00	-	2	.01000	25.06	1.147	2.15031	1.500	3.915	PER IMP=	85.00
ADD HYD	102.10	1& 2	3	.01110	27.99	1.283	2.16785	1.500	3.940		
ROUTE MCUNGE	108.10	3	4	.01110	27.33	1.283	2.16734	1.550	3.847	CCODE =	.2
COMPUTE NM HYD	108.00	-	1	.00350	3.58	1.110	.58809	1.500	1.600	PER IMP=	5.00
ADD HYD	108.20	1& 4	2	.01460	30.75	1.393	1.78869	1.550	3.291		
*S BASINS CONTRIBUTING TO POND 111											
COMPUTE NM HYD	111.00	-	1	.00340	3.48	.107	.58809	1.500	1.598	PER IMP=	5.00
*S BASINS CONTRIBUTING TO POND 107											
COMPUTE NM HYD	107.00	-	1	.00400	7.19	.295	1.38474	1.500	2.807	PER IMP=	45.00
*S BASINS CONTRIBUTING TO POND 110											
COMPUTE NM HYD	103.00	-	3	.00990	18.50	1.135	2.15031	1.600	2.919	PER IMP=	85.00
COMPUTE NM HYD	104.00	-	1	.00150	3.11	.126	1.57240	1.500	3.244	PER IMP=	50.00
ROUTE MCUNGE	105.10	1	2	.00150	3.02	.126	1.57267	1.500	3.141	CCODE =	.2
COMPUTE NM HYD	105.00	-	4	.00180	4.44	.204	2.12906	1.500	3.856	PER IMP=	85.00
ADD HYD	105.20	3& 4	1	.01170	21.51	1.340	2.14697	1.600	2.873		
ADD HYD	105.30	1& 2	3	.01320	23.97	1.465	2.08165	1.600	2.838		
ROUTE MCUNGE	110.10	3	5	.01320	23.86	1.464	2.07963	1.600	2.824	CCODE =	.1
COMPUTE NM HYD	110.00	-	1	.00500	4.80	.149	.55707	1.500	1.499	PER IMP=	5.00
COMPUTE NM HYD	112.00	-	2	.00200	1.85	.057	.53875	1.500	1.446	PER IMP=	5.00
COMPUTE NM HYD	113.00	-	2	.00230	2.13	.066	.53875	1.500	1.445	PER IMP=	5.00
ADD HYD	113.10	1& 2	3	.00430	3.98	.124	.53867	1.500	1.445		
ADD HYD	110.30	3& 4	1	.01750	26.97	1.588	1.70095	1.500	1.445		
ADD HYD	110.40	1& 5	2	.02250	30.72	1.736	1.44675	1.600	2.408		
*S BASINS CONTRIBUTING TO POND 109											
COMPUTE NM HYD	106.00	-	1	.00760	13.64	.561	1.38474	1.500	2.804	PER IMP=	45.00
ROUTE MCUNGE	109.10	1	2	.00760	13.04	.561	1.38383	1.550	2.680	CCODE =	.2
COMPUTE NM HYD	109.00	-	3	.00380	5.92	.182	.58809	1.500	1.595	PER IMP=	5.00
ADD HYD	109.20	2& 3	1	.01340	18.69	.743	1.03933	1.550	2.180		
FINISH											

AHYMO PROGRAM (AHYMO 97) -

- Version: 1997.02c

RUN DATE (MON/DAY/YR) = 06/30/2006

START TIME (HR:MIN:SEC) = 14:52:20

USER NO.= AHYMO-C-9803c01UNMLIB-AH

INPUT FILE = WMHS.DAT

* WMHS.DAT

*S EXISTING & PROPOSED CONDITION MODELS FOR WMHS DRAINAGE IMPROVEMENTS

*S BASINS AREAS DO NOT CHANGE FROM THE EXISTING TO PROPOSED CONDITION

*S PONDS ARE NAMED FOR THE BASINS IN WHICH THEY ARE LOCATED

START TIME=0.0 PUNCH CODE=0 PRINT CODE=0

LOCATION BERNALILLO COUNTY

Bernalillo County soil infiltration values (LAND FACTORS) used for computations.

Land Treatment	Initial Abstr.(in)	Unif. Infiltr.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

