APPENDIX D

VO6 Model Input & Output Files

CROZIER & ASSOCIATES
Consulting Engineers

Project: Glenelg Expansion Lands
Project No.: 1060-6220
File: Storm Data
Design by: K. Swain
Date: 20223-05-25

Visual OTTHYMO 6.0 Storm Data - Chicago

Time Step (min)	10
Duration (hour)	3
A	404.147
B	0
C	0.699

2Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	3.76
10	4.42
20	5.48
30	7.50
40	13.95
50	80.82
60	17.11
70	10.79
80	8.23
90	6.78
100	5.83
110	5.15
120	4.63
130	4.23
140	3.90
150	3.63
160	3.39
170	3.20

Time Step (min)	10
Duration (hour)	3
A	535.364
B	0
C	0.699

5Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	4.98
10	5.86
20	7.26
30	9.93
40	18.47
50	107.07
60	22.67
70	14.30
80	10.90
90	8.98
100	7.72
110	6.82
120	6.14
130	5.60
140	5.16
150	4.80
160	4.50
170	4.24

Time Step (min)	10
Duration (hour)	3
A	622.842
B	0
C	0.699

10Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	5.79
10	6.82
20	8.45
30	11.56
40	21.49
50	124.56
60	26.38
70	16.63
80	12.68
90	10.45
100	8.98
110	7.93
120	7.14
130	6.51
140	6.01
150	5.59
160	5.23
170	4.93

Time Step (min)	10
Duration (hour)	3
A	731.314
B	0
C	0.699

25Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	6.80
10	8.01
20	9.92
30	13.57
40	25.24
50	146.25
60	30.97
70	19.53
80	14.89
90	12.27
100	10.54
110	9.31
120	8.38
130	7.65
140	7.05
150	6.56
160	6.14
170	5.79

Time Step (min)	10
Duration (hour)	3
A	811.794
B	0
C	0.699

50Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	7.55
10	8.89
20	11.01
30	15.06
40	28.01
50	162.35
60	34.38
70	21.68
80	16.53
90	13.62
100	11.70
110	10.34
120	9.30
130	8.49
140	7.83
150	7.28
160	6.82
170	6.42

Time Step (min)	10
Duration (hour)	3
A	892.273
B	0
C	0.699

100Yr 3hr 10min Chicago

Time (minute)	Rainfall Intensity (mm/hr)
0	8.30
10	9.77
20	12.10
30	16.55
40	30.79
50	178.44
60	37.79
70	23.83
80	18.17
90	14.97
100	12.86
110	11.36
120	10.23
130	9.33
140	8.61
150	8.00
160	7.50
170	7.06

CROZIER & ASSOCIATES
Consulting Engineers

Project: Glenela Expansion Lands
Project No.: 1060-6220
File: Storm Data
Design by: K. Swain
Date: 20223-05-25

Visual OTTHYMO 6.0 Storm Data - SCS

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	60.13

2Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	0.66
30	0.66
45	0.66
60	0.66
75	0.66
90	0.66
105	0.66
120	0.66
135	0.78
150	0.78
165	0.78
180	0.78
195	0.78
210	0.78
225	0.78
240	0.78
255	0.96
270	0.96
285	0.96
300	0.96
315	0.96
330	0.96
345	0.96
360	0.96
375	1.08
390	1.08
405	1.08
420	1.08
435	1.32
450	1.32
465	1.32
480	1.32
495	1.56
510	1.56
525	1.68
540	1.68
555	1.92
570	1.92
585	2.16
600	2.16
615	2.77
630	2.77
645	3.73
660	3.73
675	5.77
690	5.77
705	17.80
720	73.60
735	8.66
750	8.66
765	4.45
780	4.45
795	3.25
810	3.25
825	2.53
840	2.53
855	1.80
870	1.80
885	1.80
900	1.80
915	1.80
930	1.80
945	1.80
960	1.80
975	1.08
990	1.08
1005	1.08
1020	1.08
1035	1.08
1050	1.08
1065	1.08
1080	1.08
1095	1.08
1110	1.08
1125	1.08
1140	1.08
1155	1.08
1170	1.08
1185	1.08
1200	1.08
1215	0.72
1230	0.72
1245	0.72
1260	0.72
1275	0.72
1290	0.72
1305	0.72
1320	0.72
1335	0.72
1350	0.72
1365	0.72
1380	0.72
1395	0.72
1410	0.72
1425	0.72
1440	0.72

