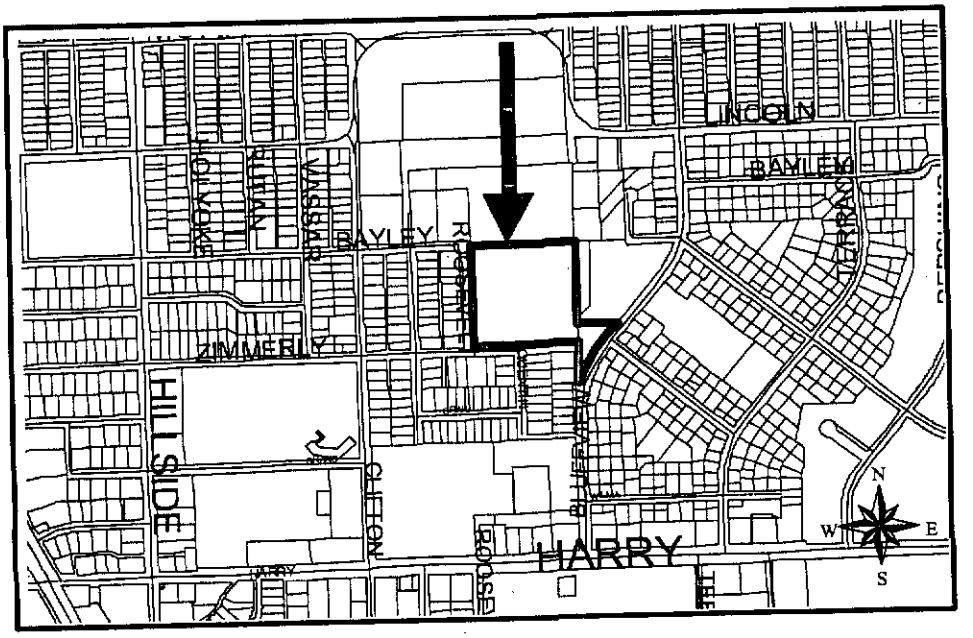
SUBDIVISION COMMITTEE
METROPOLITAN AREA PLANNING COMMISSION

AGENDA ITEM NO. 7
JUNE 27, 2002

STAFF REPORT
(PRELIMINARY PLAT)

CASE NUMBER:	**SUB 2002-54 -- SISTERS OF ST. JOSEPH FIFTH ADDITION**
OWNER/APPLICANT:	Sisters of St. Joseph, Attn: Mark A. Kuhn, 3700 E. Lincoln, Wichita, KS 67218-2099; City of Wichita, Attn: John Philbrick, 455 N. Main, 13th Floor, Wichita, KS 67202
SURVEYOR/ENGINEER:	Baughman Company, P.A., Attn: Phil Meyer, 315 Ellis, Wichita, KS 67211
LOCATION:	North of Harry, East of Hillside
SITE SIZE:	10.13 Acres
NUMBER OF LOTS	
Residential:	1
Office:	
Commercial:	
Industrial:	
Total:	1
MINIMUM LOT AREA:	10.13 Acres
CURRENT ZONING:	TF-3, Two-Family Residential; B, Multi-Family Residential
PROPOSED ZONING:	Same

VICINITY MAP



DCS # 2 SS # 12

10

NOTE: This is a replat of portions of Hilltop Manor and *Hilltop* Manor 2nd Addition along with unplatted property. The site has been approved for a zone change (ZON 2002-08) from TF-3, Two-Family Residential to B, Multi-Family Residential for use as an elderly apartment living facility.

Planning Staff recommends approval of the plat.

STAFF COMMENTS:

A. Municipal services appear to be available to serve the site. **City Engineering** needs to comment on the need for guarantees or easements.

B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.

C. **City Engineering** needs to comment on the status of the applicant's drainage concept.

D. Roosevelt Avenue is unpaved. **City/Traffic Engineering** needs to comment on the need for any improvements to perimeter streets.

E. As a lot zoned for multi-family residential abutting non-arterial streets, the Subdivision regulations require a sidewalk along perimeter streets.

F. A cross-lot access agreement shall be provided with the property to the north.

G. The Applicant is reminded that a platting binder is required with the final plat. Approval of this plat will be subject to submittal of this binder and any relevant conditions found by such a review.

H. The plattor's text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

I. The applicant shall install or guarantee the installation of all utilities and facilities that are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)

J. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

K. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.

L. The applicant is advised that various State and Federal requirements (specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 317, Valley Center, KS 67147) for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.

M. The owner of the subdivision should be aware of the fact that the development of any subdivision greater than five (5) acres in size may require an NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Further, on all construction sites, the City of Wichita requires that best management practices be used to reduce pollutant loadings in storm water runoffs.

N. Perimeter closure computations shall be submitted with the final plat tracing.

O. Recording of the plat within thirty (30) days after approval by the City Council and/or County Commission.

P. The representatives from the **utility companies** should be prepared to comment on the need for any additional utility easements to be platted on this property.

Q. The applicant is reminded that a disk shall be submitted with the final plat tracing to the Planning Department detailing this plat in digital format in AutoCAD. This will be used by the City and County GIS Department.

SUBDIVISION COMMITTEE
METROPOLITAN AREA PLANNING COMMISSION

AGENDA ITEM NO. 5
AUGUST 1, 2002

STAFF REPORT
(Final Plat, Preliminary Plat Approved 6/27/02)

CASE NUMBER: **SUB 2002-54 -- SISTERS OF ST. JOSEPH FIFTH ADDITION**

OWNER/APPLICANT: Sisters of St. Joseph, Attn: Mark A. Kuhn, 3700 E. Lincoln, Wichita, KS 67218-2099; City of Wichita, Attn: John Philbrick, 455 N. Main, 13th Floor, Wichita, KS 67202

SURVEYOR/ENGINEER: Baughman Company, P.A., Attn: Phil Meyer, 315 Ellis, Wichita, KS 67211

LOCATION: North of Harry, East of Hillside

SITE SIZE: 10.13 Acres

NUMBER OF LOTS

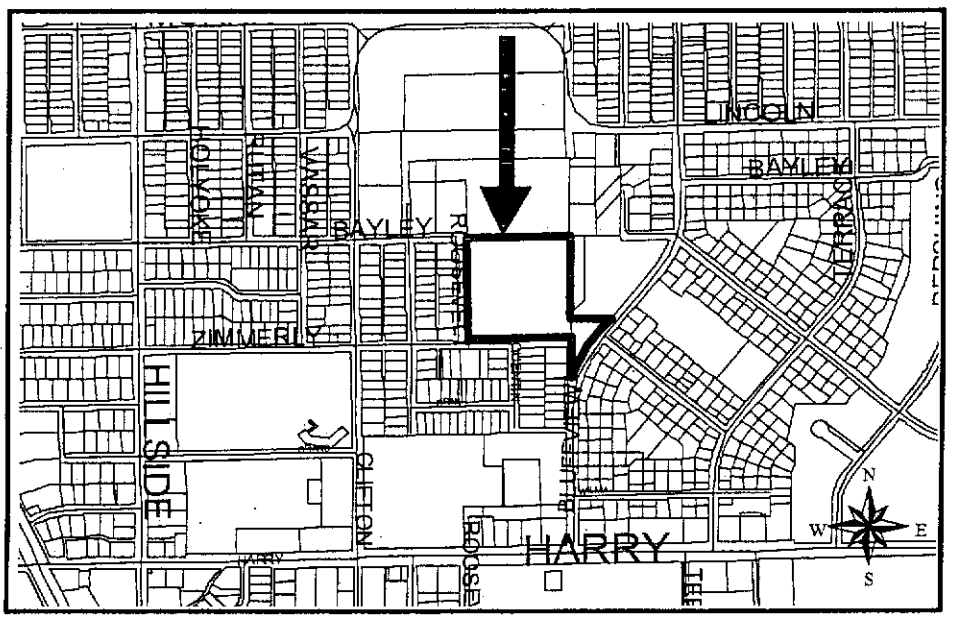
Residential:	1
Office:	
Commercial:	
Industrial:	
Total:	1

MINIMUM LOT AREA: 10.13 Acres

CURRENT ZONING: TF-3, Two-Family Residential; B, Multi-Family Residential

PROPOSED ZONING: Same

VICINITY MAP



NOTE: This is a replat of portions of Hilltop Manor and Hilltop Manor 2nd Addition along with unplatted property. The site has been approved for a zone change (ZON 2002-08) from TF-3, Two-Family Residential to B, Multi-Family Residential for use as an elderly apartment living facility.

Planning Staff recommends approval of the plat.

STAFF COMMENTS:

A. Municipal services are available to serve the site. ***A drainage reserve is needed along the southeast portion of the plat.***

The drainage reserve has been platted as requested.

B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.

C. City Engineering needs to comment on the status of the applicant's drainage plan.

D. ***City Engineering has requested a petition for the paving of Roosevelt. The Applicant is opposed to this condition.***

E. As a lot zoned for multi-family residential abutting non-arterial streets, the Subdivision regulations require a sidewalk along perimeter streets.

F. A cross-lot access agreement shall be provided with the property to the north.

G. Provisions shall be made for ownership and maintenance of the proposed reserves. A covenant shall be submitted regarding ownership and maintenance responsibilities.

