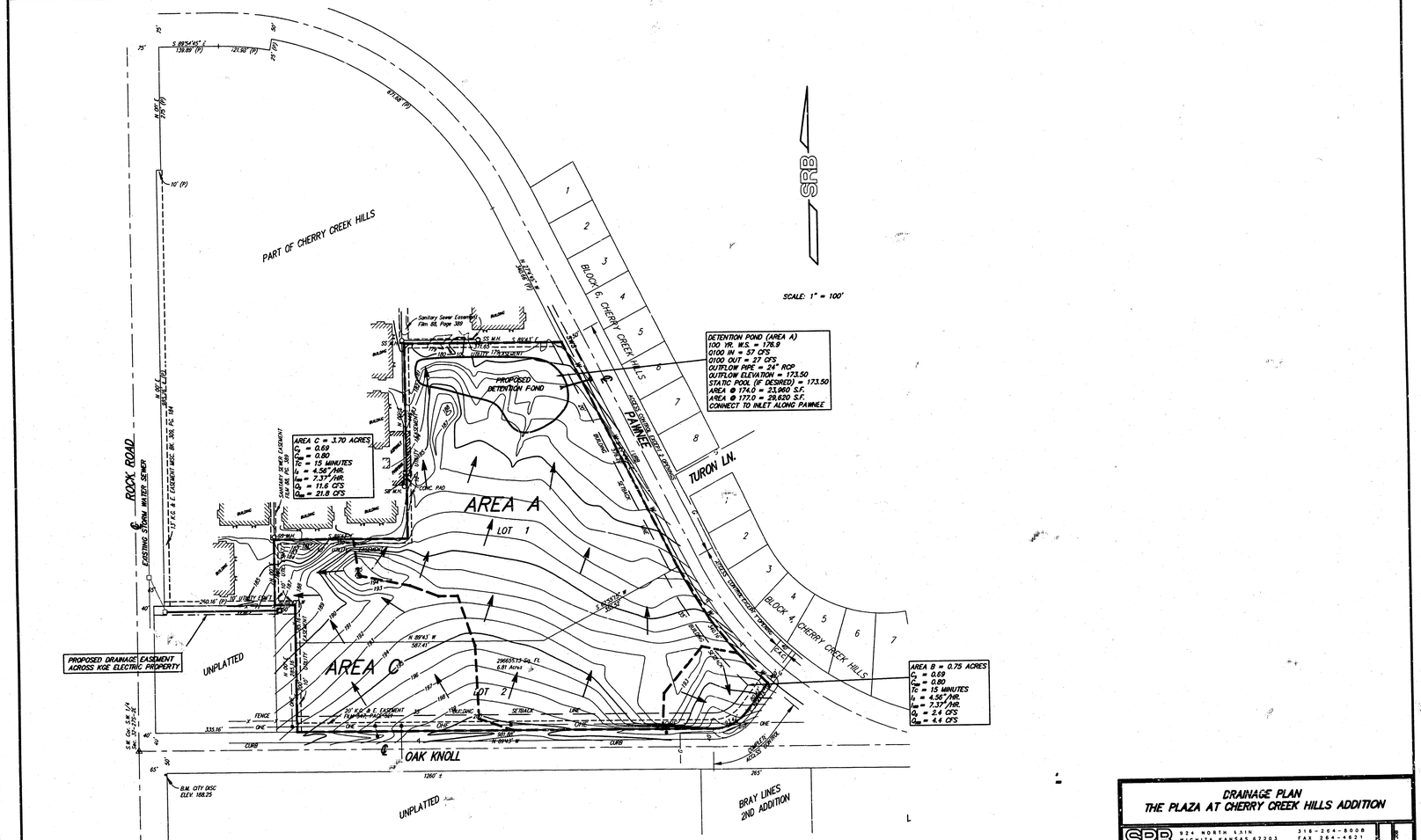


DRAINAGE PLAN
THE PLAZA AT CHERRY CREEK HILLS ADDITION

SRB
924 NORTH LAIN
WICHITA, KANSAS 67203
316-264-8008
FAX 264-4621
http://www.feist.com/~srb
E-mail: srb@feist.com
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

PROJECT NUMBER

DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
				1-5-98	

SHEET OF SHEETS

12/22/97 CMB

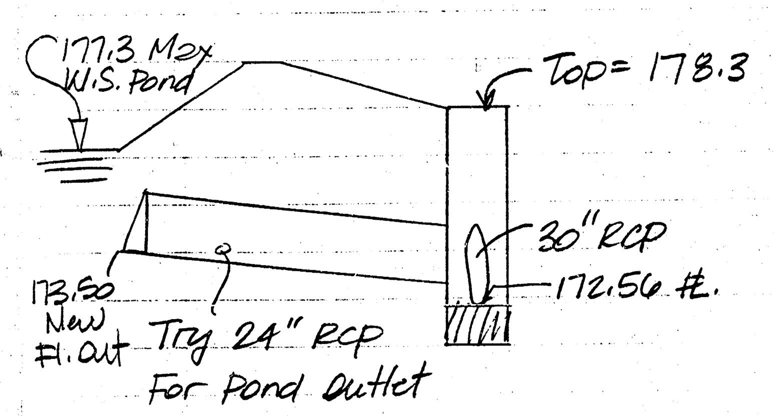
The Plaza @ Cherry Creek Hills
Drainage Plan

Pond located @ North East Corner of Site.
D_A = 10.6 Acres (Area A)
T_c = 20 minutes.

Aveible outlet structure = Inlet; Pipe Installed W/ KDOT Project for Pawnee.
12.5 Acres Used on Drainage Plan.