*

* RAINFALL FROM NOAA COA DEVELOPMENT PROCESS MANUAL

*S*****

*S 100 YEAR 24HR STORM

RAINFALL

TYPE=2 ONE DAY RAINFALL, NOAA ATLAS TWO

QUARTER=0.00 IN

HOURLY= 1.87 IN

SIX HR= 2.20 IN

DAY= 2.66 IN DT=0.05

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

DT = .050000 HOURS END TIME = 24.000000 HOURS

.0000	.0025	.0050	.0076	.0103	.0131	.0160
.0190	.0222	.0254	.0289	.0324	.0362	.0401
.0443	.0487	.0534	.0584	.0637	.0695	.0758
.0837	.0924	.1176	.1773	.2798	.4384	.6668
.9790	1.2253	1.3366	1.4295	1.5109	1.5836	1.6495
1.7096	1.7648	1.8156	1.8624	1.9057	1.9458	1.9548
1.9631	1.9708	1.9780	1.9848	1.9912	1.9973	2.0031
2.0087	2.0140	2.0191	2.0240	2.0287	2.0333	2.0377
2.0420	2.0462	2.0502	2.0542	2.0580	2.0617	2.0653
2.0689	2.0724	2.0757	2.0791	2.0823	2.0855	2.0886
2.0916	2.0946	2.0976	2.1005	2.1033	2.1061	2.1088
2.1115	2.1142	2.1168	2.1193	2.1219	2.1244	2.1268
2.1293	2.1316	2.1340	2.1363	2.1386	2.1409	2.1431
2.1453	2.1475	2.1497	2.1518	2.1539	2.1560	2.1580
2.1601	2.1621	2.1641	2.1660	2.1680	2.1699	2.1718
2.1737	2.1756	2.1774	2.1793	2.1811	2.1829	2.1847
2.1864	2.1882	2.1899	2.1916	2.1933	2.1950	2.1967
2.1984	2.2000	2.2020	2.2039	2.2059	2.2078	2.2097
2.2117	2.2136	2.2155	2.2174	2.2193	2.2212	2.2231
2.2249	2.2268	2.2287	2.2305	2.2324	2.2342	2.2361
2.2379	2.2398	2.2416	2.2434	2.2452	2.2470	2.2488
2.2506	2.2524	2.2542	2.2559	2.2577	2.2595	2.2612
2.2630	2.2647	2.2665	2.2682	2.2700	2.2717	2.2734
2.2751	2.2768	2.2785	2.2802	2.2819	2.2836	2.2853
2.2870	2.2887	2.2903	2.2920	2.2937	2.2953	2.2970
2.2986	2.3002	2.3019	2.3035	2.3051	2.3068	2.3084
2.3100	2.3116	2.3132	2.3148	2.3164	2.3180	2.3196
2.3212	2.3227	2.3243	2.3259	2.3274	2.3290	2.3305
2.3321	2.3336	2.3352	2.3367	2.3383	2.3398	2.3413
2.3428	2.3444	2.3459	2.3474	2.3489	2.3504	2.3519
2.3534	2.3549	2.3563	2.3578	2.3593	2.3608	2.3622
2.3637	2.3652	2.3666	2.3681	2.3695	2.3710	2.3724
2.3739	2.3753	2.3767	2.3782	2.3796	2.3810	2.3824
2.3839	2.3853	2.3867	2.3881	2.3895	2.3909	2.3923
2.3937	2.3951	2.3965	2.3978	2.3992	2.4006	2.4020
2.4033	2.4047	2.4061	2.4074	2.4088	2.4101	2.4115
2.4128	2.4142	2.4155	2.4168	2.4182	2.4195	2.4208
2.4222	2.4235	2.4248	2.4261	2.4274	2.4287	2.4300
2.4314	2.4327	2.4340	2.4352	2.4365	2.4378	2.4391
2.4404	2.4417	2.4430	2.4442	2.4455	2.4468	2.4480
2.4493	2.4506	2.4518	2.4531	2.4543	2.4556	2.4568
2.4581	2.4593	2.4606	2.4618	2.4630	2.4643	2.4655
2.4667	2.4680	2.4692	2.4704	2.4716	2.4728	2.4740
2.4753	2.4765	2.4777	2.4789	2.4801	2.4813	2.4825
2.4837	2.4849	2.4860	2.4872	2.4884	2.4896	2.4908
2.4919	2.4931	2.4943	2.4955	2.4966	2.4978	2.4990
2.5001	2.5013	2.5024	2.5036	2.5047	2.5059	2.5070
2.5082	2.5093	2.5105	2.5116	2.5127	2.5139	2.5150
2.5161	2.5172	2.5184	2.5195	2.5206	2.5217	2.5229
2.5240	2.5251	2.5262	2.5273	2.5284	2.5295	2.5306
2.5317	2.5328	2.5339	2.5350	2.5361	2.5372	2.5383
2.5394	2.5404	2.5415	2.5426	2.5437	2.5448	2.5458
2.5469	2.5480	2.5490	2.5501	2.5512	2.5522	2.5533
2.5544	2.5554	2.5565	2.5575	2.5586	2.5596	2.5607
2.5617	2.5628	2.5638	2.5649	2.5659	2.5669	2.5680
2.5690	2.5700	2.5711	2.5721	2.5731	2.5741	2.5752
2.5762	2.5772	2.5782	2.5792	2.5803	2.5813	2.5823
2.5833	2.5843	2.5853	2.5863	2.5873	2.5883	2.5893
2.5903	2.5913	2.5923	2.5933	2.5943	2.5953	2.5963
2.5973	2.5982	2.5992	2.6002	2.6012	2.6022	2.6031
2.6041	2.6051	2.6061	2.6070	2.6080	2.6090	2.6099

WMHS.OUT
 2.6109 2.6119 2.6128 2.6138 2.6148 2.6157 2.6167
 2.6176 2.6186 2.6195 2.6205 2.6214 2.6224 2.6233
 2.6243 2.6252 2.6261 2.6271 2.6280 2.6290 2.6299
 2.6308 2.6318 2.6327 2.6336 2.6346 2.6355 2.6364
 2.6373 2.6383 2.6392 2.6401 2.6410 2.6419 2.6428
 2.6438 2.6447 2.6456 2.6465 2.6474 2.6483 2.6492
 2.6501 2.6510 2.6519 2.6528 2.6537 2.6546 2.6555
 2.6564 2.6573 2.6582 2.6591 2.6600

* *S 10 YEAR 24HR STORM EXISTING CONDITION
 *RAINFALL TYPE=2 0.0 1.08 1.41 1.78 DT=0.1
 *S

*S BASINS CONTRIBUTING TO POND 108

* **** SUB-BASIN 101 ****

* NW CORNER OF PARKING LOT @ NW CORNER OF SITE

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=381 FT SLOPE=0.003 K=2.0
 KN=0.021 CENTROID DIST=153 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	381.0	.003000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	381.0	.003000	2.0000

TIME OF CONCENTRATION (HRS)= .0966 TIME TO PEAK (HRS)= .0644 LAG TIME (HRS)= .0725

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

.1500 REVISED VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=1 HYD NO=101 DA=0.0011 SQ MI
 PER A=5 PER B=0 PER C=0 PER D=95
 TP=0.0 MASSRAIN=-1
 TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 4.1247 CFS UNIT VOLUME = .9966 B = 526.28 P60 = 1.8700
 AREA = .001045 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .163724HR TP = .133333HR K/TP RATIO = 1.227936 SHAPE CONSTANT, N = 2.899764
 UNIT PEAK = .11284 CFS UNIT VOLUME = .8676 B = 273.54 P60 = 1.8700
 AREA = .000055 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.00

RUNOFF VOLUME = 2.32785 INCHES = .1366 ACRE-FEET
 PEAK DISCHARGE RATE = 2.93 CFS AT 1.500 HOURS BASIN AREA = .0011 SQ. MI.

*
 * **** SUB-BASIN 102 ****
 * PARKING LOT @ NW CORNER OF SITE
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=955 FT SLOPE=0.005 K=2.0
 KN=0.021 CENTROID DIST=377 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	955.0	.005000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	955.0	.005000	2.0000

TIME OF CONCENTRATION (HRS)= .1876 TIME TO PEAK (HRS)= .1251 LAG TIME (HRS)= .1407

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

.1500 REVISED VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=2 HYD NO=102 DA=0.01 SQ MI
 PER A=5 PER B=10 PER C=0 PER D=85
 TP=0.0 MASSRAIN=-1

TIME TO PEAK (hrs)= .1333

WMHS.OUT

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 33.550 CFS UNIT VOLUME = .9988 B = 526.28 P60 = 1.8700
AREA = .008500 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .141924HR TP = .133333HR K/TP RATIO = 1.064435 SHAPE CONSTANT, N = 3.317659
UNIT PEAK = 3.4512 CFS UNIT VOLUME = .9960 B = 306.77 P60 = 1.8700
AREA = .001500 SQ MI IA = .55000 INCHES INF = 1.39000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD

ID=2 CODE=1

PARTIAL HYDROGRAPH 102.00

RUNOFF VOLUME = 2.15031 INCHES = 1.1468 ACRE-Feet
PEAK DISCHARGE RATE = 25.06 CFS AT 1.500 HOURS BASIN AREA = .0100 SQ. MI.

*

* ADD 101 TO 102 TO GET 102.1

ADD HYD ID=3 HYD NO=102.1 ID I=1 ID II=2
PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 102.10

RUNOFF VOLUME = 2.16785 INCHES = 1.2834 ACRE-Feet
PEAK DISCHARGE RATE = 27.99 CFS AT 1.500 HOURS BASIN AREA = .0111 SQ. MI.