H. For those reserves being platted for drainage purposes, the required covenant which provides for ownership and maintenance of the reserves shall grant, to the City, the authority to maintain the drainage reserves in the event the owner(s) fail to do so. The covenant shall provide for the cost of such maintenance to be charged back to the owner(s) by the governing body.

I. On the final plat tracing, the MAPC signature block needs to reference "J.D. Michaelis, Chair".

J. The plattor's text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

K. The applicant shall install or guarantee the installation of all utilities and facilities which are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)

L. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

M. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.

N. The applicant is advised that various State and Federal requirements (specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 317, Valley Center, KS 67147) for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.

O. The owner of the subdivision should be aware of the fact that the development of any subdivision greater than five (5) acres in size may require an NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Further, on all construction sites, the City of Wichita requires that best management practices be used to reduce pollutant loadings in storm water runoffs.

P. Perimeter closure computations shall be submitted with the final plat tracing.

Q. Recording of the plat within thirty (30) days after approval by the City Council and/or County Commission.

R. The representatives from the **utility companies** should be prepared to comment on the need for any additional utility easements to be platted on this property.

S. The applicant is reminded that a disk shall be submitted with the final plat tracing to the Planning Department detailing this plat in digital format in AutoCAD. This will be used by the City and County GIS Department.

HEC-RAS Version 3.0.1 Mar 2001
U.S. Army Corp of Engineers
Hydrologic Engineering Center
609 Second Street, Suite D
Davis, California 95616-4687
(916) 756-1104

```
            X     X  XXXXXX    XXXX         XXXX        XX       XXXX
            X     X  X         X    X       X   X      X  X     X
            X     X  X         X            X   X     X    X    X
            XXXXXXX  XXXX      X       XXX  XXXX      XXXXXX    XXXX
            X     X  X         X            X  X      X    X
X
            X     X  X         X    X       X   X     X    X
X
            X     X  XXXXXX    XXXX         X    X    X    X   XXXXX
```

****

PROJECT DATA
Project Title: SSTJOE
Project File : SSTJOE.prj
Run Date and Time: 7/1/02 10:54:16 AM

Project in English units

****

PLAN DATA

Plan Title: STJOE
Plan File : C:\Hec\RAS\STJOE\SSTJOE.p01

Geometry Title: STJOE
Geometry File : C:\Hec\RAS\STJOE\SSTJOE.g01

Flow Title : STJOE
Flow File : C:\Hec\RAS\STJOE\SSTJOE.f01

Plan Summary Information:

Number of:	Cross Sections	= 5	Mulitple Openings	=	0
	Culverts	= 0	Inline Weirs	=	0
	Bridges	= 0			

```
Computational Information
    Water surface calculation tolerance =  0.003
    Critical depth calculaton tolerance =  0.003
    Maximum number of interations       =  20
    Maximum difference tolerance        =  0.1
    Flow tolerance factor               =  0.001

Computation Options
    Critical depth computed only where necessary
    Conveyance Calculation Method: At breaks in n values only
    Friction Slope Method:         Average Conveyance
    Computational Flow Regime:     Subcritical Flow


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

FLOW DATA

Flow Title: STJOE
Flow File : C:\Hec\RAS\STJOE\SSTJOE.f01

Flow Data (cfs)
***************************************************************
* River           Reach           RS      *           100-YR *
* STJOE           NORTH           792     *              649 *
***************************************************************

Boundary Conditions
**************************************************************************
************************************
* River           Reach           Profile         *           Up
stream                Downstream    *
**************************************************************************
************************************
* STJOE           NORTH           100-YR          *
                  Normal S = .002 *
**************************************************************************
************************************

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

GEOMETRY DATA

Geometry Title: STJOE
Geometry File : C:\Hec\RAS\STJOE\SSTJOE.g01
```

```
CROSS SECTION          RIVER: STJOE
REACH: NORTH              RS: 792

INPUT
Description: STA. 7+92.0
Station Elevation Data    num=      11
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   Sta    Elev
**********************************************************************
**************
      20     147      60     145      80     143     100   141.3
   110   140.2
      120   137.9     130     140     150   141.8     170   143.2
   180     144
      190     145

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
**********************************************
      20     .04      60     .04     190     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff
Contr.   Expan.
            60     190              301     301     301
  .1       .3

CROSS SECTION          RIVER: STJOE
REACH: NORTH              RS: 490.8

INPUT
Description: STA. 4+90.8
Station Elevation Data    num=       9
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   Sta    Elev
**********************************************************************
**************
      60     143     100     139     110     138     115   137.5
   130   139.7
      140   140.8     160   142.5     170   146.8     180     149

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
**********************************************
      60     .04      60     .04     160     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff
Contr.   Expan.
```

```
           60     160              154     190     208
  .1       .3

CROSS SECTION          RIVER: STJOE
REACH: NORTH              RS: 294.9

INPUT
Description: STA. 2+94.9
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   Sta    Elev
**********************************************************************
**************
      30     143      90     142     130     140     137     138
   150   136.5
      160     135     170   136.5     180   140.5     190     142
   210     144

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
***********************************************
      30     .04      90     .04     190     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff
Contr.   Expan.
           90     190              211     209     208
  .1       .3

CROSS SECTION          RIVER: STJOE
REACH: NORTH              RS: 76.8

INPUT
Description: STA. 0+76.8
Station Elevation Data    num=      10
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   Sta    Elev
**********************************************************************
**************
      40     143      70     142     100     140     110     138
   115     134
      120     136     140     137     150     139     160     141
   173     142

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
***********************************************
      40     .04      70     .04     173     .04
```

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff
Contr.   Expan.
            70     173              122      75      24
  .1       .3

CROSS SECTION          RIVER: STJOE
REACH: NORTH              RS: 0

INPUT
Description: STA. 0+00
Station Elevation Data    num=      12
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   Sta    Elev
**********************************************************************
**************
       0   142.3      40     141      60     140    70.5     139
    87     138
     104     134     110   135.2     120     138     130   138.8
   150   140.2
     166     141     188     142

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
**********************************************
       0     .04       0     .04     188     .04

Bank Sta: Left   Right    Coeff Contr.   Expan.
            0     188             .1       .3

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

SUMMARY OF MANNING'S N VALUES

River:STJOE
**********************************************************************
*     Reach      *   River Sta.   *   n1    *   n2    *   n3    *
**********************************************************************
*NORTH            *    792         *      .04*      .04*      .04*
*NORTH            *    490.8       *      .04*      .04*      .04*
*NORTH            *    294.9       *      .04*      .04*      .04*
*NORTH            *    76.8        *      .04*      .04*      .04*
*NORTH            *    0           *      .04*      .04*      .04*
**********************************************************************

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

SUMMARY OF REACH LENGTHS

River: STJOE

Reach	River Sta.	Left	Channel	Right
*NORTH	792	301*	301*	301*
*NORTH	490.8	154*	190*	208*
*NORTH	294.9	211*	209*	208*
*NORTH	76.8	122*	75*	24*
*NORTH	0	*	*	*

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: STJOE

Reach	River Sta.	Contr.	Expan.
*NORTH	792	.1*	.3*
*NORTH	490.8	.1*	.3*
*NORTH	294.9	.1*	.3*
*NORTH	76.8	.1*	.3*
*NORTH	0	.1*	.3*

Profile Output Table - Standard Table 1

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
NORTH	792	649.00	137.90	143.11	143.31	143.31	0.003650	3.57	181.81	89.89	0.44
NORTH	490.8	649.00	137.50	141.53	141.86	141.86	0.006566	4.61	140.75	73.79	0.59

```
* NORTH        * 294.9         *      649.00 *   135.00 *   141.04 *
         *   141.20 *  0.001875 *     3.14 *   206.85 *    74.51 *
        0.33 *
* NORTH        * 76.8          *      649.00 *   134.00 *   140.53 *
         *   140.73 *  0.002603 *     3.62 *   179.29 *    65.55 *
        0.39 *
* NORTH        * 0             *      649.00 *   134.00 *   140.41 *
  138.38 *   140.54 *  0.002003 *     2.83 *   229.66 *   102.49 *
        0.33 *
**********************************************************************
**********************************************************************
**************
```