D.S. Pipe from Inlet = 30" RCP
@ Slope = 0.5%; Capacity 30" RCP = ±29cfs.
(Gravity Flow, Mannings Equation).

Target < 29 cfs Outlet from Pond.



12/22/97 CMB

Use CN Developed = 93

Use 24" RCP From New Pond; Fl = 173.50

For Inlet Control - 24" RCP from Pond.

Elev.	HW	Q (24") RCP	Area (Acres) Pond	Area S.F.
177	3.5	26	0.68	29,620
176	2.5	18	0.63	27,440
175	1.5	8	0.56	24,394
174	0.5	2	0.55	23,960
173.5	0	0.1	0.52	22,650

Results: Q_{100} out = 27cfs
WS = 176.91 (Target 177.3)
Q_{in} = 57cfs

Required Pond:

Area @ Elev = 177 = 29,620
Side Slope (down) = 4:1
Outlet = 24" RCP, Flow out of pond = 173.5
Any amount of Excavation below 173.5
Is o.k. as desired.

12/22/97 CMB

For Balance of Area "A"; Use on site SWS or overland flow to convey water to Pond.

Area "B" Southeast Corner of Site:
A = 0.75 Acres
C_5 = 0.69 (Neighborhood Business)
C_{100} = 0.80 (Ditto)
T_c = 15 minutes
i_5 = 4.56"/hr
i_{100} = 7.37"/hr
Q_5 = 2.4 cfs
Q_{100} = 4.4 cfs

Drainage to Pawnee; Oak Knoll V/2 Driveways.

Area "C" Southwest Corner of Plat.
Area = 3.7 Acres
C_5 = 0.69 i_5 = 4.56"/hr
C_{100} = 0.80 i_{100} = 7.37"/hr
T_c = 15 minutes
Q_5 = 11.4 cfs
Q_{100} = 21.8 cfs

Drainage Via Storm Water Sewer Across KGE Property to West.

```
HEC1 S/N: 1343000364        HMVersion: 6.33    Data File: HECOX.HC1

**************************************             **************************************
* FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *             *  U.S. ARMY CORPS OF ENGINEERS      *
*           MAY  1991                *             *  HYDROLOGIC ENGINEERING CENTER     *
*        VERSION 4.0.1E              *             *       609 SECOND STREET            *
*                                    *             *    DAVIS, CALIFORNIA 95616         *
* RUN DATE  12/22/1997  TIME 15:31:24 *            *       (916) 756-1104               *
**************************************             **************************************

     X     X  XXXXXXX   XXXXX        X
     X     X  X        X     X      XX
     X     X  X        X             X
     XXXXXXX  XXXX     X     XXXXX   X
     X     X  X        X             X
     X     X  X        X     X       X
     X     X  XXXXXXX   XXXXX       XXX

          ::::::::::::::::::::::::::::::::::::::::::
          ::::::::::::::::::::::::::::::::::::::::::
          :::                                    :::
          :::  Full Microcomputer Implementation :::
          :::                by                  :::
          :::       Haestad Methods, Inc.        :::
          :::                                    :::
          ::::::::::::::::::::::::::::::::::::::::::
          ::::::::::::::::::::::::::::::::::::::::::

   37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

                                   HEC-1 INPUT                                        PAGE  1

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

*** FREE ***
         1        ID    HECOX (OAK KNOLL) PLAT
         2        IT      5                  289
         3        IN     30
         4        IO      1

         5        KK    DEVEL
         6        PC      0    0.04    0.08     .12     .17     .22     .27     .32     .37     .43
         7        PC    .49     .56     .62     .69     .77     .85     .94    1.04    1.15    1.27
         8        PC   1.41    1.59    1.83    2.21    5.17    5.73    6.02    6.23    6.40    6.54
         9        PC   6.65    6.76    6.86    6.95    7.02    7.09    7.16    7.23    7.29    7.36
        10        PC   7.43    7.49    7.54    7.59    7.63    7.68    7.72    7.76    7.80
        11        BA 0.0166
        12        LS      0      93
        13        UD   0.20

        14        KK    POND
        15        RS      1    ELEV   173.5
        16        SA   0.52    0.55    0.56    0.63    0.68
        17        SE  173.5     174     175     176     177
        18        SQ    0.1       2       8      18      28
        19        SE  173.5     174     175     176     177
        20        ZZ

HEC1 S/N: 1343000364        HMVersion: 6.33    Data File: HECOX.HC1

**************************************             **************************************
* FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *             *  U.S. ARMY CORPS OF ENGINEERS      *
*           MAY  1991                *             *  HYDROLOGIC ENGINEERING CENTER     *
*        VERSION 4.0.1E              *             *       609 SECOND STREET            *
*                                    *             *    DAVIS, CALIFORNIA 95616         *
* RUN DATE  12/22/1997  TIME 15:31:24 *            *       (916) 756-1104               *
**************************************             **************************************

                         HECOX (OAK KNOLL) PLAT

  4 IO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT         HYDROGRAPH TIME DATA
                     NMIN          5  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ        289  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      2   0  ENDING DATE
                   NDTIME       0000  ENDING TIME
                    ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL    0.08 HOURS
               TOTAL TIME BASE   24.00 HOURS

       ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT

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

              ***************
   5 KK       *    DEVEL    *
              ***************

   3 IN          TIME DATA FOR INPUT TIME SERIES
                    JXMIN         30  TIME INTERVAL IN MINUTES
                   JXDATE      1   0  STARTING DATE
                   JXTIME          0  STARTING TIME

               SUBBASIN RUNOFF DATA

  11 BA          SUBBASIN CHARACTERISTICS
                    TAREA       0.02  SUBBASIN AREA

                 PRECIPITATION DATA

   6 PB             STORM       7.80  BASIN TOTAL PRECIPITATION

   6 PI           INCREMENTAL PRECIPITATION PATTERN
```