*

* ROUTE 102.1 THRU 108 IN V-DITCH TO 108.1

COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
MIN ELEV=5096 MAX ELEV=5100
CH SLOPE=0.005 FP SLOPE=0.005
N=0.030 DIST=20
DIST ELEV DIST ELEV
0 5100 10 5096
20 5100

RATING CURVE VALLEY SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	TOP WIDTH FT
5096.00	.00	.00	.00
5096.21	.11	.08	1.05
5096.42	.44	.52	2.10
5096.63	1.00	1.54	3.16
5096.84	1.77	3.32	4.21
5097.05	2.77	6.01	5.26
5097.26	3.99	9.78	6.31
5097.47	5.43	14.75	7.37
5097.68	7.09	21.06	8.42
5097.89	8.97	28.83	9.47
5098.10	11.07	38.18	10.52
5098.31	13.40	49.23	11.57
5098.53	15.94	62.09	12.63
5098.74	18.71	76.86	13.68
5098.95	21.70	93.66	14.73
5099.16	24.91	112.58	15.78
5099.37	28.34	133.72	16.84
5099.58	32.00	157.18	17.89
5099.79	35.87	183.06	18.94
5100.00	39.97	211.46	19.99

ROUTE MCUNGE

ID=4 HYD NO=108.1 INFLOW ID=3
DT=0.0 L=570 FT NS=0 SLOPE=0.005
MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 497
DT= .050000
WIDTH MED=

TABLE PTS= 20
QMED= 13.99 CKMED= 3.4541
NREACH= 2 DX= 285.00

C2-M	DEPTH C3-M (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
.000	.00	.0	.0	.292	.0	1.58	.34	1.000	.000	1.000	.000	.000	.0	1.000
.000	.21	.1	.1	.213	1.1	1.53	.74	.964	.036	.964	.000	.036	.0	.994
.025	.42	.4	.5	.134	2.1	1.64	1.18	1.036	.106	.901	.066	.033	.2	.941
.126	.63	1.0	1.5	.102	3.2	2.11	1.55	1.330	.163	.870	.198	-.067	1.0	.877
.241	.84	1.8	3.3	.085	4.2	2.53	1.87	1.597	.219	.845	.290	-.134	2.3	.851
.323	1.05	2.8	6.0	.073	5.3	2.92	2.17	1.846	.274	.824	.359	-.183	4.6	.830

	1.26	4.0	9.8	.065	6.3	3.29	WMHS.OUT 2.45	2.079	.330	.806	.413	-.220	7.8	.811
.385	-.197	5.4	14.8	.058	7.4	3.64	2.72	2.301	.386	.791	.457	-.248	12.2	.795
.435	-.230	7.1	21.1	.053	8.4	3.98	2.97	2.512	.441	.777	.494	-.271	17.8	.781
.475	-.257	9.0	28.8	.049	9.5	4.30	3.21	2.716	.497	.764	.525	-.289	24.8	.768
.509	-.278	11.1	38.2	.046	10.5	4.61	3.45	2.912	.552	.753	.552	-.305	33.4	.756
.538	-.295	13.4	49.2	.043	11.6	4.91	3.67	3.101	.608	.742	.575	-.317	43.6	.745
.563	-.309	15.9	62.1	.041	12.6	5.20	3.89	3.286	.663	.732	.596	-.328	55.5	.735
.585	-.321	18.7	76.9	.039	13.7	5.49	4.11	3.465	.719	.723	.614	-.337	69.3	.726
.605	-.331	21.7	93.7	.037	14.7	5.76	4.32	3.640	.774	.714	.631	-.345	85.1	.717
.622	-.339	24.9	112.6	.035	15.8	6.03	4.52	3.810	.830	.706	.645	-.351	103.0	.709
.638	-.347	28.3	133.7	.034	16.8	6.30	4.72	3.977	.885	.698	.659	-.357	123.0	.701
.652	-.353	32.0	157.2	.032	17.9	6.56	4.91	4.141	.941	.691	.671	-.362	145.3	.693
.665	-.358	35.9	183.1	.031	18.9	6.81	5.10	4.301	.996	.684	.682	-.366	170.0	.686
.677	-.363	40.0	211.5	.030	20.0	6.91	5.29	4.364	1.074	.666	.689	-.356	197.1	.680
.688	-.367													

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 12 TIMES. AVERAGE NUMBER ITERATIONS = 1.0607
 Equations solved using the Ponce correction to C2
 PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 108.10

RUNOFF VOLUME = 2.16734 INCHES = 1.2831 ACRE-Feet
 PEAK DISCHARGE RATE = 27.33 CFS AT 1.550 HOURS BASIN AREA = .0111 SQ. MI.

*
 * ***** SUB-BASIN 108 *****
 * WEST BASEBALL FIELD

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=423 FT SLOPE=0.004 K=2.0
 KN=0.021 CENTROID DIST=220 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	423.0	.004000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	423.0	.004000	2.0000

TIME OF CONCENTRATION (HRS)= .0929 TIME TO PEAK (HRS)= .0619 LAG TIME (HRS)= .0697

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=1 HYD NO=108 DA=0.0035 SQ MI
 PER A=70 PER B=25 PER C=0 PER D=5
 TP=0.0 MASSRAIN=-1
 TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = .69074 CFS UNIT VOLUME = .9832 B = 526.28 P60 = 1.8700
 AREA = .000175 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .155119HR TP = .133333HR K/TP RATIO = 1.163396 SHAPE CONSTANT, N = 3.047301
 UNIT PEAK = 7.1236 CFS UNIT VOLUME = .9974 B = 285.66 P60 = 1.8700
 AREA = .003325 SQ MI IA = .61053 INCHES INF = 1.55947 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 108.00

RUNOFF VOLUME = .58809 INCHES = .1098 ACRE-Feet
 PEAK DISCHARGE RATE = 3.58 CFS AT 1.500 HOURS BASIN AREA = .0035 SQ. MI.

*

* ADD 108.1 TO 108 TO GET 108.2
ADD HYD ID=2 HYD NO=108.2 ID I=1 ID II=4
PRINT HYD ID=2 CODE=1

WMHS.OUT

PARTIAL HYDROGRAPH 108.20

RUNOFF VOLUME = 1.78869 INCHES = 1.3928 ACRE-FEET
PEAK DISCHARGE RATE = 30.75 CFS AT 1.550 HOURS BASIN AREA = .0146 SQ. MI.