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  07/12/02  TIME  11:38:22   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
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
```

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


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

  1           ID  SISTERS OF ST. JOESEPH
  2           ID  EXIST. DRAINAGE CONDITIONS AND DEVELOPED
  3           ID  2,5,10,25,50,&100 YEAR STORM EVENTS
  4           IT       5 07JUN02    0000     300                    2000
  5           IO       3       0
  6           JR    PREC  1.0000  1.3143  1.5143  1.7714  2.0000  2.2286
              *Diagram
              *

  7           KK     OFF
  8           KM  OFFSITE DRAINAGE - 241 ac.
  9           BA    .3766
 10           PB     3.5
 11           IN      60
 12           PC       0   0.011   0.022   0.035   0.048   0.063   0.080   0.098   0.120   0.147
 13           PC   0.181   0.235   0.663   0.772   0.820   0.854   0.880   0.902   0.921   0.937
 14           PC   0.952   0.965   0.978   0.989   1.000
 15           UD     .16
 16           LS       0      75
              *

 17           KK    SITE
 18           KM  EXIST. CONDITIONS - 10.13 ac.
 19           BA   .0158
 20           UD     .15
 21           LS       0      61
              *

 22           KK      C1
 23           KM   COMBO
 24           HC       2       0
              *
```

```
          25          KK    OFF2
          26          KM  OFFSITE DRAINAGE
          27          BA   .3766
          28          UD     .16
          29          LS        0      75
                      *

          30          KK    SITE
          31          KM  DEVELOPED CONDITIONS
          32          BA   .0158
          33          UD     .15
          34          LS        0      80
                      *

          35          KK      C2
          36          KM   COMBO
          37          HC        2       0
                      *
1                                          HEC-1 INPUT                                          PAGE  2

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


          38          KK    POND
          39          KM  DETENTION POND
          40          RS        1    ELEV     134
          41          SA       .8      .9     1.0     1.3     1.5
          42          SE      134     135     136     140     141
          43          SL   134.63    2.45     .67      .5
          44          SS      136      30     2.8     1.5
                      *
          45          ZZ
1
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

     7        OFF
                .
                .
    17          .        SITE
                .          .
                .          .
    22          C1.............
                .
                .
    25          .        OFF2
                .          .
                .          .
    30          .          .        SITE
                .          .          .
                .          .          .
    35          .          C2.............
                .          V
                .          V
    38          .        POND

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY   1991               *
*          VERSION 4.0.1E              *
*     Lahey F77L-EM/32 version 5.01    *
*       Dodson & Associates, Inc.      *
*  RUN DATE  07/12/02  TIME  11:38:22  *
****************************************

****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*         609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 551-1748             *
*                                      *
****************************************
```

SISTERS OF ST. JOESEPH
EXIST. DRAINAGE CONDITIONS AND DEVELOPED
2,5,10,25,50,&100 YEAR STORM EVENTS

5 IO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	7JUN 2	STARTING DATE
ITIME	0000	STARTING TIME
NQ	300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	8JUN 2	ENDING DATE
NDTIME	0055	ENDING TIME
ICENT	20	CENTURY MARK

COMPUTATION INTERVAL 0.08 HOURS
TOTAL TIME BASE 24.92 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

JP MULTI-PLAN OPTION

NPLAN	1	NUMBER OF PLANS

JR MULTI-RATIO OPTION
RATIOS OF PRECIPITATION

1.00	1.31	1.51	1.77	2.00	2.23

*** ***

****
* *
7 KK * OFF *
* *
****
OFFSITE DRAINAGE - 241 ac.

11 IN TIME DATA FOR INPUT TIME SERIES

JXMIN	60	TIME INTERVAL IN MINUTES
JXDATE	7JUN 2	STARTING DATE
JXTIME	0	STARTING TIME

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS

TAREA	0.38	SUBBASIN AREA

PRECIPITATION DATA

10 PB

STORM	3.50	BASIN TOTAL PRECIPITATION

12 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

16 LS SCS LOSS RATE

STRTL	0.67	INITIAL ABSTRACTION
CRVNBR	75.00	CURVE NUMBER
RTIMP	0.00	PERCENT IMPERVIOUS AREA

15 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	0.16	LAG

***

UNIT HYDROGRAPH
12 END-OF-PERIOD ORDINATES

301.	860.	821.	461.	233.	119.	61.	31.	16.	9.
4.	0.								

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 176.	12.00		43.	13.	13.	13.
		(INCHES)	1.052	1.302	1.302	1.302
		(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 176.	12.00		43.	13.	13.	13.
		(INCHES)	1.052	1.302	1.302	1.302
		(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 2.47, TOTAL EXCESS = 2.13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 286.	12.00	70.	22.	21.	21.
		(INCHES) 1.728	2.129	2.129	2.129
		(AC-FT) 35.	43.	43.	43.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.61, TOTAL EXCESS = 2.69

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 360.	12.00	88.	27.	26.	26.
		(INCHES) 2.183	2.695	2.695	2.695
		(AC-FT) 44.	54.	54.	54.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.75, TOTAL EXCESS = 3.45

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 456.	12.00	113.	35.	34.	34.
		(INCHES) 2.785	3.453	3.453	3.453
		(AC-FT) 56.	69.	69.	69.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.85, TOTAL EXCESS = 4.15

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 543.	12.00	135.	42.	40.	40.
		(INCHES) 3.333	4.149	4.149	4.149
		(AC-FT) 67.	83.	83.	83.

CUMULATIVE AREA = 0.38 SQ MI

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

                         HYDROGRAPH AT STATION      OFF
                           FOR PLAN 1, RATIO = 2.23

    TOTAL RAINFALL =    7.80, TOTAL LOSS =    2.94, TOTAL EXCESS =    4.86

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                            (CFS)
+     630.     12.00                   158.          49.         47.          47.
                          (INCHES)     3.894        4.862       4.862        4.862
                           (AC-FT)       78.          98.         98.          98.

                          CUMULATIVE AREA =    0.38 SQ MI


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

          ***************
          *             *
   17 KK  *      SITE   *
          *             *
          ***************
                         EXIST. CONDITIONS - 10.13 ac.

             SUBBASIN RUNOFF DATA

   19 BA       SUBBASIN CHARACTERISTICS
                     TAREA        0.02  SUBBASIN AREA

               PRECIPITATION DATA

   10 PB             STORM        3.50  BASIN TOTAL PRECIPITATION

   12 PI         INCREMENTAL PRECIPITATION PATTERN
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.04       0.04       0.04       0.04       0.04       0.04       0.04       0.04
                    0.04       0.04       0.04       0.04       0.01       0.01       0.01       0.01       0.01       0.01
                    0.01       0.01       0.01       0.01       0.01       0.01       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
                    0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00
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21 LS           SCS LOSS RATE
                      STRTL        1.28  INITIAL ABSTRACTION
                     CRVNBR       61.00  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

20 UD           SCS DIMENSIONLESS UNITGRAPH
                       TLAG        0.15  LAG

                                                                 ***

                                                           UNIT HYDROGRAPH
                                                      11 END-OF-PERIOD ORDINATES
             15.        39.        34.        17.         9.         4.         2.         1.         1.         0.
              0.

   TOTAL RAINFALL =    3.50, TOTAL LOSS =    2.93, TOTAL EXCESS =    0.57

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                           (CFS)
+        3.     12.08                   1.          0.          0.           0.
                         (INCHES)   0.433       0.573       0.573        0.573
                          (AC-FT)      0.          0.          0.           0.

                        CUMULATIVE AREA =     0.02 SQ MI


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

                         HYDROGRAPH AT STATION      SITE
                           FOR PLAN 1, RATIO = 1.00

   TOTAL RAINFALL =    3.50, TOTAL LOSS =    2.93, TOTAL EXCESS =    0.57

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                           (CFS)
+        3.     12.08                   1.          0.          0.           0.
                         (INCHES)   0.433       0.573       0.573        0.573
                          (AC-FT)      0.          0.          0.           0.

                        CUMULATIVE AREA =     0.02 SQ MI


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

                         HYDROGRAPH AT STATION      SITE
                           FOR PLAN 1, RATIO = 1.31

   TOTAL RAINFALL =    4.60, TOTAL LOSS =    3.46, TOTAL EXCESS =    1.14

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                           (CFS)
+        6.     12.00                   2.          0.          0.           0.
                         (INCHES)   0.890       1.136       1.136        1.136
                          (AC-FT)      1.          1.          1.           1.

                        CUMULATIVE AREA =     0.02 SQ MI


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

                         HYDROGRAPH AT STATION      SITE
                           FOR PLAN 1, RATIO = 1.51

   TOTAL RAINFALL =    5.30, TOTAL LOSS =    3.75, TOTAL EXCESS =    1.55
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  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                         6-HR       24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                           (CFS)
+        9.     12.00                     2.          1.          1.            1.
                        (INCHES)      1.234       1.553       1.553         1.553
                         (AC-FT)         1.          1.          1.            1.

                            CUMULATIVE AREA =     0.02 SQ MI


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

                             HYDROGRAPH AT STATION     SITE
                               FOR PLAN 1, RATIO = 1.77

     TOTAL RAINFALL =     6.20, TOTAL LOSS =     4.06, TOTAL EXCESS =     2.14

  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                         6-HR       24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                           (CFS)
+       12.     12.00                     3.          1.          1.            1.
                        (INCHES)      1.723       2.140       2.140         2.140
                         (AC-FT)         1.          2.          2.            2.

                            CUMULATIVE AREA =     0.02 SQ MI


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

                             HYDROGRAPH AT STATION     SITE
                               FOR PLAN 1, RATIO = 2.00

     TOTAL RAINFALL =     7.00, TOTAL LOSS =     4.30, TOTAL EXCESS =     2.70

  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                         6-HR       24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                           (CFS)
+       15.     12.00                     4.          1.          1.            1.
                        (INCHES)      2.188       2.702       2.702         2.702
                         (AC-FT)         2.          2.          2.            2.