0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
0.04	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.49	0.49
0.49	0.49	0.19	0.49	0.09	0.09	0.09	0.09	0.09	0.09
0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.04	0.03	0.03
0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		

```
  12 LS          SCS LOSS RATE
                   STRTL        0.15  INITIAL ABSTRACTION
                  CRVNBR       93.00  CURVE NUMBER
                   RTIMP        0.00  PERCENT IMPERVIOUS AREA

  13 UD          SCS DIMENSIONLESS UNITGRAPH
                    TLAG        0.20  LAG

                                            ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                     UNIT HYDROGRAPH
                                 14 END-OF-PERIOD ORDINATES
            8.      27.      33.      26.      15.       8.       5.       3.       2.       1.
            1.       0.       0.       0.
```

HYDROGRAPH AT STATION DEVEL

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	0.00	0.00	0.00	0.	1		1205	146	0.09	0.00	0.09	56.
1		0005	2	0.01	0.01	0.00	0.	1		1210	147	0.09	0.00	0.09	47.
1		0010	3	0.01	0.01	0.00	0.	1		1215	148	0.09	0.00	0.09	35.
1		0015	4	0.01	0.01	0.00	0.	1		1220	149	0.09	0.00	0.09	25.
1		0020	5	0.01	0.01	0.00	0.	1		1225	150	0.09	0.00	0.09	19.
1		0025	6	0.01	0.01	0.00	0.	1		1230	151	0.09	0.00	0.09	16.
1		0030	7	0.01	0.01	0.00	0.	1		1235	152	0.05	0.00	0.05	14.
1		0035	8	0.01	0.01	0.00	0.	1		1240	153	0.05	0.00	0.05	12.
1		0040	9	0.01	0.01	0.00	0.	1		1245	154	0.05	0.00	0.05	10.
1		0045	10	0.01	0.01	0.00	0.	1		1250	155	0.05	0.00	0.05	8.
1		0050	11	0.01	0.01	0.00	0.	1		1255	156	0.05	0.00	0.05	7.
1		0055	12	0.01	0.01	0.00	0.	1		1300	157	0.05	0.00	0.05	7.
1		0100	13	0.01	0.01	0.00	0.	1		1305	158	0.03	0.00	0.03	6.
1		0105	14	0.01	0.01	0.00	0.	1		1310	159	0.04	0.00	0.03	6.
1		0110	15	0.01	0.01	0.00	0.	1		1315	160	0.03	0.00	0.03	5.
1		0115	16	0.01	0.01	0.00	0.	1		1320	161	0.03	0.00	0.03	5.
1		0120	17	0.01	0.01	0.00	0.	1		1325	162	0.04	0.00	0.03	5.
1		0125	18	0.01	0.01	0.00	0.	1		1330	163	0.03	0.00	0.03	5.
1		0130	19	0.01	0.01	0.00	0.	1		1335	164	0.03	0.00	0.03	4.
1		0135	20	0.01	0.01	0.00	0.	1		1340	165	0.03	0.00	0.03	4.
1		0140	21	0.01	0.01	0.00	0.	1		1345	166	0.03	0.00	0.03	4.
1		0145	22	0.01	0.01	0.00	0.	1		1350	167	0.03	0.00	0.03	4.
1		0150	23	0.01	0.01	0.00	0.	1		1355	168	0.03	0.00	0.03	4.
1		0155	24	0.01	0.01	0.00	0.	1		1400	169	0.03	0.00	0.03	4.
1		0200	25	0.01	0.01	0.00	0.	1		1405	170	0.02	0.00	0.02	4.
1		0205	26	0.01	0.01	0.00	0.	1		1410	171	0.02	0.00	0.02	3.
1		0210	27	0.01	0.01	0.00	0.	1		1415	172	0.02	0.00	0.02	3.
1		0215	28	0.01	0.01	0.00	0.	1		1420	173	0.02	0.00	0.02	3.
1		0220	29	0.01	0.01	0.00	0.	1		1425	174	0.02	0.00	0.02	3.
1		0225	30	0.01	0.01	0.00	0.	1		1430	175	0.02	0.00	0.02	3.
1		0230	31	0.01	0.01	0.00	0.	1		1435	176	0.02	0.00	0.02	3.
1		0235	32	0.01	0.01	0.00	0.	1		1440	177	0.02	0.00	0.02	3.
1		0240	33	0.01	0.01	0.00	0.	1		1445	178	0.02	0.00	0.02	3.
1		0245	34	0.01	0.01	0.00	0.	1		1450	179	0.02	0.00	0.02	3.
1		0250	35	0.01	0.01	0.00	0.	1		1455	180	0.02	0.00	0.02	2.
1		0255	36	0.01	0.01	0.00	0.	1		1500	181	0.02	0.00	0.02	2.
1		0300	37	0.01	0.01	0.00	0.	1		1505	182	0.02	0.00	0.02	2.
1		0305	38	0.01	0.01	0.00	0.	1		1510	183	0.02	0.00	0.02	2.
1		0310	39	0.01	0.01	0.00	0.	1		1515	184	0.02	0.00	0.02	2.
1		0315	40	0.01	0.01	0.00	0.	1		1520	185	0.02	0.00	0.02	2.
1		0320	41	0.01	0.01	0.00	0.	1		1525	186	0.02	0.00	0.02	2.
1		0325	42	0.01	0.01	0.00	0.	1		1530	187	0.02	0.00	0.02	2.
1		0330	43	0.01	0.01	0.00	0.	1		1535	188	0.02	0.00	0.02	2.
1		0335	44	0.01	0.01	0.00	0.	1		1540	189	0.02	0.00	0.02	2.
1		0340	45	0.01	0.01	0.00	0.	1		1545	190	0.02	0.00	0.02	2.
1		0345	46	0.01	0.01	0.00	0.	1		1550	191	0.02	0.00	0.02	2.
1		0350	47	0.01	0.01	0.00	0.	1		1555	192	0.02	0.00	0.02	2.
1		0355	48	0.01	0.01	0.00	0.	1		1600	193	0.02	0.00	0.02	2.
1		0400	49	0.01	0.01	0.00	0.	1		1605	194	0.01	0.00	0.01	2.
1		0405	50	0.01	0.01	0.00	0.	1		1610	195	0.01	0.00	0.01	2.
1		0410	51	0.01	0.01	0.00	0.	1		1615	196	0.02	0.00	0.01	2.
1		0415	52	0.01	0.01	0.00	0.	1		1620	197	0.01	0.00	0.01	2.
1		0420	53	0.01	0.01	0.00	1.	1		1625	198	0.01	0.00	0.01	2.
1		0425	54	0.01	0.01	0.00	1.	1		1630	199	0.01	0.00	0.01	2.
1		0430	55	0.01	0.01	0.00	1.	1		1635	200	0.01	0.00	0.01	2.
1		0435	56	0.01	0.01	0.00	1.	1		1640	201	0.01	0.00	0.01	2.
1		0440	57	0.01	0.01	0.00	1.	1		1645	202	0.01	0.00	0.01	2.
1		0445	58	0.01	0.01	0.00	1.	1		1650	203	0.01	0.00	0.01	2.
1		0450	59	0.01	0.00	0.01	1.	1		1655	204	0.01	0.00	0.01	2.
1		0455	60	0.01	0.00	0.00	1.	1		1700	205	0.01	0.00	0.01	2.
1		0500	61	0.01	0.00	0.01	1.	1		1705	206	0.01	0.00	0.01	2.
1		0505	62	0.01	0.01	0.01	1.	1		1710	207	0.01	0.00	0.01	1.
1		0510	63	0.01	0.01	0.01	1.	1		1715	208	0.01	0.00	0.01	1.
1		0515	64	0.01	0.01	0.01	1.	1		1720	209	0.01	0.00	0.01	1.