*
*
*

*S BASINS CONTRIBUTING TO POND 111

* **** SUB-BASIN 111 ****

* EAST BASEBALL FIELD

COMPUTE LT TP

LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=382 FT SLOPE=0.012 K=2.0
KN=0.021 CENTROID DIST=209 FT

Tc AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	382.0	.012000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	382.0	.012000	2.0000

TIME OF CONCENTRATION (HRS)= .0484 TIME TO PEAK (HRS)= .0323 LAG TIME (HRS)= .0363

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISED VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD

ID=1 HYD NO=111 DA=.0034 SQ MI
PER A=75 PER B=15 PER C=5 PER D=5
TP=0.0 MASSRAIN=-1

TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = .67100 CFS UNIT VOLUME = .9832 B = 526.28 P60 = 1.8700
AREA = .000170 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .155517HR TP = .133333HR K/TP RATIO = 1.166384 SHAPE CONSTANT, N = 3.040026
UNIT PEAK = 6.9058 CFS UNIT VOLUME = .9971 B = 285.07 P60 = 1.8700
AREA = .003230 SQ MI IA = .61053 INCHES INF = 1.55947 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 111.00

RUNOFF VOLUME = .58809 INCHES = .1066 ACRE-FEET
PEAK DISCHARGE RATE = 3.48 CFS AT 1.500 HOURS BASIN AREA = .0034 SQ. MI.

*
*
*

*S BASINS CONTRIBUTING TO POND 107

* **** SUB-BASIN 107 ****

* MAIN BLDG

COMPUTE LT TP

LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=373 FT SLOPE=0.01 K=2.0
KN=0.021 CENTROID DIST=237 FT

Tc AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	373.0	.010000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	373.0	.010000	2.0000

TIME OF CONCENTRATION (HRS)= .0518 TIME TO PEAK (HRS)= .0345 LAG TIME (HRS)= .0389

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .1500 WMHS.OUT
TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)= .2000

COMPUTE NM HYD ID=1 HYD NO=107 DA=.004 SQ MI
PER A=35 PER B=15 PER C=5 PER D=45
TP=0.0 MASSRAIN=-1
TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 7.1047 CFS UNIT VOLUME = .9975 B = 526.28 P60 = 1.8700
AREA = .001800 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .149549HR TP = .133333HR K/TP RATIO = 1.121619 SHAPE CONSTANT, N = 3.154190
UNIT PEAK = 4.8537 CFS UNIT VOLUME = .9968 B = 294.16 P60 = 1.8700
AREA = .002200 SQ MI IA = .58182 INCHES INF = 1.47909 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 107.00

RUNOFF VOLUME = 1.38474 INCHES = .2954 ACRE-FEET
PEAK DISCHARGE RATE = 7.19 CFS AT 1.500 HOURS BASIN AREA = .0040 SQ. MI.

*
*
*

*S BASINS CONTRIBUTING TO POND 110

* **** SUB-BASIN 103 ****

* SW CORNER OF SITE

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=1667 FT SLOPE=0.004 K=2.0
KN=0.021 CENTROID DIST=337 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	1667.0	.004000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	1667.0	.004000	2.0000

TIME OF CONCENTRATION (HRS)= .3661 TIME TO PEAK (HRS)= .2441 LAG TIME (HRS)= .2746

COMPUTE NM HYD ID=3 HYD NO=103 DA=0.0099 SQ MI
PER A=5 PER B=10 PER C=0 PER D=85
TP=0.0 MASSRAIN=-1
TIME TO PEAK (hrs)= .2441

K = .133008HR TP = .244052HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 18.146 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 1.8700
AREA = .008415 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .259777HR TP = .244052HR K/TP RATIO = 1.064435 SHAPE CONSTANT, N = 3.317659
UNIT PEAK = 1.8666 CFS UNIT VOLUME = .9926 B = 306.77 P60 = 1.8700
AREA = .001485 SQ MI IA = .55000 INCHES INF = 1.39000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 103.00

RUNOFF VOLUME = 2.15031 INCHES = 1.1354 ACRE-FEET
PEAK DISCHARGE RATE = 18.50 CFS AT 1.600 HOURS BASIN AREA = .0099 SQ. MI.

*

* **** SUB-BASIN 104 ****

* COURTYARD AREA

COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=282 FT SLOPE=0.007 K=2.0
KN=0.021 CENTROID DIST=146 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	282.0	.007000	2.0000

CHANNEL FLOW PORTION .0 WMHS.OUT
TOTAL BASIN 282.0 .000000 .0000
.007000 2.0000

TIME OF CONCENTRATION (HRS)= .0468 TIME TO PEAK (HRS)= .0312 LAG TIME (HRS)= .0351

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

1500 REVISED VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=1 HYD NO=104 DA=0.0015 SQ MI
PER A=0 PER B=45 PER C=10 PER D=55
TP=0.0 MASSRAIN=-1

TIME TO PEAK (hrs)= .1333

*****WARNING***** SUM OF TREATMENT TYPES DOES NOT EQUAL 100 PERCENT OR TOTAL AREA

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 2.9603 CFS UNIT VOLUME = .9959 B = 526.28 P60 = 1.8700
AREA = .000750 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .126455HR TP = .133333HR K/TP RATIO = .948415 SHAPE CONSTANT, N = 3.727038
UNIT PEAK = 1.8930 CFS UNIT VOLUME = .9947 B = 336.54 P60 = 1.8700
AREA = .000750 SQ MI IA = .47273 INCHES INF = 1.17364 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 104.00

RUNOFF VOLUME = 1.57240 INCHES = .1258 ACRE-FEET
PEAK DISCHARGE RATE = 3.11 CFS AT 1.500 HOURS BASIN AREA = .0015 SQ. MI.

*
* ROUTE 104 THRU 105 IN OPEN CHANNEL TO 105.1
COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
MIN ELEV=5097 MAX ELEV=5100
CH SLOPE=0.005 FP SLOPE=0.005
N=0.015 DIST=20
DIST ELEV DIST ELEV
0 5100 0 5099
10 5097 20 5099
20 5100

RATING CURVE VALLEY SECTION 1.0			
WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	TOP WIDTH FT
5097.00	.00	.00	.00
5097.16	.12	.16	1.58
5097.32	.50	1.00	3.15
5097.47	1.12	2.96	4.73
5097.63	1.99	6.38	6.31
5097.79	3.11	11.56	7.89
5097.95	4.48	18.80	9.46
5098.10	6.09	28.35	11.04
5098.26	7.96	40.48	12.62
5098.42	10.07	55.42	14.19
5098.58	12.44	73.40	15.77
5098.73	15.05	94.64	17.35
5098.89	17.91	119.35	18.93
5099.05	21.01	149.82	20.00
5099.21	24.16	188.20	20.00
5099.37	27.31	229.73	20.00
5099.52	30.47	274.24	20.00
5099.68	33.62	321.56	20.00
5099.84	36.78	371.55	20.00
5100.00	39.93	424.06	20.00

ROUTE MCUNGE ID=2 HYD NO=105.1 INFLOW ID=1
DT=0.0 L=270 FT NS=0 SLOPE=0.005
MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 487 . TABLE PTS= 20
DT= .050000 QMED= 1.56 CKMED= 3.1458
WIDTH MED= 3.60 NREACH= 1 DX= 270.00