                            CUMULATIVE AREA =     0.02 SQ MI


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

                             HYDROGRAPH AT STATION     SITE
                               FOR PLAN 1, RATIO = 2.23

     TOTAL RAINFALL =     7.80, TOTAL LOSS =     4.51, TOTAL EXCESS =     3.29

  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                         6-HR       24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                           (CFS)
+       19.     12.00                     5.          1.          1.            1.
                        (INCHES)      2.673       3.293       3.293         3.293
                         (AC-FT)         2.          3.          3.            3.

                            CUMULATIVE AREA =     0.02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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          **************
          *            *
   22 KK  *       C1   *
          *            *
          **************
                         COMBO

   24 HC        HYDROGRAPH COMBINATION
                     ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                    ***

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.00

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR     24.92-HR
 +   (CFS)      (HR)
                           (CFS)
 +     179.    12.00                   43.          13.         13.          13.
                        (INCHES)     1.027        1.272       1.272        1.272
                         (AC-FT)       21.          27.         27.          27.

                       CUMULATIVE AREA =    0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.31

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR     24.92-HR
 +   (CFS)      (HR)
                           (CFS)
 +     293.    12.00                   71.          22.         21.          21.
                        (INCHES)     1.694        2.089       2.089        2.089
                         (AC-FT)       35.          44.         44.          44.

                       CUMULATIVE AREA =    0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.51

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR     24.92-HR
 +   (CFS)      (HR)
                           (CFS)
 +     369.    12.00                   90.          28.         27.          27.
                        (INCHES)     2.144        2.649       2.649        2.649
                         (AC-FT)       45.          55.         55.          55.

                       CUMULATIVE AREA =    0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.77

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR     24.92-HR
 +   (CFS)      (HR)
                           (CFS)
 +     468.    12.00                  116.          36.         35.          35.
                        (INCHES)     2.742        3.400       3.400        3.400
```

	(AC-FT)	57.	71.	71.	71.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C1
FOR PLAN 1, RATIO = 2.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 558.	12.00		139.	43.	42.	42.
		(INCHES)	3.286	4.091	4.091	4.091
		(AC-FT)	69.	86.	86.	86.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C1
FOR PLAN 1, RATIO = 2.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 649.	12.00		162.	51.	49.	49.
		(INCHES)	3.843	4.799	4.799	4.799
		(AC-FT)	80.	100.	100.	100.

CUMULATIVE AREA = 0.39 SQ MI

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          **************
          *            *
 25 KK    *     OFF2   *
          *            *
          **************
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OFFSITE DRAINAGE

SUBBASIN RUNOFF DATA

27 BA SUBBASIN CHARACTERISTICS
TAREA 0.38 SUBBASIN AREA

PRECIPITATION DATA

10 PB STORM 3.50 BASIN TOTAL PRECIPITATION

12 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

29 LS SCS LOSS RATE

STRTL	0.67	INITIAL ABSTRACTION
CRVNBR	75.00	CURVE NUMBER
RTIMP	0.00	PERCENT IMPERVIOUS AREA

28 UD SCS DIMENSIONLESS UNITGRAPH

TLAG 0.16 LAG

***

UNIT HYDROGRAPH
12 END-OF-PERIOD ORDINATES

301.	860.	821.	461.	233.	119.	61.	31.	16.	9.
4.	0.								

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 176.	12.00		43.	13.	13.	13.
		(INCHES)	1.052	1.302	1.302	1.302
		(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 176.	12.00		43.	13.	13.	13.
		(INCHES)	1.052	1.302	1.302	1.302
		(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 2.47, TOTAL EXCESS = 2.13

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	286.	12.00		70.	22.	21.	21.
			(INCHES)	1.728	2.129	2.129	2.129
			(AC-FT)	35.	43.	43.	43.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.61, TOTAL EXCESS = 2.69

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	360.	12.00		88.	27.	26.	26.
			(INCHES)	2.183	2.695	2.695	2.695
			(AC-FT)	44.	54.	54.	54.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.75, TOTAL EXCESS = 3.45

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	456.	12.00		113.	35.	34.	34.
			(INCHES)	2.785	3.453	3.453	3.453
			(AC-FT)	56.	69.	69.	69.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.85, TOTAL EXCESS = 4.15

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	543.	12.00		135.	42.	40.	40.
			(INCHES)	3.333	4.149	4.149	4.149
			(AC-FT)	67.	83.	83.	83.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 2.23

TOTAL RAINFALL = 7.80, TOTAL LOSS = 2.94, TOTAL EXCESS = 4.86

```
  PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                       6-HR       24-HR       72-HR      24.92-HR
+   (CFS)        (HR)
                          (CFS)
+     630.     12.00                   158.         49.         47.          47.
                        (INCHES)      3.894       4.862       4.862        4.862
                         (AC-FT)        78.         98.         98.          98.

                         CUMULATIVE AREA =     0.38 SQ MI
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
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            ***************
            *             *
  30 KK     *      SITE   *
            *             *
            ***************
                       DEVELOPED CONDITIONS

              SUBBASIN RUNOFF DATA

  32 BA         SUBBASIN CHARACTERISTICS
                     TAREA        0.02  SUBBASIN AREA

                PRECIPITATION DATA

  10 PB              STORM        3.50  BASIN TOTAL PRECIPITATION

  12 PI           INCREMENTAL PRECIPITATION PATTERN
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.04      0.04      0.04      0.04      0.04      0.04      0.04      0.04
                      0.04      0.04      0.04      0.04      0.01      0.01      0.01      0.01      0.01      0.01
                      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

  34 LS         SCS LOSS RATE
                     STRTL        0.50  INITIAL ABSTRACTION
                    CRVNBR       80.00  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

  33 UD         SCS DIMENSIONLESS UNITGRAPH
                      TLAG        0.15  LAG
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UNIT HYDROGRAPH
11 END-OF-PERIOD ORDINATES

15. 39. 34. 17. 9. 4. 2. 1. 1. 0.
0.

TOTAL RAINFALL = 3.50, TOTAL LOSS = 1.86, TOTAL EXCESS = 1.64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 9.	12.00	2.	1.	1.	1.
		(INCHES) 1.328	1.636	1.636	1.636
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 1.86, TOTAL EXCESS = 1.64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 9.	12.00	2.	1.	1.	1.
		(INCHES) 1.328	1.636	1.636	1.636
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 2.05, TOTAL EXCESS = 2.55

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 14.	12.00	3.	1.	1.	1.
		(INCHES) 2.055	2.547	2.547	2.547
		(AC-FT) 2.	2.	2.	2.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.14, TOTAL EXCESS = 3.16

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 17.	12.00	4.	1.	1.	1.
		(INCHES) 2.535	3.156	3.156	3.156
		(AC-FT) 2.	3.	3.	3.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.24, TOTAL EXCESS = 3.96

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 22.	12.00		5.	2.	2.	2.
		(INCHES)	3.169	3.962	3.962	3.962
		(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.31, TOTAL EXCESS = 4.69

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 25.	12.00		6.	2.	2.	2.
		(INCHES)	3.742	4.694	4.694	4.694
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 2.23

TOTAL RAINFALL = 7.80, TOTAL LOSS = 2.36, TOTAL EXCESS = 5.44

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 29.	12.00		7.	2.	2.	2.
		(INCHES)	4.320	5.438	5.438	5.438
		(AC-FT)	4.	5.	5.	5.

CUMULATIVE AREA = 0.02 SQ MI

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          ***************
          *             *
 35 KK    *        C2   *
          *             *
          ***************
                     COMBO

 37 HC         HYDROGRAPH COMBINATION
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ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.00

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	186.	12.00		45.	14.	13.	13.
			(INCHES)	1.063	1.315	1.315	1.315
			(AC-FT)	22.	28.	28.	28.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.31

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	301.	12.00		73.	23.	22.	22.
			(INCHES)	1.741	2.146	2.146	2.146
			(AC-FT)	36.	45.	45.	45.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.51

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	377.	12.00		93.	29.	28.	28.
			(INCHES)	2.197	2.713	2.713	2.713
			(AC-FT)	46.	57.	57.	57.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.77

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	477.	12.00		118.	37.	35.	35.
			(INCHES)	2.800	3.474	3.474	3.474
			(AC-FT)	59.	73.	73.	73.

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION C2

FOR PLAN 1, RATIO = 2.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 568.	12.00		141.	44.	42.	42.
		(INCHES)	3.349	4.171	4.171	4.171
		(AC-FT)	70.	87.	87.	87.

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 2.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 659.	12.00		165.	52.	50.	50.
		(INCHES)	3.911	4.885	4.885	4.885
		(AC-FT)	82.	102.	102.	102.