1		0520	65	0.01	0.01	0.01	1.	1		1725	210	0.01	0.00	0.01	1.
1		0525	66	0.01	0.01	0.01	1.	1		1730	211	0.01	0.00	0.01	1.
1		0530	67	0.01	0.00	0.01	1.	1		1735	212	0.01	0.00	0.01	1.
1		0535	68	0.01	0.00	0.01	1.	1		1740	213	0.01	0.00	0.01	1.
1		0540	69	0.01	0.00	0.01	1.	1		1745	214	0.01	0.00	0.01	1.
1		0545	70	0.01	0.00	0.01	1.	1		1750	215	0.01	0.00	0.01	1.
1		0550	71	0.01	0.00	0.01	1.	1		1755	216	0.01	0.00	0.01	1.
1		0555	72	0.01	0.00	0.01	1.	1		1800	217	0.01	0.00	0.01	1.
1		0600	73	0.01	0.00	0.01	1.	1		1805	218	0.01	0.00	0.01	1.
1		0605	74	0.01	0.00	0.01	1.	1		1810	219	0.01	0.00	0.01	1.
1		0610	75	0.01	0.00	0.01	1.	1		1815	220	0.01	0.00	0.01	1.
1		0615	76	0.01	0.00	0.01	1.	1		1820	221	0.01	0.00	0.01	1.
1		0620	77	0.01	0.00	0.01	1.	1		1825	222	0.01	0.00	0.01	1.
1		0625	78	0.01	0.00	0.01	1.	1		1830	223	0.01	0.00	0.01	1.
1		0630	79	0.01	0.00	0.01	1.	1		1835	224	0.01	0.00	0.01	1.
1		0635	80	0.01	0.00	0.01	1.	1		1840	225	0.01	0.00	0.01	1.
1		0640	81	0.01	0.00	0.01	1.	1		1845	226	0.01	0.00	0.01	1.
1		0645	82	0.01	0.00	0.01	1.	1		1850	227	0.01	0.00	0.01	1.
1		0650	83	0.01	0.00	0.01	1.	1		1855	228	0.01	0.00	0.01	1.
1		0655	84	0.01	0.00	0.01	1.	1		1900	229	0.01	0.00	0.01	1.
1		0700	85	0.01	0.00	0.01	1.	1		1905	230	0.01	0.00	0.01	1.
1		0705	86	0.01	0.00	0.01	1.	1		1910	231	0.01	0.00	0.01	1.
1		0710	87	0.01	0.00	0.01	1.	1		1915	232	0.01	0.00	0.01	1.
1		0715	88	0.01	0.00	0.01	1.	1		1920	233	0.01	0.00	0.01	1.
1		0720	89	0.01	0.00	0.01	1.	1		1925	234	0.01	0.00	0.01	1.
1		0725	90	0.01	0.00	0.01	1.	1		1930	235	0.01	0.00	0.01	1.
1		0730	91	0.01	0.00	0.01	1.	1		1935	236	0.01	0.00	0.01	1.
1		0735	92	0.01	0.00	0.01	1.	1		1940	237	0.01	0.00	0.01	1.
1		0740	93	0.01	0.00	0.01	1.	1		1945	238	0.01	0.00	0.01	1.
1		0745	94	0.02	0.00	0.01	1.	1		1950	239	0.01	0.00	0.01	1.
1		0750	95	0.01	0.00	0.01	1.	1		1955	240	0.01	0.00	0.01	1.
1		0755	96	0.01	0.00	0.01	1.	1		2000	241	0.01	0.00	0.01	1.
1		0800	97	0.01	0.00	0.01	1.	1		2005	242	0.01	0.00	0.01	1.
1		0805	98	0.02	0.00	0.01	1.	1		2010	243	0.01	0.00	0.01	1.
1		0810	99	0.02	0.00	0.01	1.	1		2015	244	0.01	0.00	0.01	1.
1		0815	100	0.02	0.00	0.01	2.	1		2020	245	0.01	0.00	0.01	1.
1		0820	101	0.02	0.00	0.01	2.	1		2025	246	0.01	0.00	0.01	1.
1		0825	102	0.02	0.00	0.01	2.	1		2030	247	0.01	0.00	0.01	1.
1		0830	103	0.02	0.00	0.01	2.	1		2035	248	0.01	0.00	0.01	1.
1		0835	104	0.02	0.00	0.01	2.	1		2040	249	0.01	0.00	0.01	1.
1		0840	105	0.02	0.00	0.01	2.	1		2045	250	0.01	0.00	0.01	1.
1		0845	106	0.02	0.00	0.01	2.	1		2050	251	0.01	0.00	0.01	1.
1		0850	107	0.02	0.00	0.01	2.	1		2055	252	0.01	0.00	0.01	1.
1		0855	108	0.02	0.00	0.01	2.	1		2100	253	0.01	0.00	0.01	1.
1		0900	109	0.02	0.00	0.01	2.	1		2105	254	0.01	0.00	0.01	1.
1		0905	110	0.02	0.00	0.02	2.	1		2110	255	0.01	0.00	0.01	1.
1		0910	111	0.02	0.00	0.02	2.	1		2115	256	0.01	0.00	0.01	1.
1		0915	112	0.02	0.00	0.02	2.	1		2120	257	0.01	0.00	0.01	1.
1		0920	113	0.02	0.00	0.02	2.	1		2125	258	0.01	0.00	0.01	1.
1		0925	114	0.02	0.00	0.02	2.	1		2130	259	0.01	0.00	0.01	1.
1		0930	115	0.02	0.00	0.02	2.	1		2135	260	0.01	0.00	0.01	1.
1		0935	116	0.02	0.00	0.02	2.	1		2140	261	0.01	0.00	0.01	1.
1		0940	117	0.02	0.00	0.02	2.	1		2145	262	0.01	0.00	0.01	1.
1		0945	118	0.02	0.00	0.02	2.	1		2150	263	0.01	0.00	0.01	1.
1		0950	119	0.02	0.00	0.02	2.	1		2155	264	0.01	0.00	0.01	1.
1		0955	120	0.02	0.00	0.02	2.	1		2200	265	0.01	0.00	0.01	1.
1		1000	121	0.02	0.00	0.02	3.	1		2205	266	0.01	0.00	0.01	1.
1		1005	122	0.03	0.00	0.03	3.	1		2210	267	0.01	0.00	0.01	1.
1		1010	123	0.03	0.00	0.03	3.	1		2215	268	0.01	0.00	0.01	1.
1		1015	124	0.03	0.00	0.03	3.	1		2220	269	0.01	0.00	0.01	1.
1		1020	125	0.03	0.00	0.03	3.	1		2225	270	0.01	0.00	0.01	1.
1		1025	126	0.03	0.00	0.03	3.	1		2230	271	0.01	0.00	0.01	1.
1		1030	127	0.03	0.00	0.03	3.	1		2235	272	0.01	0.00	0.01	1.
1		1035	128	0.04	0.00	0.04	3.	1		2240	273	0.01	0.00	0.01	1.
1		1040	129	0.04	0.00	0.04	4.	1		2245	274	0.01	0.00	0.01	1.
1		1045	130	0.04	0.00	0.04	4.	1		2250	275	0.01	0.00	0.01	1.
1		1050	131	0.04	0.00	0.04	4.	1		2255	276	0.01	0.00	0.01	1.
1		1055	132	0.04	0.00	0.04	4.	1		2300	277	0.01	0.00	0.01	1.
1		1100	133	0.04	0.00	0.04	4.	1		2305	278	0.01	0.00	0.01	1.
1		1105	134	0.06	0.01	0.06	5.	1		2310	279	0.01	0.00	0.01	1.
1		1110	135	0.06	0.01	0.06	5.	1		2315	280	0.01	0.00	0.01	1.
1		1115	136	0.06	0.01	0.06	6.	1		2320	281	0.01	0.00	0.01	1.
1		1120	137	0.06	0.01	0.06	7.	1		2325	282	0.01	0.00	0.01	1.
1		1125	138	0.06	0.00	0.06	7.	1		2330	283	0.01	0.00	0.01	1.
1		1130	139	0.06	0.00	0.06	7.	1		2335	284	0.01	0.00	0.01	1.
1		1135	140	0.49	0.03	0.46	11.	1		2340	285	0.01	0.00	0.01	1.
1		1140	141	0.49	0.02	0.47	22.	1		2345	286	0.01	0.00	0.01	1.
1		1145	142	0.49	0.02	0.48	35.	1		2350	287	0.01	0.00	0.01	1.
1		1150	143	0.49	0.01	0.48	46.	1		2355	288	0.01	0.00	0.01	1.
1		1155	144	0.49	0.01	0.48	53.	2		0000	289	0.01	0.00	0.01	1.
1		1200	145	0.49	0.01	0.48	57.								