C2-M	DEPTH C3-M (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
.000	.000	.0	.0	.081	.0	1.50	.58	1.000	.000	1.000	.000	.000	.0	1.000
.016	.16	.1	.2	.059	1.6	1.77	1.27	1.182	.042	.962	.101	-.063	.0	.994
.210	.32	.5	1.0	.037	3.2	2.81	2.02	1.872	.084	.943	.323	-.266	.5	.947
	.47	1.1	3.0	.028	4.7	3.60	2.64	2.402	.129	.927	.434	-.361	1.8	.930

WMHS.OUT													
.372	-.302												
.467	-.385	.63	2.0	6.4	.023	6.3	4.33	3.20	2.885	.173	.915	.507	-.422
.532	-.439	.79	3.1	11.6	.020	7.9	5.00	3.72	3.334	.217	.905	.561	-.465
.580	-.478	.95	4.5	18.8	.018	9.5	5.63	4.20	3.756	.261	.896	.601	-.497
.617	-.507	1.10	6.1	28.4	.016	11.0	6.23	4.65	4.156	.305	.888	.634	-.522
.646	-.530	1.26	8.0	40.5	.015	12.6	6.81	5.09	4.538	.349	.881	.660	-.542
.671	-.548	1.42	10.1	55.4	.014	14.2	7.36	5.50	4.905	.393	.875	.682	-.558
.692	-.563	1.58	12.4	73.4	.013	15.8	7.89	5.90	5.260	.437	.869	.701	-.571
.709	-.575	1.73	15.0	94.6	.012	17.3	8.40	6.29	5.602	.481	.864	.718	-.582
.725	-.585	1.89	17.9	119.4	.011	18.9	9.21	6.66	6.143	.507	.867	.739	-.606
.754	-.627	2.05	21.0	149.8	.011	20.0	10.85	7.13	7.232	.512	.883	.771	-.654
.792	-.686	2.21	24.2	188.2	.010	20.0	12.68	7.79	8.452	.550	.890	.800	-.690
.807	-.694	2.37	27.3	229.7	.009	20.0	13.65	8.41	9.100	.623	.884	.813	-.697
.819	-.700	2.52	30.5	274.2	.008	20.0	14.56	9.00	9.710	.697	.878	.825	-.702
.830	-.704	2.68	33.6	321.6	.008	20.0	15.43	9.56	10.288	.772	.872	.834	-.706
.838	-.708	2.84	36.8	371.5	.007	20.0	16.25	10.10	10.836	.847	.867	.842	-.709
.846	-.710	3.00	39.9	424.1	.007	20.0	17.04	10.62	11.362	.922	.861	.849	-.711

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 2 OCCURRED 21 TIMES. AVERAGE NUMBER ITERATIONS = 1.0364
 Equations solved using the Ponce correction to c2
 PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 105.10

RUNOFF VOLUME = 1.57267 INCHES = .1258 ACRE-FEET
 PEAK DISCHARGE RATE = 3.02 CFS AT 1.500 HOURS BASIN AREA = .0015 SQ. MI.

*
 * **** SUB-BASIN 105 ****
 * FRONT YARD AND PARKING AREA
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=430 FT SLOPE=0.007 K=2.0
 KN=0.021 CENTROID DIST=220 FT

Tc AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	430.0	.007000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	430.0	.007000	2.0000

TIME OF CONCENTRATION (HRS)= .0714 TIME TO PEAK (HRS)= .0476 LAG TIME (HRS)= .0535

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)= .1500

COMPUTE NM HYD ID=4 HYD NO=105 DA=0.0018 SQ MI
 PER A=15 PER B=0 PER C=0 PER D=85
 TP=0.0 MASSRAIN=-1
 TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 6.0390 CFS UNIT VOLUME = .9975 B = 526.28 P60 = 1.8700
 AREA = .001530 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .163724HR TP = .133333HR K/TP RATIO = 1.227936 SHAPE CONSTANT, N = 2.899764
 UNIT PEAK = .55393 CFS UNIT VOLUME = .9727 B = 273.54 P60 = 1.8700
 AREA = .000270 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=4 CODE=1

PARTIAL HYDROGRAPH 105.00

RUNOFF VOLUME = 2.12906 INCHES = .2044 ACRE-FEET

PEAK DISCHARGE RATE = 4.44 CFS AT 1.500 HOURS WMHS.OUT BASIN AREA = .0018 SQ. MI.

*
* ADD 103 TO 105 TO GET 105.2
ADD HYD ID=1 HYD NO=105.2 ID I=3 ID II=4
PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 105.20

RUNOFF VOLUME = 2.14697 INCHES = 1.3397 ACRE-FEET
PEAK DISCHARGE RATE = 21.51 CFS AT 1.600 HOURS BASIN AREA = .0117 SQ. MI.

*
* ADD 105.1 TO 105.2 TO GET 105.3
ADD HYD ID=3 HYD NO=105.3 ID I=1 ID II=2
PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 105.30

RUNOFF VOLUME = 2.08165 INCHES = 1.4655 ACRE-FEET
PEAK DISCHARGE RATE = 23.97 CFS AT 1.600 HOURS BASIN AREA = .0132 SQ. MI.

*
* ROUTE 104 THRU 105 IN OPEN CHANNEL TO 105.1
COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
MIN ELEV=5097 MAX ELEV=5100
CH SLOPE=0.005 FP SLOPE=0.005
N=0.015 DIST=20
DIST ELEV DIST ELEV
0 5100 0 5099
10 5097 20 5099
20 5100

RATING CURVE VALLEY SECTION 1.0				TOP
WATER	FLOW	FLOW	RATE	WIDTH
SURFACE	AREA	AREA	CFS	FT
ELEV	SQ FT			
5097.00	.00	.00	.00	.00
5097.16	.12	.16	1.58	1.58
5097.32	.50	1.00	3.15	3.15
5097.47	1.12	2.96	4.73	4.73
5097.63	1.99	6.38	6.31	6.31
5097.79	3.11	11.56	7.89	7.89
5097.95	4.48	18.80	9.46	9.46
5098.10	6.09	28.35	11.04	11.04
5098.26	7.96	40.48	12.62	12.62
5098.42	10.07	55.42	14.19	14.19
5098.58	12.44	73.40	15.77	15.77
5098.73	15.05	94.64	17.35	17.35
5098.89	17.91	119.35	18.93	18.93
5099.05	21.01	149.82	20.00	20.00
5099.21	24.16	188.20	20.00	20.00
5099.37	27.31	229.73	20.00	20.00
5099.52	30.47	274.24	20.00	20.00
5099.68	33.62	321.56	20.00	20.00
5099.84	36.78	371.55	20.00	20.00
5100.00	39.93	424.06	20.00	20.00

ROUTE MCUNGE ID=4 HYD NO=110.1 INFLOW ID=3
DT=0.0 L=500 FT NS=0 SLOPE=0.005
MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 511
DT= .050000
WIDTH MED= 7.98
TABLE PTS= 20
QMED= 11.99
NREACH= 1
CKMED= 5.2902
DX= 500.00