CUMULATIVE AREA = 0.39 SQ MI

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          *            *
 38 KK    *     POND   *
          *            *
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DETENTION POND

HYDROGRAPH ROUTING DATA

40 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	ELEV	TYPE OF INITIAL CONDITION
RSVRIC	134.00	INITIAL CONDITION
X	0.00	WORKING R AND D COEFFICIENT

41 SA	AREA	0.8	0.9	1.0	1.3	1.5
42 SE	ELEVATION	134.00	135.00	136.00	140.00	141.00

43 SL LOW-LEVEL OUTLET

ELEVL	134.63	ELEVATION AT CENTER OF OUTLET
CAREA	2.45	CROSS-SECTIONAL AREA
COQL	0.67	COEFFICIENT
EXPL	0.50	EXPONENT OF HEAD

44 SS SPILLWAY

CREL	136.00	SPILLWAY CREST ELEVATION
SPWID	30.00	SPILLWAY WIDTH
COQW	2.80	WEIR COEFFICIENT
EXPW	1.50	EXPONENT OF HEAD

***

COMPUTED STORAGE-ELEVATION DATA

STORAGE	0.00	0.85	1.80	6.39	7.78
ELEVATION	134.00	135.00	136.00	140.00	141.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	0.00	0.00	11.76	12.17	12.61	13.09	13.60	14.15	14.76	15.41
ELEVATION	134.00	134.63	135.43	135.48	135.55	135.62	135.70	135.79	135.89	136.00
OUTFLOW	17.34	26.13	47.04	85.28	146.08	234.68	356.34	516.32	719.90	972.37
ELEVATION	136.07	136.23	136.49	136.85	137.30	137.85	138.49	139.23	140.07	141.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	0.52	0.85	1.24	1.30	1.36	1.42	1.50	1.59	1.69
OUTFLOW	0.00	0.00	8.01	11.76	12.17	12.61	13.09	13.60	14.15	14.75
ELEVATION	134.00	134.63	135.00	135.43	135.48	135.55	135.62	135.70	135.79	135.89
STORAGE	1.80	1.87	2.03	2.30	2.67	3.16	3.77	4.52	5.41	6.39
OUTFLOW	15.41	17.34	26.13	47.04	85.28	146.08	234.68	356.34	516.32	702.51
ELEVATION	136.00	136.07	136.23	136.49	136.85	137.30	137.85	138.49	139.23	140.00
STORAGE	6.47	7.78								
OUTFLOW	719.90	972.38								
ELEVATION	140.07	141.00								

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HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 179.	12.08		42.	14.	13.	13.
		(INCHES)	1.005	1.287	1.287	1.287
		(AC-FT)	21.	27.	27.	27.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)					
3.	12.08		2.	1.	1.	1.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)					
137.51	12.08		136.32	134.97	134.93	134.93

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.31

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 292.	12.08		72.	22.	21.	21.
		(INCHES)	1.694	2.113	2.113	2.113
		(AC-FT)	35.	44.	44.	44.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)					
4.	12.08		2.	1.	1.	1.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)					

138.15	12.08		136.61	135.22	135.18	135.18

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.51

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 367.	12.08		91.	28.	27.	27.
		(INCHES)	2.162	2.674	2.674	2.674
		(AC-FT)	45.	56.	56.	56.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
5.	12.08	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
138.54	12.08	136.76	135.36	135.31	135.31

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.77

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 465.	12.00		118.	36.	35.	35.
		(INCHES)	2.785	3.424	3.424	3.424
		(AC-FT)	58.	72.	72.	72.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
5.	12.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
138.99	12.00	136.95	135.50	135.45	135.45

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 2.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 556.	12.00		141.	43.	42.	42.
		(INCHES)	3.346	4.118	4.118	4.118
		(AC-FT)	70.	86.	86.	86.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE

		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
6.	12.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
139.39	12.00	137.10	135.61	135.55	135.55

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 2.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 646.	12.00		165.	51.	49.	49.
		(INCHES)	3.908	4.830	4.830	4.830
		(AC-FT)	82.	101.	101.	101.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
6.	12.00	3.	2.	2.	2.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
139.77	12.00	137.24	135.71	135.64	135.64

CUMULATIVE AREA = 0.39 SQ MI

1

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

					RATIOS APPLIED TO PRECIPITATION					
OPERATION	STATION	AREA	PLAN		RATIO 1	RATIO 2	RATIO 3	RATIO 4	RATIO 5	RATIO 6
					1.00	1.31	1.51	1.77	2.00	2.23
HYDROGRAPH AT										
+	OFF	0.38	1	FLOW	176.	286.	360.	456.	543.	630.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	SITE	0.02	1	FLOW	3.	6.	9.	12.	15.	19.
				TIME	12.08	12.00	12.00	12.00	12.00	12.00
2 COMBINED AT										
+	C1	0.39	1	FLOW	179.	293.	369.	468.	558.	649.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	OFF2	0.38	1	FLOW	176.	286.	360.	456.	543.	630.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	SITE	0.02	1	FLOW	9.	14.	17.	22.	25.	29.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
2 COMBINED AT										
+	C2	0.39	1	FLOW	186.	301.	377.	477.	568.	659.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00

ROUTED TO

+	POND	0.39	1	FLOW	179.	292.	367.	465.	556.	646.
				TIME	12.08	12.08	12.08	12.00	12.00	12.00
			** PEAK STAGES IN FEET **							
			1	STAGE	137.51	138.15	138.54	138.99	139.39	139.77
				TIME	12.08	12.08	12.08	12.00	12.00	12.00

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

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*     Lahey F77L-EM/32 version 5.01     *
*       Dodson & Associates, Inc.       *
*  RUN DATE  07/12/02  TIME  11:38:22   *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 551-1748              *
*                                       *
*****************************************
```

```
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
```

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


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

  1           ID  SISTERS OF ST. JOESEPH
  2           ID  EXIST. DRAINAGE CONDITIONS AND DEVELOPED
  3           ID  2,5,10,25,50,&100 YEAR STORM EVENTS
  4           IT       5 07JUN02    0000     300                    2000
  5           IO       3       0
  6           JR    PREC  1.0000  1.3143  1.5143  1.7714  2.0000  2.2286
              *Diagram
              *

  7           KK     OFF
  8           KM  OFFSITE DRAINAGE - 241 ac.
  9           BA    .3766
 10           PB     3.5
 11           IN      60
 12           PC       0   0.011   0.022   0.035   0.048   0.063   0.080   0.098   0.120   0.147
 13           PC   0.181   0.235   0.663   0.772   0.820   0.854   0.880   0.902   0.921   0.937
 14           PC   0.952   0.965   0.978   0.989   1.000
 15           UD     .16
 16           LS       0      75
              *

 17           KK    SITE
 18           KM  EXIST. CONDITIONS - 10.13 ac.
 19           BA   .0158
 20           UD     .15
 21           LS       0      61
              *

 22           KK      C1
 23           KM   COMBO
 24           HC       2       0
              *
```

```
         25          KK    OFF2
         26          KM  OFFSITE DRAINAGE
         27          BA   .3766
         28          UD     .16
         29          LS       0      75
                     *

         30          KK    SITE
         31          KM  DEVELOPED CONDITIONS
         32          BA   .0158
         33          UD     .15
         34          LS       0      80
                     *

         35          KK      C2
         36          KM   COMBO
         37          HC       2       0
                     *
1                                                  HEC-1 INPUT                                                 PAGE  2

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


         38          KK    POND
         39          KM  DETENTION POND
         40          RS       1    ELEV     134
         41          SA      .8      .9     1.0     1.3     1.5
         42          SE     134     135     136     140     141
         43          SL  134.63    2.45     .67      .5
         44          SS     136      30     2.8     1.5
                     *
         45          ZZ
1
             SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    7        OFF
              .
              .
   17         .         SITE
              .            .
              .            .
   22        C1............
              .
              .
   25         .         OFF2
              .            .
              .            .
   30         .            .         SITE
              .            .            .
              .            .            .
   35         .           C2............
              .            V
              .            V
   38         .         POND

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************                                 ***************************************
*                                        *                                 *                                     *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                                 *   U.S. ARMY CORPS OF ENGINEERS      *
*              MAY   1991                *                                 *   HYDROLOGIC ENGINEERING CENTER     *
*           VERSION 4.0.1E               *                                 *        609 SECOND STREET            *
*     Lahey F77L-EM/32 version 5.01      *                                 *     DAVIS, CALIFORNIA 95616         *
*       Dodson & Associates, Inc.        *                                 *         (916) 551-1748              *
*  RUN DATE  07/12/02  TIME  11:38:22    *                                 *                                     *
******************************************                                 ***************************************
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SISTERS OF ST. JOESEPH
EXIST. DRAINAGE CONDITIONS AND DEVELOPED
2,5,10,25,50,&100 YEAR STORM EVENTS

5 IO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	7JUN 2	STARTING DATE
ITIME	0000	STARTING TIME
NQ	300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	8JUN 2	ENDING DATE
NDTIME	0055	ENDING TIME
ICENT	20	CENTURY MARK

COMPUTATION INTERVAL 0.08 HOURS
TOTAL TIME BASE 24.92 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

JP MULTI-PLAN OPTION

NPLAN	1	NUMBER OF PLANS

JR MULTI-RATIO OPTION
RATIOS OF PRECIPITATION

1.00	1.31	1.51	1.77	2.00	2.23

*** ***