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TOTAL RAINFALL =   7.80, TOTAL LOSS =    0.84, TOTAL EXCESS =    6.96

PEAK FLOW     TIME                    MAXIMUM AVERAGE FLOW
                            6-HR        24-HR        72-HR     24.00-HR
  (CFS)      (HR)
                  (CFS)
     57.     12.00             9.           3.           3.           3.
                (INCHES)     5.261        6.943        6.943        6.943
                 (AC-FT)        5.           6.           6.           6.

                        CUMULATIVE AREA =    0.02 SQ MI

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

              ***************
  14 KK       *    POND     *
              ***************

               HYDROGRAPH ROUTING DATA

  15 RS          STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       ELEV  TYPE OF INITIAL CONDITION
                    RSVRIC    173.50  INITIAL CONDITION
                        X       0.00  WORKING R AND D COEFFICIENT

  16 SA            AREA        0.5       0.6       0.6       0.6       0.7

  17 SE       ELEVATION     173.50    174.00    175.00    176.00    177.00

  18 SQ       DISCHARGE         0.        2.        8.       18.       28.

  19 SE       ELEVATION     173.50    174.00    175.00    176.00    177.00

                                         ***

                             COMPUTED STORAGE-ELEVATION DATA

          STORAGE      0.00      0.27      0.82      1.42      2.07
        ELEVATION    173.50    174.00    175.00    176.00    177.00

                         COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE      0.00      0.27      0.82      1.42      2.07
          OUTFLOW      0.10      2.00      8.00     18.00     28.00
        ELEVATION    173.50    174.00    175.00    176.00    177.00
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HYDROGRAPH AT STATION POND