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	79.65

5Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	0.88
30	0.88
45	0.88
60	0.88
75	0.88
90	0.88
105	0.88
120	0.88
135	1.04
150	1.04
165	1.04
180	1.04
195	1.04
210	1.04
225	1.04
240	1.04
255	1.27
270	1.27
285	1.27
300	1.27
315	1.27
330	1.27
345	1.27
360	1.27
375	1.43
390	1.43
405	1.43
420	1.43
435	1.75
450	1.75
465	1.75
480	1.75
495	2.07
510	2.07
525	2.23
540	2.23
555	2.55
570	2.55
585	2.87
600	2.87
615	3.66
630	3.66
645	4.94
660	4.94
675	7.65
690	7.65
705	23.58
720	97.49
735	11.47
750	11.47
765	5.89
780	5.89
795	4.30
810	4.30
825	3.35
840	3.35
855	2.39
870	2.39
885	2.39
900	2.39
915	2.39
930	2.39
945	2.39
960	2.39
975	1.43
990	1.43
1005	1.43
1020	1.43
1035	1.43
1050	1.43
1065	1.43
1080	1.43
1095	1.43
1110	1.43
1125	1.43
1140	1.43
1155	1.43
1170	1.43
1185	1.43
1200	1.43
1215	0.96
1230	0.96
1245	0.96
1260	0.96
1275	0.96
1290	0.96
1305	0.96
1320	0.96
1335	0.96
1350	0.96
1365	0.96
1380	0.96
1395	0.96
1410	0.96
1425	0.96
1440	0.96

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	92.66

10Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	1.02
30	1.02
45	1.02
60	1.02
75	1.02
90	1.02
105	1.02
120	1.02
135	1.20
150	1.20
165	1.20
180	1.20
195	1.20
210	1.20
225	1.20
240	1.20
255	1.48
270	1.48
285	1.48
300	1.48
315	1.48
330	1.48
345	1.48
360	1.48
375	1.67
390	1.67
405	1.67
420	1.67
435	2.04
450	2.04
465	2.04
480	2.04
495	2.41
510	2.41
525	2.59
540	2.59
555	2.97
570	2.97
585	3.34
600	3.34
615	4.26
630	4.26
645	5.74
660	5.74
675	8.90
690	8.90
705	27.43
720	113.42
735	13.34
750	13.34
765	6.86
780	6.86
795	5.00
810	5.00
825	3.89
840	3.89
855	2.78
870	2.78
885	2.78
900	2.78
915	2.78
930	2.78
945	2.78
960	2.78
975	1.67
990	1.67
1005	1.67
1020	1.67
1035	1.67
1050	1.67
1065	1.67
1080	1.67
1095	1.67
1110	1.67
1125	1.67
1140	1.67
1155	1.67
1170	1.67
1185	1.67
1200	1.67
1215	1.11
1230	1.11
1245	1.11
1260	1.11
1275	1.11
1290	1.11
1305	1.11
1320	1.11
1335	1.11
1350	1.11
1365	1.11
1380	1.11
1395	1.11
1410	1.11
1425	1.11
1440	1.11

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	108.8

25Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	1.20
30	1.20
45	1.20
60	1.20
75	1.20
90	1.20
105	1.20
120	1.20
135	1.41
150	1.41
165	1.41
180	1.41
195	1.41
210	1.41
225	1.41
240	1.41
255	1.74
270	1.74
285	1.74
300	1.74
315	1.74
330	1.74
345	1.74
360	1.74
375	1.96
390	1.96
405	1.96
420	1.96
435	2.39
450	2.39
465	2.39
480	2.39
495	2.83
510	2.83
525	3.05
540	3.05
555	3.48
570	3.48
585	3.92
600	3.92
615	5.00
630	5.00
645	6.75
660	6.75
675	10.44
690	10.44
705	32.20
720	133.17
735	15.67
750	15.67
765	8.05
780	8.05
795	5.88
810	5.88
825	4.57
840	4.57
855	3.26
870	3.26
885	3.26
900	3.26
915	3.26
930	3.26
945	3.26
960	3.26
975	1.96
990	1.96
1005	1.96
1020	1.96
1035	1.96
1050	1.96
1065	1.96
1080	1.96
1095	1.96
1110	1.96
1125	1.96
1140	1.96
1155	1.96
1170	1.96
1185	1.96
1200	1.96
1215	1.31
1230	1.31
1245	1.31
1260	1.31
1275	1.31
1290	1.31
1305	1.31
1320	1.31
1335	1.31
1350	1.31
1365	1.31
1380	1.31
1395	1.31
1410	1.31
1425	1.31
1440	1.31