```
**************
*            *
*      OFF   *
*            *
**************
```

OFFSITE DRAINAGE - 241 ac.

11 IN TIME DATA FOR INPUT TIME SERIES

JXMIN	60	TIME INTERVAL IN MINUTES
JXDATE	7JUN 2	STARTING DATE
JXTIME	0	STARTING TIME

SUBBASIN RUNOFF DATA

9 BA SUBBASIN CHARACTERISTICS

TAREA	0.38	SUBBASIN AREA

PRECIPITATION DATA

10 PB

STORM	3.50	BASIN TOTAL PRECIPITATION

12 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

16 LS SCS LOSS RATE

STRTL	0.67	INITIAL ABSTRACTION
CRVNBR	75.00	CURVE NUMBER
RTIMP	0.00	PERCENT IMPERVIOUS AREA

15 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	0.16	LAG

***

UNIT HYDROGRAPH
12 END-OF-PERIOD ORDINATES

301.	860.	821.	461.	233.	119.	61.	31.	16.	9.
4.	0.								

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	176.	12.00		43.	13.	13.	13.
			(INCHES)	1.052	1.302	1.302	1.302
			(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.20, TOTAL EXCESS = 1.30

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	176.	12.00		43.	13.	13.	13.
			(INCHES)	1.052	1.302	1.302	1.302
			(AC-FT)	21.	26.	26.	26.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 2.47, TOTAL EXCESS = 2.13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 286.	12.00	70.	22.	21.	21.
		(INCHES) 1.728	2.129	2.129	2.129
		(AC-FT) 35.	43.	43.	43.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.61, TOTAL EXCESS = 2.69

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 360.	12.00	88.	27.	26.	26.
		(INCHES) 2.183	2.695	2.695	2.695
		(AC-FT) 44.	54.	54.	54.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.75, TOTAL EXCESS = 3.45

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 456.	12.00	113.	35.	34.	34.
		(INCHES) 2.785	3.453	3.453	3.453
		(AC-FT) 56.	69.	69.	69.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.85, TOTAL EXCESS = 4.15

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 543.	12.00	135.	42.	40.	40.
		(INCHES) 3.333	4.149	4.149	4.149
		(AC-FT) 67.	83.	83.	83.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF
FOR PLAN 1, RATIO = 2.23

TOTAL RAINFALL = 7.80, TOTAL LOSS = 2.94, TOTAL EXCESS = 4.86

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	630.	12.00		158.	49.	47.	47.
			(INCHES)	3.894	4.862	4.862	4.862
			(AC-FT)	78.	98.	98.	98.

CUMULATIVE AREA = 0.38 SQ MI

*** ***