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	0.0	173.5	1		0805	98	1.	0.1	173.7	1		1610	195	3.	0.4	174.2
1		0005	2	0.	0.0	173.5	1		0810	99	1.	0.1	173.7	1		1615	196	3.	0.4	174.2
1		0010	3	0.	0.0	173.5	1		0815	100	1.	0.1	173.7	1		1620	197	3.	0.4	174.2
1		0015	4	0.	0.0	173.5	1		0820	101	1.	0.1	173.8	1		1625	198	3.	0.4	174.2
1		0020	5	0.	0.0	173.5	1		0825	102	1.	0.1	173.8	1		1630	199	3.	0.3	174.1
1		0025	6	0.	0.0	173.5	1		0830	103	1.	0.1	173.8	1		1635	200	3.	0.3	174.1
1		0030	7	0.	0.0	173.5	1		0835	104	1.	0.1	173.8	1		1640	201	3.	0.3	174.1
1		0035	8	0.	0.0	173.5	1		0840	105	1.	0.2	173.8	1		1645	202	3.	0.3	174.1
1		0040	9	0.	0.0	173.5	1		0845	106	1.	0.2	173.8	1		1650	203	3.	0.3	174.1
1		0045	10	0.	0.0	173.5	1		0850	107	1.	0.2	173.8	1		1655	204	3.	0.3	174.1
1		0050	11	0.	0.0	173.5	1		0855	108	1.	0.2	173.8	1		1700	205	2.	0.3	174.1
1		0055	12	0.	0.0	173.5	1		0900	109	1.	0.2	173.8	1		1705	206	2.	0.3	174.1
1		0100	13	0.	0.0	173.5	1		0905	110	1.	0.2	173.8	1		1710	207	2.	0.3	174.1
1		0105	14	0.	0.0	173.5	1		0910	111	1.	0.2	173.8	1		1715	208	2.	0.3	174.0
1		0110	15	0.	0.0	173.5	1		0915	112	1.	0.2	173.8	1		1720	209	2.	0.3	174.0
1		0115	16	0.	0.0	173.5	1		0920	113	1.	0.2	173.8	1		1725	210	2.	0.3	174.0
1		0120	17	0.	0.0	173.5	1		0925	114	1.	0.2	173.9	1		1730	211	2.	0.3	174.0
1		0125	18	0.	0.0	173.5	1		0930	115	1.	0.2	173.9	1		1735	212	2.	0.3	174.0
1		0130	19	0.	0.0	173.5	1		0935	116	2.	0.2	173.9	1		1740	213	2.	0.3	174.0
1		0135	20	0.	0.0	173.5	1		0940	117	2.	0.2	173.9	1		1745	214	2.	0.3	174.0
1		0140	21	0.	0.0	173.5	1		0945	118	2.	0.2	173.9	1		1750	215	2.	0.3	174.0
1		0145	22	0.	0.0	173.5	1		0950	119	2.	0.2	173.9	1		1755	216	2.	0.3	174.0
1		0150	23	0.	0.0	173.5	1		0955	120	2.	0.2	173.9	1		1800	217	2.	0.3	174.0
1		0155	24	0.	0.0	173.5	1		1000	121	2.	0.2	173.9	1		1805	218	2.	0.3	174.0
1		0200	25	0.	0.0	173.5	1		1005	122	2.	0.2	173.9	1		1810	219	2.	0.3	174.0
1		0205	26	0.	0.0	173.5	1		1010	123	2.	0.2	173.9	1		1815	220	2.	0.2	174.0
1		0210	27	0.	0.0	173.5	1		1015	124	2.	0.2	174.0	1		1820	221	2.	0.2	174.0
1		0215	28	0.	0.0	173.5	1		1020	125	2.	0.3	174.0	1		1825	222	2.	0.2	174.0
1		0220	29	0.	0.0	173.5	1		1025	126	2.	0.3	174.0	1		1830	223	2.	0.2	173.9
1		0225	30	0.	0.0	173.5	1		1030	127	2.	0.3	174.0	1		1835	224	2.	0.2	173.9
1		0230	31	0.	0.0	173.5	1		1035	128	2.	0.3	174.0	1		1840	225	2.	0.2	173.9
1		0235	32	0.	0.0	173.5	1		1040	129	2.	0.3	174.0	1		1845	226	2.	0.2	173.9
1		0240	33	0.	0.0	173.5	1		1045	130	2.	0.3	174.1	1		1850	227	2.	0.2	173.9
1		0245	34	0.	0.0	173.5	1		1050	131	2.	0.3	174.1	1		1855	228	2.	0.2	173.9
1		0250	35	0.	0.0	173.5	1		1055	132	2.	0.3	174.1	1		1900	229	2.	0.2	173.9
1		0255	36	0.	0.0	173.5	1		1100	133	3.	0.3	174.1	1		1905	230	2.	0.2	173.9
1		0300	37	0.	0.0	173.5	1		1105	134	3.	0.3	174.1	1		1910	231	2.	0.2	173.9
1		0305	38	0.	0.0	173.5	1		1110	135	3.	0.4	174.2	1		1915	232	2.	0.2	173.9
1		0310	39	0.	0.0	173.5	1		1115	136	3.	0.4	174.2	1		1920	233	2.	0.2	173.9
1		0315	40	0.	0.0	173.5	1		1120	137	3.	0.4	174.2	1		1925	234	2.	0.2	173.9
1		0320	41	0.	0.0	173.5	1		1125	138	4.	0.4	174.3	1		1930	235	2.	0.2	173.9
1		0325	42	0.	0.0	173.5	1		1130	139	4.	0.4	174.3	1		1935	236	2.	0.2	173.9
1		0330	43	0.	0.0	173.5	1		1135	140	4.	0.5	174.4	1		1940	237	2.	0.2	173.9
1		0335	44	0.	0.0	173.5	1		1140	141	5.	0.6	174.5	1		1945	238	2.	0.2	173.9
1		0340	45	0.	0.0	173.5	1		1145	142	7.	0.7	174.8	1		1950	239	2.	0.2	173.9
1		0345	46	0.	0.0	173.5	1		1150	143	10.	0.9	175.2	1		1955	240	2.	0.2	173.9
1		0350	47	0.	0.0	173.5	1		1155	144	14.	1.2	175.6	1		2000	241	2.	0.2	173.9
1		0355	48	0.	0.0	173.5	1		1200	145	19.	1.5	176.1	1		2005	242	2.	0.2	173.9