C2-M	DEPTH C3-M (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
.000	.000	.0	.0	.150	.0	2.78	.58	1.000	.000	1.000	.000	.000	.0	1.000
.000	.002	.1	.2	.109	1.6	2.74	1.27	.985	.015	.985	.000	.015	.0	.998
.010	.015	.5	1.0	.069	3.2	2.81	2.02	1.011	.045	.956	.027	.017	.5	.974
.083	.027	1.1	3.0	.053	4.7	3.60	2.64	1.297	.069	.941	.155	-.096	1.8	.945
.196	.032	2.0	6.4	.043	6.3	4.33	3.20	1.558	.093	.930	.246	-.175	4.5	.933
.278	.037	3.1	11.6	.037	7.9	5.00	3.72	1.800	.117	.920	.315	-.234	8.8	.922
.340	.042	4.5	18.8	.033	9.5	5.63	4.20	2.028	.141	.911	.369	-.280	15.0	.913
.390	.047	6.1	28.4	.030	11.0	6.23	4.65	2.244	.165	.903	.413	-.317	23.4	.906
	.052	8.0	40.5	.027	12.6	6.81	5.09	2.451	.189	.896	.450	-.347	34.2	.899

WMHS.OUT													
C2-M	DEPTH C3-M	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	ck	4 OCCURRED VEL	C	4 TIMES. D	AVERAGE NUMBER C1	ITERATIONS = C2	Q-M	C1-M
.431	1.42	10.1	55.4	.025	14.2	7.36	5.50	2.649	.212	.890	.482	-.372	47.7
.466	1.58	12.4	73.4	.024	15.8	7.89	5.90	2.840	.236	.884	.509	-.394	64.2
.495	1.73	15.0	94.6	.022	17.3	8.40	6.29	3.025	.260	.879	.533	-.412	83.8
.521	1.89	17.9	119.4	.021	18.9	9.21	6.66	3.317	.274	.881	.564	-.445	106.7
.543	2.05	21.0	149.8	.019	20.0	10.85	7.13	3.905	.276	.893	.614	-.507	134.3
.588	2.21	24.2	188.2	.018	20.0	12.68	7.79	4.564	.297	.899	.659	-.557	168.6
.647	2.37	27.3	229.7	.017	20.0	13.65	8.41	4.914	.337	.892	.680	-.572	208.6
.670	2.52	30.5	274.2	.015	20.0	14.56	9.00	5.243	.377	.886	.698	-.584	251.6
.689	2.68	33.6	321.6	.015	20.0	15.43	9.56	5.555	.417	.880	.713	-.594	297.5
.706	2.84	36.8	371.5	.014	20.0	16.25	10.10	5.852	.457	.875	.726	-.601	346.2
.720	3.00	39.9	424.1	.013	20.0	17.04	10.62	6.135	.498	.870	.738	-.608	397.5
.732													

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 4 TIMES. AVERAGE NUMBER ITERATIONS = 1.0589

C2-M	DEPTH C3-M	AREA (SQ FT)	Q (CFS)	TRAVEL TIME(HR)	WIDTH (FT)	(FPS)	(FPS)	C	4 TIMES. D	AVERAGE NUMBER C1	ITERATIONS = C2	Q-M	C1-M
.000	.00	.0	.0	.150	.0	2.78	.58	1.000	.000	1.000	.000	.000	.0
.000	.16	.1	.2	.109	1.6	2.74	1.27	.985	.015	.985	.000	.015	.0
.010	.32	.5	1.0	.069	3.2	2.81	2.02	1.011	.045	.956	.027	.017	.5
.060	.47	1.1	3.0	.053	4.7	3.01	2.64	1.083	.083	.923	.077	.000	1.8
.096	.63	2.0	6.4	.043	6.3	3.14	3.20	1.129	.129	.886	.114	.000	4.5
.134	.79	3.1	11.6	.037	7.9	3.28	3.72	1.179	.179	.848	.152	.000	8.8
.171	.95	4.5	18.8	.033	9.5	3.42	4.20	1.232	.232	.812	.188	.000	15.0
.207	1.10	6.1	28.4	.030	11.0	3.58	4.65	1.287	.287	.777	.223	.000	23.4
.240	1.26	8.0	40.5	.027	12.6	3.73	5.09	1.344	.344	.744	.256	.000	34.2
.272	1.42	10.1	55.4	.025	14.2	3.89	5.50	1.401	.401	.714	.286	.000	47.7
.301	1.58	12.4	73.4	.024	15.8	4.05	5.90	1.459	.459	.685	.315	.000	64.2
.328	1.73	15.0	94.6	.022	17.3	4.22	6.29	1.518	.518	.659	.341	.000	83.8
.354	1.89	17.9	119.4	.021	18.9	4.38	6.66	1.576	.576	.634	.366	.000	106.7
.381	2.05	21.0	149.8	.019	20.0	4.59	7.13	1.653	.653	.605	.395	.000	134.3
.415	2.21	24.2	188.2	.018	20.0	4.91	7.79	1.767	.767	.566	.434	.000	168.6
.452	2.37	27.3	229.7	.017	20.0	5.22	8.41	1.880	.880	.532	.468	.000	208.6
.483	2.52	30.5	274.2	.015	20.0	5.53	9.00	1.991	.991	.502	.498	.000	251.6
.511	2.68	33.6	321.6	.015	20.0	5.84	9.56	2.102	1.102	.476	.524	.000	297.5
.536	2.84	36.8	371.5	.014	20.0	6.14	10.10	2.210	1.210	.452	.548	.000	346.2
.558	3.00	39.9	424.1	.013	20.0	6.44	10.62	2.317	1.317	.432	.568	.000	397.5

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 2 OCCURRED 30 TIMES. AVERAGE NUMBER ITERATIONS = 1.0520
 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=4 CODE=1

PARTIAL HYDROGRAPH 110.10

RUNOFF VOLUME = 2.07963 INCHES = 1.4640 ACRE-FEET
 PEAK DISCHARGE RATE = 23.86 CFS AT 1.600 HOURS BASIN AREA = .0132 SQ. MI.

*
 * **** SUB-BASIN 110 ****
 * SOUTH HALF OF SOCCER FIELD
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=497 FT SLOPE=0.008 K=2.0
 KN=0.021 CENTROID DIST=301 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

SHEET FLOW PORTION	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
	.0	.000000	.0000

SHALLOW FLOW PORTION 497.0 WMHS.OUT
CHANNEL FLOW PORTION .0 .008000 2.0000
TOTAL BASIN 497.0 .000000 .0000
.008000 2.0000

TIME OF CONCENTRATION (HRS)= .0772 TIME TO PEAK (HRS)= .0515 LAG TIME (HRS)= .0579

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=5 HYD NO=110 DA=0.005 SQ MI
PER A=90 PER B=0 PER C=5 PER D=5
TP=0.0 MASSRAIN=-1
TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = .98677 CFS UNIT VOLUME = .9890 B = 526.28 P60 = 1.8700
AREA = .000250 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .160681HR TP = .133333HR K/TP RATIO = 1.205107 SHAPE CONSTANT, N = 2.949709
UNIT PEAK = 9.8929 CFS UNIT VOLUME = .9970 B = 277.70 P60 = 1.8700
AREA = .004750 SQ MI IA = .63421 INCHES INF = 1.62579 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=5 CODE=1

PARTIAL HYDROGRAPH 110.00

RUNOFF VOLUME = .55707 INCHES = .1486 ACRE-FEET
PEAK DISCHARGE RATE = 4.80 CFS AT 1.500 HOURS BASIN AREA = .0050 SQ. MI.