```
         ***************
         *             *
17 KK    *      SITE   *
         *             *
         ***************
```

EXIST. CONDITIONS - 10.13 ac.

SUBBASIN RUNOFF DATA

19 BA SUBBASIN CHARACTERISTICS
TAREA 0.02 SUBBASIN AREA

PRECIPITATION DATA

10 PB STORM 3.50 BASIN TOTAL PRECIPITATION

12 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

21 LS SCS LOSS RATE

STRTL	1.28	INITIAL ABSTRACTION
CRVNBR	61.00	CURVE NUMBER
RTIMP	0.00	PERCENT IMPERVIOUS AREA

20 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	0.15	LAG

***

UNIT HYDROGRAPH
11 END-OF-PERIOD ORDINATES

15. 39. 34. 17. 9. 4. 2. 1. 1. 0.
0.

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.93, TOTAL EXCESS = 0.57

	PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)				
			(CFS)			
+	3.	12.08	1.	0.	0.	0.
			(INCHES) 0.433	0.573	0.573	0.573
			(AC-FT) 0.	0.	0.	0.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 2.93, TOTAL EXCESS = 0.57

	PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)				
			(CFS)			
+	3.	12.08	1.	0.	0.	0.
			(INCHES) 0.433	0.573	0.573	0.573
			(AC-FT) 0.	0.	0.	0.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 3.46, TOTAL EXCESS = 1.14

	PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)				
			(CFS)			
+	6.	12.00	2.	0.	0.	0.
			(INCHES) 0.890	1.136	1.136	1.136
			(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 3.75, TOTAL EXCESS = 1.55

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  PEAK FLOW      TIME                             MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                              (CFS)
+        9.      12.00                   2.           1.          1.           1.
                           (INCHES)  1.234        1.553       1.553        1.553
                           (AC-FT)      1.           1.          1.           1.

                           CUMULATIVE AREA =     0.02 SQ MI


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

                            HYDROGRAPH AT STATION     SITE
                              FOR PLAN 1, RATIO = 1.77

     TOTAL RAINFALL =     6.20, TOTAL LOSS =    4.06, TOTAL EXCESS =    2.14

  PEAK FLOW      TIME                             MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                              (CFS)
+       12.      12.00                   3.           1.          1.           1.
                           (INCHES)  1.723        2.140       2.140        2.140
                           (AC-FT)      1.           2.          2.           2.

                           CUMULATIVE AREA =     0.02 SQ MI


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

                            HYDROGRAPH AT STATION     SITE
                              FOR PLAN 1, RATIO = 2.00

     TOTAL RAINFALL =     7.00, TOTAL LOSS =    4.30, TOTAL EXCESS =    2.70

  PEAK FLOW      TIME                             MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                              (CFS)
+       15.      12.00                   4.           1.          1.           1.
                           (INCHES)  2.188        2.702       2.702        2.702
                           (AC-FT)      2.           2.          2.           2.

                           CUMULATIVE AREA =     0.02 SQ MI


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

                            HYDROGRAPH AT STATION     SITE
                              FOR PLAN 1, RATIO = 2.23

     TOTAL RAINFALL =     7.80, TOTAL LOSS =    4.51, TOTAL EXCESS =    3.29

  PEAK FLOW      TIME                             MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR     24.92-HR
+   (CFS)        (HR)
                              (CFS)
+       19.      12.00                   5.           1.          1.           1.
                           (INCHES)  2.673        3.293       3.293        3.293
                           (AC-FT)      2.           3.          3.           3.

                           CUMULATIVE AREA =     0.02 SQ MI



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          ***************
          *             *
  22 KK   *        C1   *
          *             *
          ***************
                    COMBO

  24 HC        HYDROGRAPH COMBINATION
                   ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                 ***

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.00

  PEAK FLOW     TIME                     MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR     24.92-HR
+   (CFS)       (HR)
                          (CFS)
+      179.    12.00                 43.          13.         13.          13.
                        (INCHES)    1.027       1.272       1.272        1.272
                         (AC-FT)     21.          27.         27.          27.

                        CUMULATIVE AREA =     0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.31

  PEAK FLOW     TIME                     MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR     24.92-HR
+   (CFS)       (HR)
                          (CFS)
+      293.    12.00                 71.          22.         21.          21.
                        (INCHES)    1.694       2.089       2.089        2.089
                         (AC-FT)     35.          44.         44.          44.

                        CUMULATIVE AREA =     0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.51

  PEAK FLOW     TIME                     MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR     24.92-HR
+   (CFS)       (HR)
                          (CFS)
+      369.    12.00                 90.          28.         27.          27.
                        (INCHES)    2.144       2.649       2.649        2.649
                         (AC-FT)     45.          55.         55.          55.

                        CUMULATIVE AREA =     0.39 SQ MI

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

                          HYDROGRAPH AT STATION       C1
                            FOR PLAN 1, RATIO = 1.77

  PEAK FLOW     TIME                     MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR     24.92-HR
+   (CFS)       (HR)
                          (CFS)
+      468.    12.00                116.          36.         35.          35.
                        (INCHES)    2.742       3.400       3.400        3.400
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                    (AC-FT)       57.          71.          71.           71.

                    CUMULATIVE AREA =    0.39 SQ MI

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

                     HYDROGRAPH AT STATION       C1
                       FOR PLAN 1, RATIO = 2.00

  PEAK FLOW      TIME                              MAXIMUM AVERAGE FLOW
                                           6-HR        24-HR        72-HR      24.92-HR
+   (CFS)       (HR)
                            (CFS)
+     558.     12.00                      139.          43.          42.           42.
                         (INCHES)        3.286        4.091        4.091        4.091
                          (AC-FT)          69.          86.          86.           86.

                    CUMULATIVE AREA =    0.39 SQ MI

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

                     HYDROGRAPH AT STATION       C1
                       FOR PLAN 1, RATIO = 2.23

  PEAK FLOW      TIME                              MAXIMUM AVERAGE FLOW
                                           6-HR        24-HR        72-HR      24.92-HR
+   (CFS)       (HR)
                            (CFS)
+     649.     12.00                      162.          51.          49.           49.
                         (INCHES)        3.843        4.799        4.799        4.799
                          (AC-FT)          80.         100.         100.          100.

                    CUMULATIVE AREA =    0.39 SQ MI


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

          ***************
          *             *
  25 KK   *      OFF2   *
          *             *
          ***************
                   OFFSITE DRAINAGE

             SUBBASIN RUNOFF DATA

  27 BA        SUBBASIN CHARACTERISTICS
                     TAREA         0.38  SUBBASIN AREA

               PRECIPITATION DATA

  10 PB              STORM         3.50  BASIN TOTAL PRECIPITATION

  12 PI           INCREMENTAL PRECIPITATION PATTERN
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

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29 LS          SCS LOSS RATE
                 STRTL        0.67  INITIAL ABSTRACTION
                CRVNBR       75.00  CURVE NUMBER
                 RTIMP        0.00  PERCENT IMPERVIOUS AREA

28 UD          SCS DIMENSIONLESS UNITGRAPH
                  TLAG        0.16  LAG

                                                    ***

                                              UNIT HYDROGRAPH
                                          12 END-OF-PERIOD ORDINATES
          301.      860.      821.      461.      233.      119.      61.       31.       16.       9.
            4.        0.

   TOTAL RAINFALL =    3.50, TOTAL LOSS =    2.20, TOTAL EXCESS =    1.30

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                             (CFS)
+     176.     12.00                     43.          13.         13.          13.
                          (INCHES)    1.052        1.302       1.302        1.302
                           (AC-FT)      21.          26.         26.          26.

                          CUMULATIVE AREA =    0.38 SQ MI


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

                            HYDROGRAPH AT STATION     OFF2
                              FOR PLAN 1, RATIO = 1.00

   TOTAL RAINFALL =    3.50, TOTAL LOSS =    2.20, TOTAL EXCESS =    1.30

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR       72-HR      24.92-HR
+   (CFS)       (HR)
                             (CFS)
+     176.     12.00                     43.          13.         13.          13.
                          (INCHES)    1.052        1.302       1.302        1.302
                           (AC-FT)      21.          26.         26.          26.

                          CUMULATIVE AREA =    0.38 SQ MI


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

                            HYDROGRAPH AT STATION     OFF2
                              FOR PLAN 1, RATIO = 1.31

   TOTAL RAINFALL =    4.60, TOTAL LOSS =    2.47, TOTAL EXCESS =    2.13
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	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	286.	12.00		70.	22.	21.	21.
			(INCHES)	1.728	2.129	2.129	2.129
			(AC-FT)	35.	43.	43.	43.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.61, TOTAL EXCESS = 2.69

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	360.	12.00		88.	27.	26.	26.
			(INCHES)	2.183	2.695	2.695	2.695
			(AC-FT)	44.	54.	54.	54.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.75, TOTAL EXCESS = 3.45

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	456.	12.00		113.	35.	34.	34.
			(INCHES)	2.785	3.453	3.453	3.453
			(AC-FT)	56.	69.	69.	69.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.85, TOTAL EXCESS = 4.15

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	543.	12.00		135.	42.	40.	40.
			(INCHES)	3.333	4.149	4.149	4.149
			(AC-FT)	67.	83.	83.	83.

CUMULATIVE AREA = 0.38 SQ MI

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

HYDROGRAPH AT STATION OFF2
FOR PLAN 1, RATIO = 2.23