1		0400	49	0.	0.0	173.5	1		1205	146	22.	1.7	176.4	1		2010	243	2.	0.2	173.9
1		0405	50	0.	0.0	173.5	1		1210	147	25.	1.9	176.7	1		2015	244	2.	0.2	173.9
1		0410	51	0.	0.0	173.5	1		1215	148	27.	2.0	176.9	1		2020	245	2.	0.2	173.9
1		0415	52	0.	0.0	173.5	1		1220	149	27.	2.0	176.9	1		2025	246	2.	0.2	173.9
1		0420	53	0.	0.0	173.5	1		1225	150	27.	2.0	176.9	1		2030	247	2.	0.2	173.9
1		0425	54	0.	0.0	173.5	1		1230	151	26.	1.9	176.8	1		2035	248	2.	0.2	173.9
1		0430	55	0.	0.0	173.5	1		1235	152	25.	1.9	176.7	1		2040	249	2.	0.2	173.9
1		0435	56	0.	0.0	173.5	1		1240	153	23.	1.8	176.5	1		2045	250	1.	0.2	173.9
1		0440	57	0.	0.0	173.6	1		1245	154	22.	1.7	176.4	1		2050	251	1.	0.2	173.9
1		0445	58	0.	0.0	173.6	1		1250	155	21.	1.6	176.3	1		2055	252	1.	0.2	173.9
1		0450	59	0.	0.0	173.6	1		1255	156	20.	1.5	176.2	1		2100	253	1.	0.2	173.9
1		0455	60	0.	0.0	173.6	1		1300	157	19.	1.4	176.0	1		2105	254	1.	0.2	173.8
1		0500	61	0.	0.0	173.6	1		1305	158	17.	1.4	175.9	1		2110	255	1.	0.2	173.8
1		0505	62	0.	0.0	173.6	1		1310	159	16.	1.3	175.8	1		2115	256	1.	0.2	173.8
1		0510	63	0.	0.0	173.6	1		1315	160	15.	1.2	175.7	1		2120	257	1.	0.2	173.8
1		0515	64	0.	0.0	173.6	1		1320	161	14.	1.2	175.6	1		2125	258	1.	0.2	173.8
1		0520	65	0.	0.0	173.6	1		1325	162	13.	1.1	175.5	1		2130	259	1.	0.2	173.8
1		0525	66	0.	0.0	173.6	1		1330	163	12.	1.0	175.4	1		2135	260	1.	0.2	173.8
1		0530	67	0.	0.0	173.6	1		1335	164	11.	1.0	175.3	1		2140	261	1.	0.2	173.8
1		0535	68	0.	0.0	173.6	1		1340	165	10.	1.0	175.2	1		2145	262	1.	0.2	173.8
1		0540	69	0.	0.0	173.6	1		1345	166	10.	0.9	175.2	1		2150	263	1.	0.2	173.8
1		0545	70	1.	0.1	173.6	1		1350	167	9.	0.9	175.1	1		2155	264	1.	0.2	173.8
1		0550	71	1.	0.1	173.6	1		1355	168	8.	0.8	175.0	1		2200	265	1.	0.2	173.8
1		0555	72	1.	0.1	173.6	1		1400	169	8.	0.8	175.0	1		2205	266	1.	0.2	173.8
1		0600	73	1.	0.1	173.6	1		1405	170	8.	0.8	174.9	1		2210	267	1.	0.2	173.8
1		0605	74	1.	0.1	173.6	1		1410	171	7.	0.8	174.9	1		2215	268	1.	0.2	173.8
1		0610	75	1.	0.1	173.6	1		1415	172	7.	0.7	174.8	1		2220	269	1.	0.2	173.8
1		0615	76	1.	0.1	173.6	1		1420	173	7.	0.7	174.8	1		2225	270	1.	0.2	173.8
1		0620	77	1.	0.1	173.6	1		1425	174	7.	0.7	174.8	1		2230	271	1.	0.2	173.8
1		0625	78	1.	0.1	173.6	1		1430	175	6.	0.7	174.7	1		2235	272	1.	0.2	173.8
1		0630	79	1.	0.1	173.6	1		1435	176	6.	0.6	174.7	1		2240	273	1.	0.1	173.8
1		0635	80	1.	0.1	173.6	1		1440	177	6.	0.6	174.6	1		2245	274	1.	0.1	173.8
1		0640	81	1.	0.1	173.6	1		1445	178	6.	0.6	174.6	1		2250	275	1.	0.1	173.8
1		0645	82	1.	0.1	173.7	1		1450	179	5.	0.6	174.6	1		2255	276	1.	0.1	173.8
1		0650	83	1.	0.1	173.7	1		1455	180	5.	0.6	174.5	1		2300	277	1.	0.1	173.8
1		0655	84	1.	0.1	173.7	1		1500	181	5.	0.5	174.5	1		2305	278	1.	0.1	173.8
1		0700	85	1.	0.1	173.7	1		1505	182	5.	0.5	174.5	1		2310	279	1.	0.1	173.8
1		0705	86	1.	0.1	173.7	1		1510	183	5.	0.5	174.4	1		2315	280	1.	0.1	173.8
1		0710	87	1.	0.1	173.7	1		1515	184	4.	0.5	174.4	1		2320	281	1.	0.1	173.8
1		0715	88	1.	0.1	173.7	1		1520	185	4.	0.5	174.4	1		2325	282	1.	0.1	173.8
1		0720	89	1.	0.1	173.7	1		1525	186	4.	0.5	174.4	1		2330	283	1.	0.1	173.8
1		0725	90	1.	0.1	173.7	1		1530	187	4.	0.5	174.3	1		2335	284	1.	0.1	173.7
1		0730	91	1.	0.1	173.7	1		1535	188	4.	0.4	174.3	1		2340	285	1.	0.1	173.7
1		0735	92	1.	0.1	173.7	1		1540	189	4.	0.4	174.3	1		2345	286	1.	0.1	173.7
1		0740	93	1.	0.1	173.7	1		1545	190	4.	0.4	174.3	1		2350	287	1.	0.1	173.7
1		0745	94	1.	0.1	173.7	1		1550	191	4.	0.4	174.3	1		2355	288	1.	0.1	173.7
1		0750	95	1.	0.1	173.7	1		1555	192	3.	0.4	174.2	2		0000	289	1.	0.1	173.7
1		0755	96	1.	0.1	173.7	1		1600	193	3.	0.4	174.2							
1		0800	97	1.	0.1	173.7	1		1605	194	3.	0.4	174.2							