*
* **** SUB-BASIN 112 ****
* WEST SIDE OF TRACK & FIELD
COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
NK=1 ISLOPE=0
LENGTH=318 FT SLOPE=0.006 K=2.0
KN=0.021 CENTROID DIST=266 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	318.0	.006000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	318.0	.006000	2.0000

TIME OF CONCENTRATION (HRS)= .0570 TIME TO PEAK (HRS)= .0380 LAG TIME (HRS)= .0428

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)=

COMPUTE NM HYD ID=1 HYD NO=112 DA=0.002 SQ MI
PER A=95 PER B=0 PER C=0 PER D=5
TP=0.0 MASSRAIN=-1
TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = .39471 CFS UNIT VOLUME = .9739 B = 526.28 P60 = 1.8700
AREA = .000100 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .163724HR TP = .133333HR K/TP RATIO = 1.227936 SHAPE CONSTANT, N = 2.899764
UNIT PEAK = 3.8980 CFS UNIT VOLUME = .9947 B = 273.54 P60 = 1.8700
AREA = .001900 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 112.00

RUNOFF VOLUME = .53875 INCHES = .0575 ACRE-FEET
PEAK DISCHARGE RATE = 1.85 CFS AT 1.500 HOURS BASIN AREA = .0020 SQ. MI.

*
* **** SUB-BASIN 113 ****

* EAST SIDE OF TRACK & FIELD
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=315 FT SLOPE=0.006 K=2.0
 KN=0.021 CENTROID DIST=273 FT

WMHS.OUT

TC AND TP COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	315.0	.006000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	315.0	.006000	2.0000

TIME OF CONCENTRATION (HRS)= .0565 TIME TO PEAK (HRS)= .0377 LAG TIME (HRS)= .0424

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)= .1500

COMPUTE NM HYD ID=2 HYD NO=113 DA=0.0023 SQ MI
 PER A=95 PER B=0 PER C=0 PER D=5
 TP=0.0 MASSRAIN=-1
 TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = .45391 CFS UNIT VOLUME = .9739 B = 526.28 P60 = 1.8700
 AREA = .000115 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .163724HR TP = .133333HR K/TP RATIO = 1.227936 SHAPE CONSTANT, N = 2.899764
 UNIT PEAK = 4.4827 CFS UNIT VOLUME = .9953 B = 273.54 P60 = 1.8700
 AREA = .002185 SQ MI IA = .65000 INCHES INF = 1.67000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 113.00

RUNOFF VOLUME = .53875 INCHES = .0661 ACRE-FEET
 PEAK DISCHARGE RATE = 2.13 CFS AT 1.500 HOURS BASIN AREA = .0023 SQ. MI.

*
 * ADD 112 TO 113 TO GET 110.2
 ADD HYD ID=3 HYD NO=113.1 ID I=1 ID II=2
 PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 113.10

RUNOFF VOLUME = .53867 INCHES = .1235 ACRE-FEET
 PEAK DISCHARGE RATE = 3.98 CFS AT 1.500 HOURS BASIN AREA = .0043 SQ. MI.

*
 * ADD 110.1 TO 110.2 TO GET 110.3
 ADD HYD ID=1 HYD NO=110.3 ID I=3 ID II=4
 PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 110.30

RUNOFF VOLUME = 1.70095 INCHES = 1.5875 ACRE-FEET
 PEAK DISCHARGE RATE = 26.97 CFS AT 1.600 HOURS BASIN AREA = .0175 SQ. MI.

*
 * ADD 110 TO 110.3 TO GET 110.4
 ADD HYD ID=2 HYD NO=110.4 ID I=1 ID II=5
 PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 110.40

RUNOFF VOLUME = 1.44675 INCHES = 1.7361 ACRE-FEET
 PEAK DISCHARGE RATE = 30.72 CFS AT 1.600 HOURS BASIN AREA = .0225 SQ. MI.

*
 *
 *
 *

WMHS.OUT
 *S BASINS CONTRIBUTING TO POND 109
 * **** SUB-BASIN 106 ****
 * TENNIS & BASKETBALL COURTS
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=863 FT SLOPE=0.005 K=2.0
 KN=0.021 CENTROID DIST=492 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	863.0	.005000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	863.0	.005000	2.0000

TIME OF CONCENTRATION (HRS)= .1695 TIME TO PEAK (HRS)= .1130 LAG TIME (HRS)= .1271

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISD VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)= .1500

COMPUTE NM HYD ID=1 HYD NO=106 DA=0.0076 SQ MI
 PER A=35 PER B=15 PER C=5 PER D=45
 TP=0.0 MASSRAIN=-1

TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 13.499 CFS UNIT VOLUME = .9983 B = 526.28 P60 = 1.8700
 AREA = .003420 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

K = .149549HR TP = .133333HR K/TP RATIO = 1.121619 SHAPE CONSTANT, N = 3.154190
 UNIT PEAK = 9.2220 CFS UNIT VOLUME = .9983 B = 294.16 P60 = 1.8700
 AREA = .004180 SQ MI IA = .58182 INCHES INF = 1.47909 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD

ID=1 CODE=1

PARTIAL HYDROGRAPH 106.00

RUNOFF VOLUME = 1.38474 INCHES = .5613 ACRE-FEET
 PEAK DISCHARGE RATE = 13.64 CFS AT 1.500 HOURS BASIN AREA = .0076 SQ. MI.

*
 * ROUTE 106 THRU 109 IN OPEN CHANNEL TO 109.1
 COMPUTE RATING CURVE CID=1 VS NO=1 NO SEGS=1
 MIN ELEV=5096 MAX ELEV=5100
 CH SLOPE=0.005 FP SLOPE=0.005
 N=0.035 DIST=20
 DIST ELEV DIST ELEV
 0 5100 10 5096
 20 5100

RATING CURVE VALLEY SECTION 1.0

WATER SURFACE ELEV	FLOW AREA SQ FT	FLOW RATE CFS	TOP WIDTH FT
5096.00	.00	.00	.00
5096.21	.11	.07	1.05
5096.42	.44	.45	2.10
5096.63	1.00	1.32	3.16
5096.84	1.77	2.84	4.21
5097.05	2.77	5.15	5.26
5097.26	3.99	8.38	6.31
5097.47	5.43	12.64	7.37
5097.68	7.09	18.05	8.42
5097.89	8.97	24.71	9.47
5098.10	11.07	32.73	10.52
5098.31	13.40	42.20	11.57
5098.53	15.94	53.22	12.63
5098.74	18.71	65.88	13.68
5098.95	21.70	80.28	14.73
5099.16	24.91	96.50	15.78
5099.37	28.34	114.62	16.84
5099.58	32.00	134.73	17.89
5099.79	35.87	156.91	18.94
5100.00	39.97	181.25	19.99