TOTAL RAINFALL = 7.80, TOTAL LOSS = 2.94, TOTAL EXCESS = 4.86

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 630.	12.00		158.	49.	47.	47.
		(INCHES)	3.894	4.862	4.862	4.862
		(AC-FT)	78.	98.	98.	98.

CUMULATIVE AREA = 0.38 SQ MI

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          ***************
          *             *
30 KK     *     SITE    *
          *             *
          ***************
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DEVELOPED CONDITIONS

SUBBASIN RUNOFF DATA

32 BA SUBBASIN CHARACTERISTICS
TAREA 0.02 SUBBASIN AREA

PRECIPITATION DATA

10 PB STORM 3.50 BASIN TOTAL PRECIPITATION

12 PI INCREMENTAL PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
0.04	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

34 LS SCS LOSS RATE
STRTL 0.50 INITIAL ABSTRACTION
CRVNBR 80.00 CURVE NUMBER
RTIMP 0.00 PERCENT IMPERVIOUS AREA

33 UD SCS DIMENSIONLESS UNITGRAPH
TLAG 0.15 LAG

***

UNIT HYDROGRAPH
11 END-OF-PERIOD ORDINATES

15. 39. 34. 17. 9. 4. 2. 1. 1. 0.
0.

TOTAL RAINFALL = 3.50, TOTAL LOSS = 1.86, TOTAL EXCESS = 1.64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 9.	12.00	2.	1.	1.	1.
		(INCHES) 1.328	1.636	1.636	1.636
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.00

TOTAL RAINFALL = 3.50, TOTAL LOSS = 1.86, TOTAL EXCESS = 1.64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 9.	12.00	2.	1.	1.	1.
		(INCHES) 1.328	1.636	1.636	1.636
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.31

TOTAL RAINFALL = 4.60, TOTAL LOSS = 2.05, TOTAL EXCESS = 2.55

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 14.	12.00	3.	1.	1.	1.
		(INCHES) 2.055	2.547	2.547	2.547
		(AC-FT) 2.	2.	2.	2.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.51

TOTAL RAINFALL = 5.30, TOTAL LOSS = 2.14, TOTAL EXCESS = 3.16

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 17.	12.00	4.	1.	1.	1.
		(INCHES) 2.535	3.156	3.156	3.156
		(AC-FT) 2.	3.	3.	3.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 1.77

TOTAL RAINFALL = 6.20, TOTAL LOSS = 2.24, TOTAL EXCESS = 3.96

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	22.	12.00		5.	2.	2.	2.
			(INCHES)	3.169	3.962	3.962	3.962
			(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 2.00

TOTAL RAINFALL = 7.00, TOTAL LOSS = 2.31, TOTAL EXCESS = 4.69

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	25.	12.00		6.	2.	2.	2.
			(INCHES)	3.742	4.694	4.694	4.694
			(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = 0.02 SQ MI

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

HYDROGRAPH AT STATION SITE
FOR PLAN 1, RATIO = 2.23

TOTAL RAINFALL = 7.80, TOTAL LOSS = 2.36, TOTAL EXCESS = 5.44

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	29.	12.00		7.	2.	2.	2.
			(INCHES)	4.320	5.438	5.438	5.438
			(AC-FT)	4.	5.	5.	5.

CUMULATIVE AREA = 0.02 SQ MI

*** ***

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              **************
              *            *
 35 KK        *      C2    *
              *            *
              **************
                           COMBO
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37 HC HYDROGRAPH COMBINATION

ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.00

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 186.	12.00	45.	14.	13.	13.
		(INCHES) 1.063	1.315	1.315	1.315
		(AC-FT) 22.	28.	28.	28.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.31

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 301.	12.00	73.	23.	22.	22.
		(INCHES) 1.741	2.146	2.146	2.146
		(AC-FT) 36.	45.	45.	45.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.51

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 377.	12.00	93.	29.	28.	28.
		(INCHES) 2.197	2.713	2.713	2.713
		(AC-FT) 46.	57.	57.	57.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 1.77

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
		(CFS)			
+ 477.	12.00	118.	37.	35.	35.
		(INCHES) 2.800	3.474	3.474	3.474
		(AC-FT) 59.	73.	73.	73.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2

FOR PLAN 1, RATIO = 2.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 568.	12.00		141.	44.	42.	42.
		(INCHES)	3.349	4.171	4.171	4.171
		(AC-FT)	70.	87.	87.	87.

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION C2
FOR PLAN 1, RATIO = 2.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 659.	12.00		165.	52.	50.	50.
		(INCHES)	3.911	4.885	4.885	4.885
		(AC-FT)	82.	102.	102.	102.

CUMULATIVE AREA = 0.39 SQ MI

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               **************
               *            *
   38 KK       *    POND    *
               *            *
               **************
                           DETENTION POND

                HYDROGRAPH ROUTING DATA

   40 RS          STORAGE ROUTING
                        NSTPS           1  NUMBER OF SUBREACHES
                         ITYP        ELEV  TYPE OF INITIAL CONDITION
                       RSVRIC      134.00  INITIAL CONDITION
                            X        0.00 WORKING R AND D COEFFICIENT

   41 SA                 AREA         0.8        0.9        1.0        1.3        1.5

   42 SE          ELEVATION        134.00     135.00     136.00     140.00     141.00

   43 SL          LOW-LEVEL OUTLET
                        ELEVL      134.63  ELEVATION AT CENTER OF OUTLET
                        CAREA        2.45  CROSS-SECTIONAL AREA
                         COQL        0.67  COEFFICIENT
                         EXPL        0.50  EXPONENT OF HEAD

   44 SS          SPILLWAY
                         CREL      136.00  SPILLWAY CREST ELEVATION
                        SPWID       30.00  SPILLWAY WIDTH
                         COQW        2.80  WEIR COEFFICIENT
                         EXPW        1.50  EXPONENT OF HEAD
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	0.00	0.85	1.80	6.39	7.78
ELEVATION	134.00	135.00	136.00	140.00	141.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	0.00	0.00	11.76	12.17	12.61	13.09	13.60	14.15	14.76	15.41
ELEVATION	134.00	134.63	135.43	135.48	135.55	135.62	135.70	135.79	135.89	136.00
OUTFLOW	17.34	26.13	47.04	85.28	146.08	234.68	356.34	516.32	719.90	972.37
ELEVATION	136.07	136.23	136.49	136.85	137.30	137.85	138.49	139.23	140.07	141.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	0.00	0.52	0.85	1.24	1.30	1.36	1.42	1.50	1.59	1.69
OUTFLOW	0.00	0.00	8.01	11.76	12.17	12.61	13.09	13.60	14.15	14.75
ELEVATION	134.00	134.63	135.00	135.43	135.48	135.55	135.62	135.70	135.79	135.89
STORAGE	1.80	1.87	2.03	2.30	2.67	3.16	3.77	4.52	5.41	6.39
OUTFLOW	15.41	17.34	26.13	47.04	85.28	146.08	234.68	356.34	516.32	702.51
ELEVATION	136.00	136.07	136.23	136.49	136.85	137.30	137.85	138.49	139.23	140.00
STORAGE	6.47	7.78								
OUTFLOW	719.90	972.38								
ELEVATION	140.07	141.00								

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 179.	12.08		42.	14.	13.	13.
		(INCHES)	1.005	1.287	1.287	1.287
		(AC-FT)	21.	27.	27.	27.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)					
3.	12.08		2.	1.	1.	1.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)					
137.51	12.08		136.32	134.97	134.93	134.93

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.31

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 292.	12.08		72.	22.	21.	21.
		(INCHES)	1.694	2.113	2.113	2.113
		(AC-FT)	35.	44.	44.	44.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)					
4.	12.08		2.	1.	1.	1.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)					

138.15	12.08		136.61	135.22	135.18	135.18

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.51

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 367.	12.08		91.	28.	27.	27.
		(INCHES)	2.162	2.674	2.674	2.674
		(AC-FT)	45.	56.	56.	56.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
5.	12.08	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
138.54	12.08	136.76	135.36	135.31	135.31

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 1.77

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 465.	12.00		118.	36.	35.	35.
		(INCHES)	2.785	3.424	3.424	3.424
		(AC-FT)	58.	72.	72.	72.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
5.	12.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
138.99	12.00	136.95	135.50	135.45	135.45

CUMULATIVE AREA = 0.39 SQ MI

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

HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 2.00

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 556.	12.00		141.	43.	42.	42.
		(INCHES)	3.346	4.118	4.118	4.118
		(AC-FT)	70.	86.	86.	86.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE

+ (AC-FT)	(HR)	6-HR	24-HR	72-HR	24.92-HR
6.	12.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
139.39	12.00	137.10	135.61	135.55	135.55

CUMULATIVE AREA = 0.39 SQ MI

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HYDROGRAPH AT STATION POND
FOR PLAN 1, RATIO = 2.23

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 646.	12.00		165.	51.	49.	49.
		(INCHES)	3.908	4.830	4.830	4.830
		(AC-FT)	82.	101.	101.	101.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
6.	12.00	3.	2.	2.	2.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
139.77	12.00	137.24	135.71	135.64	135.64

CUMULATIVE AREA = 0.39 SQ MI

1

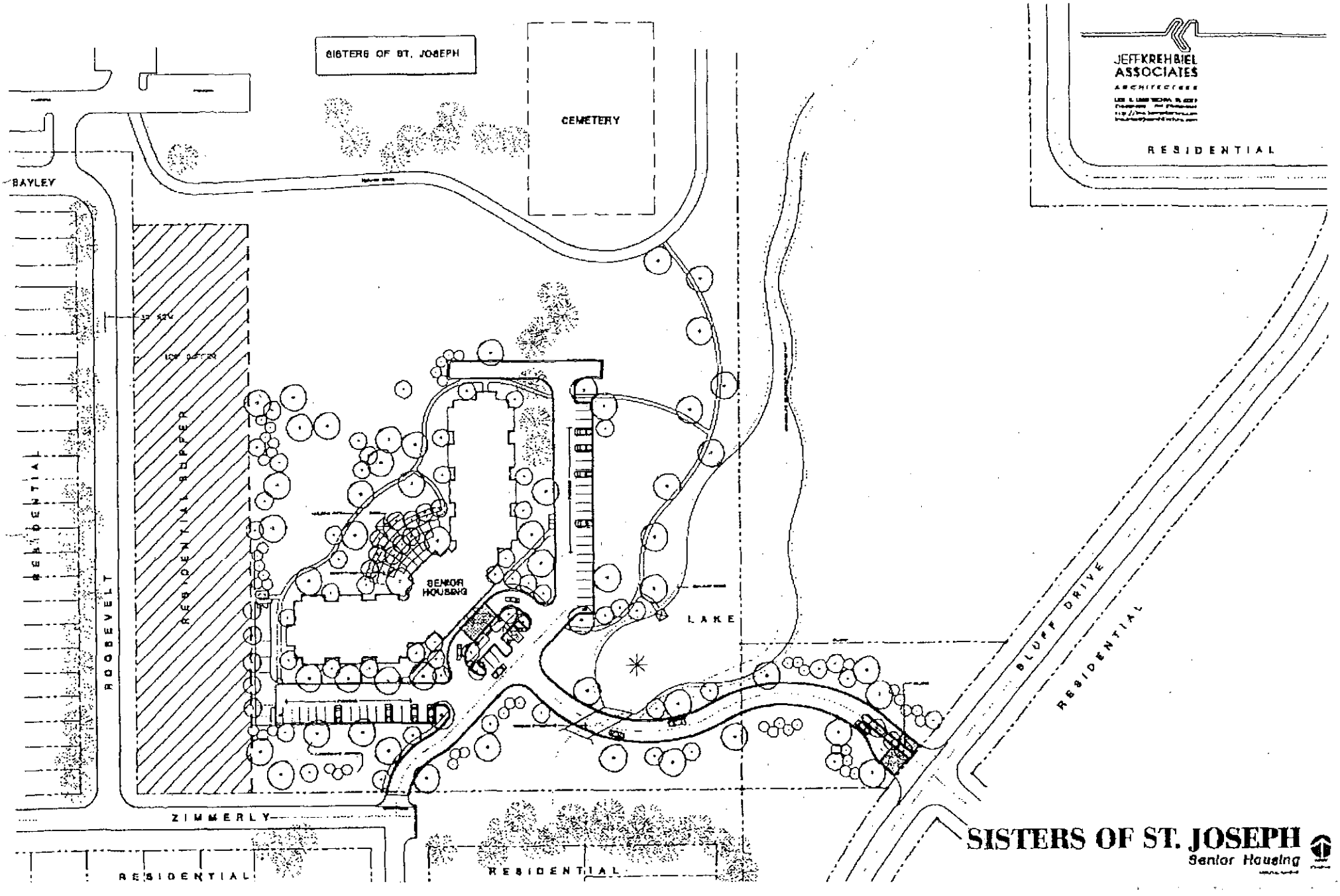
PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 1.31	RATIO 3 1.51	RATIO 4 1.77	RATIO 5 2.00	RATIO 6 2.23
HYDROGRAPH AT										
+	OFF	0.38	1	FLOW	176.	286.	360.	456.	543.	630.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	SITE	0.02	1	FLOW	3.	6.	9.	12.	15.	19.
				TIME	12.08	12.00	12.00	12.00	12.00	12.00
2 COMBINED AT										
+	C1	0.39	1	FLOW	179.	293.	369.	468.	558.	649.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	OFF2	0.38	1	FLOW	176.	286.	360.	456.	543.	630.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
HYDROGRAPH AT										
+	SITE	0.02	1	FLOW	9.	14.	17.	22.	25.	29.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00
2 COMBINED AT										
+	C2	0.39	1	FLOW	186.	301.	377.	477.	568.	659.
				TIME	12.00	12.00	12.00	12.00	12.00	12.00

ROUTED TO

+	POND	0.39	1	FLOW	179.	292.	367.	465.	556.	646.
				TIME	12.08	12.08	12.08	12.00	12.00	12.00
			** PEAK STAGES IN FEET **							
			1	STAGE	137.51	138.15	138.54	138.99	139.39	139.77
				TIME	12.08	12.08	12.08	12.00	12.00	12.00

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


SISTERS OF ST. JOSEPH
CEMETERY
BAYLEY
ROOSEVELT
RESIDENTIAL BUFFER
SENIOR HOUSING
LAKE
BLUFF DRIVE
RESIDENTIAL
ZIMMERLY
RESIDENTIAL
RESIDENTIAL
JEFF KREHBIEL ASSOCIATES
ARCHITECTURE
SISTERS OF ST. JOSEPH
Senior Housing

CLOSURE - SISTERS OF ST. JOSEPH 5TH ADDITION

PT 01 North: 5804.5702 East : 7181.2616
Line Course: N 00-02-00 E Length: 632.1600
PT 02 North: 6436.7301 East : 7181.6294
Line Course: N 89-52-26 E Length: 513.9800
PT 03 North: 6437.8614 East : 7695.6081
Line Course: S 00-00-56 W Length: 512.1700
PT 04 North: 5925.6914 East : 7695.4691
Line Course: N 89-52-31 E Length: 250.3100
PT 05 North: 5926.2363 East : 7945.7785
Line Course: S 40-07-05 W Length: 174.7400
PT 06 North: 5792.6094 East : 7833.1822
Curve Length: 286.6953 Radius: 735.0000
Delta: 22-20-56 Tangent: 145.1926
Chord: 284.8800 Course: S 28-56-37 W
Course In: S 49-52-55 E Course Out: N 72-13-51 W
RP North: 5319.0014 East : 8395.2502
PT 07 End North: 5543.3108 East : 7695.3143
Line Course: N 00-01-50 E Length: 31.3800
PT 08 North: 5574.6908 East : 7695.3311
Line Course: N 00-01-50 E Length: 201.0000
PT 09 North: 5775.6907 East : 7695.4382
Line Course: N 00-00-00 E Length: 30.0000
PT 10 North: 5805.6907 East : 7695.4382
Line Course: S 89-52-31 W Length: 514.1700
PT 01 North: 5804.5715 East : 7181.2695