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PEAK FLOW     TIME                    MAXIMUM AVERAGE FLOW
                            6-HR        24-HR        72-HR     24.00-HR
  (CFS)      (HR)
                  (CFS)
     27.     12.33             9.           3.           3.           3.
                (INCHES)     5.136        6.820        6.820        6.820
                 (AC-FT)        5.           6.           6.           6.

PEAK STORAGE  TIME                  MAXIMUM AVERAGE STORAGE
                            6-HR        24-HR        72-HR     24.00-HR
 (AC-FT)     (HR)
     2.      12.33             1.           0.           0.           0.

PEAK STAGE    TIME                  MAXIMUM AVERAGE STAGE
                            6-HR        24-HR        72-HR     24.00-HR
  (FEET)     (HR)
   176.91    12.33        174.96       174.04       174.04       174.04

                        CUMULATIVE AREA =    0.02 SQ MI

                                       RUNOFF SUMMARY
                                FLOW IN CUBIC FEET PER SECOND
                             TIME IN HOURS,  AREA IN SQUARE MILES

                                   PEAK     TIME OF      AVERAGE FLOW FOR MAXIMUM PERIOD     BASIN   MAXIMUM   TIME OF
         OPERATION     STATION     FLOW      PEAK                                           AREA     STAGE   MAX STAGE
                                                     6-HOUR      24-HOUR      72-HOUR

      HYDROGRAPH AT     DEVEL        57.    12.00        9.          3.           3.        0.02

      ROUTED TO          POND        27.    12.33        9.          3.           3.        0.02    176.91    [illegible]

*** NORMAL END OF HEC-1 ***
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