ROUTE MCUNGE

ID=2 HYD NO=109.1 INFLOW ID=1
 DT=0.0 L=680 FT NS=0 SLOPE=0.005
 MATCODE=0 REGCODE=0 CCODE=0 MM CODE=0

INFLOW END= 493
 DT= .050000
 WIDTH MED= 5.80
 TABLE PTS= 20
 QMED= 6.82
 NREACH= 3
 CKMED= 2.6498
 DX= 226.67

WMHS.OUT														
C2-M	DEPTH C3-M (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
.000	.000	.0	.0	.406	.0	1.26	.29	1.000	.000	1.000	.000	.000	.0	1.000
.000	.008	.1	.1	.297	1.1	1.20	.64	.951	.049	.951	.000	.049	.0	.992
.041	.034	.4	.4	.187	2.1	1.41	1.01	1.117	.134	.881	.111	.008	.2	.925
.172	.025	1.0	1.3	.143	3.2	1.80	1.32	1.433	.204	.845	.242	-.087	.8	.853
.285	.109	1.8	2.8	.118	4.2	2.17	1.60	1.721	.275	.817	.333	-.149	2.0	.823
.365	.165	2.8	5.2	.101	5.3	2.50	1.86	1.989	.345	.793	.400	-.193	3.9	.799
.426	.205	4.0	8.4	.090	6.3	2.82	2.10	2.241	.415	.773	.453	-.226	6.7	.779
.474	.234	5.4	12.6	.081	7.4	3.12	2.33	2.480	.485	.755	.496	-.251	10.4	.761
.513	.257	7.1	18.1	.074	8.4	3.41	2.55	2.708	.555	.740	.531	-.270	15.3	.744
.546	.276	9.0	24.7	.069	9.5	3.69	2.76	2.927	.625	.725	.561	-.286	21.3	.730
.573	.290	11.1	32.7	.064	10.5	3.95	2.96	3.138	.695	.713	.586	-.299	28.6	.717
.597	.302	13.4	42.2	.060	11.6	4.21	3.15	3.343	.764	.701	.608	-.309	37.4	.705
.618	.312	15.9	53.2	.057	12.6	4.46	3.34	3.541	.834	.690	.628	-.318	47.6	.693
.637	.320	18.7	65.9	.054	13.7	4.70	3.52	3.734	.904	.679	.645	-.325	59.4	.683
.653	.326	21.7	80.3	.051	14.7	4.94	3.70	3.923	.973	.670	.661	-.331	73.0	.673
.668	.332	24.9	96.5	.049	15.8	5.17	3.87	4.107	1.043	.661	.675	-.336	88.3	.664
.681	.336	28.3	114.6	.047	16.8	5.40	4.04	4.287	1.113	.652	.687	-.340	105.4	.655
.693	.340	32.0	134.7	.045	17.9	5.62	4.21	4.463	1.183	.644	.699	-.343	124.5	.647
.704	.344	35.9	156.9	.043	18.9	5.84	4.37	4.636	1.252	.636	.710	-.346	145.7	.639
.714	.346	40.0	181.2	.042	20.0	5.92	4.53	4.703	1.351	.617	.716	-.334	168.9	.632

MAXIMUM NO. ITERATIONS FOR SOLUTION (KKMAX) = 3 OCCURRED 10 TIMES. AVERAGE NUMBER ITERATIONS = 1.0491
 Equations solved using the Ponce correction to C2
 PRINT HYD ID=2 CODE=1

PARTIAL HYDROGRAPH 109.10

RUNOFF VOLUME = 1.38383 INCHES = .5609 ACRE-Feet
 PEAK DISCHARGE RATE = 13.04 CFS AT 1.550 HOURS BASIN AREA = .0076 SQ. MI.

*
 * **** SUB-BASIN 109 ****
 * NORTH HALF OF SOCCER FIELD
 COMPUTE LT TP LCODE=1 UPLAND/LAG TIME METHOD
 NK=1 ISLOPE=0
 LENGTH=689 FT SLOPE=0.006 K=2.0
 KN=0.021 CENTROID DIST=321 FT

TC AND Tp COMPUTED BY UPLAND/LAG TIME PROCEDURE

SCS UPLAND METHOD FACTORS

	LENGTH (FT)	SLOPE (FT/FT)	COMPOSITE K
SHEET FLOW PORTION	.0	.000000	.0000
SHALLOW FLOW PORTION	689.0	.006000	2.0000
CHANNEL FLOW PORTION	.0	.000000	.0000
TOTAL BASIN	689.0	.006000	2.0000

TIME OF CONCENTRATION (HRS)= .1235 TIME TO PEAK (HRS)= .0824 LAG TIME (HRS)= .0927

TIME TO PEAK COMPUTED TO BE LESS THAN 0.133333 HOUR MINIMUM VALUE.

REVISED VALUES: TIME OF CONCENTRATION (HRS)= .2000 TIME TO PEAK (HRS)= .1333 LAG TIME (HRS)= .1500

COMPUTE NM HYD ID=3 HYD NO=109 DA=0.0058 SQ MI
 PER A=75 PER B=15 PER C=5 PER D=5
 TP=0.0 MASSRAIN=-1
 TIME TO PEAK (hrs)= .1333

K = .072666HR TP = .133333HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
 UNIT PEAK = 1.1447 CFS UNIT VOLUME = .9890 B = 526.28 P60 = 1.8700
 AREA = .000290 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

WMHS.OUT
 K = .155517HR TP = .133333HR K/TP RATIO = 1.166384 SHAPE CONSTANT, N = 3.040026
 UNIT PEAK = 11.781 CFS UNIT VOLUME = .9980 B = 285.07 P60 = 1.8700
 AREA = .005510 SQ MI IA = .61053 INCHES INF = 1.55947 INCHES PER HOUR
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .050000

PRINT HYD ID=3 CODE=1

PARTIAL HYDROGRAPH 109.00

RUNOFF VOLUME = .58809 INCHES = .1819 ACRE-FEET
 PEAK DISCHARGE RATE = 5.92 CFS AT 1.500 HOURS BASIN AREA = .0058 SQ. MI.

*

* ADD 109.1 TO 109 TO GET 109.2
 ADD HYD ID=1 HYD NO=109.2 ID I=2 ID II=3
 PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 109.20

RUNOFF VOLUME = 1.03933 INCHES = .7428 ACRE-FEET
 PEAK DISCHARGE RATE = 18.69 CFS AT 1.550 HOURS BASIN AREA = .0134 SQ. MI.

*

FINISH

NORMAL PROGRAM FINISH

END TIME (HR:MIN:SEC) = 14:52:21