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	120.77

50Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	1.33
30	1.33
45	1.33
60	1.33
75	1.33
90	1.33
105	1.33
120	1.33
135	1.57
150	1.57
165	1.57
180	1.57
195	1.57
210	1.57
225	1.57
240	1.57
255	1.93
270	1.93
285	1.93
300	1.93
315	1.93
330	1.93
345	1.93
360	1.93
375	2.17
390	2.17
405	2.17
420	2.17
435	2.66
450	2.66
465	2.66
480	2.66
495	3.14
510	3.14
525	3.38
540	3.38
555	3.86
570	3.86
585	4.35
600	4.35
615	5.56
630	5.56
645	7.49
660	7.49
675	11.59
690	11.59
705	35.75
720	147.82
735	17.39
750	17.39
765	8.94
780	8.94
795	6.52
810	6.52
825	5.07
840	5.07
855	3.62
870	3.62
885	3.62
900	3.62
915	3.62
930	3.62
945	3.62
960	3.62
975	2.17
990	2.17
1005	2.17
1020	2.17
1035	2.17
1050	2.17
1065	2.17
1080	2.17
1095	2.17
1110	2.17
1125	2.17
1140	2.17
1155	2.17
1170	2.17
1185	2.17
1200	2.17
1215	1.45
1230	1.45
1245	1.45
1260	1.45
1275	1.45
1290	1.45
1305	1.45
1320	1.45
1335	1.45
1350	1.45
1365	1.45
1380	1.45
1395	1.45
1410	1.45
1425	1.45
1440	1.45

Time Step (min)	15
Duration (hour)	24
Precipitation (mm)	132.74

100Yr 24hr 15min SCS

Time (minute)	Rainfall Intensity (mm/hr)
0	0.00
15	1.46
30	1.46
45	1.46
60	1.46
75	1.46
90	1.46
105	1.46
120	1.46
135	1.73
150	1.73
165	1.73
180	1.73
195	1.73
210	1.73
225	1.73
240	1.73
255	2.12
270	2.12
285	2.12
300	2.12
315	2.12
330	2.12
345	2.12
360	2.12
375	2.39
390	2.39
405	2.39
420	2.39
435	2.92
450	2.92
465	2.92
480	2.92
495	3.45
510	3.45
525	3.72
540	3.72
555	4.25
570	4.25
585	4.78
600	4.78
615	6.11
630	6.11
645	8.23
660	8.23
675	12.74
690	12.74
705	39.29
720	162.47
735	19.11
750	19.11
765	9.82
780	9.82
795	7.17
810	7.17
825	5.58
840	5.58
855	3.98
870	3.98
885	3.98
900	3.98
915	3.98
930	3.98
945	3.98
960	3.98
975	2.39
990	2.39
1005	2.39
1020	2.39
1035	2.39
1050	2.39
1065	2.39
1080	2.39
1095	2.39
1110	2.39
1125	2.39
1140	2.39
1155	2.39
1170	2.39
1185	2.39
1200	2.39
1215	1.59
1230	1.59
1245	1.59
1260	1.59
1275	1.59
1290	1.59
1305	1.59
1320	1.59
1335	1.59
1350	1.59
1365	1.59
1380	1.59
1395	1.59
1410	1.59
1425	1.59
1440	1.59

Ontario IDF CURVE LOOKUP

Active coordinate

44° 10' 15" N, 80° 24' 15" W (44.170833,-80.404167)

Retrieved: Mon, 16 Jan 2023 18:30:15 GMT

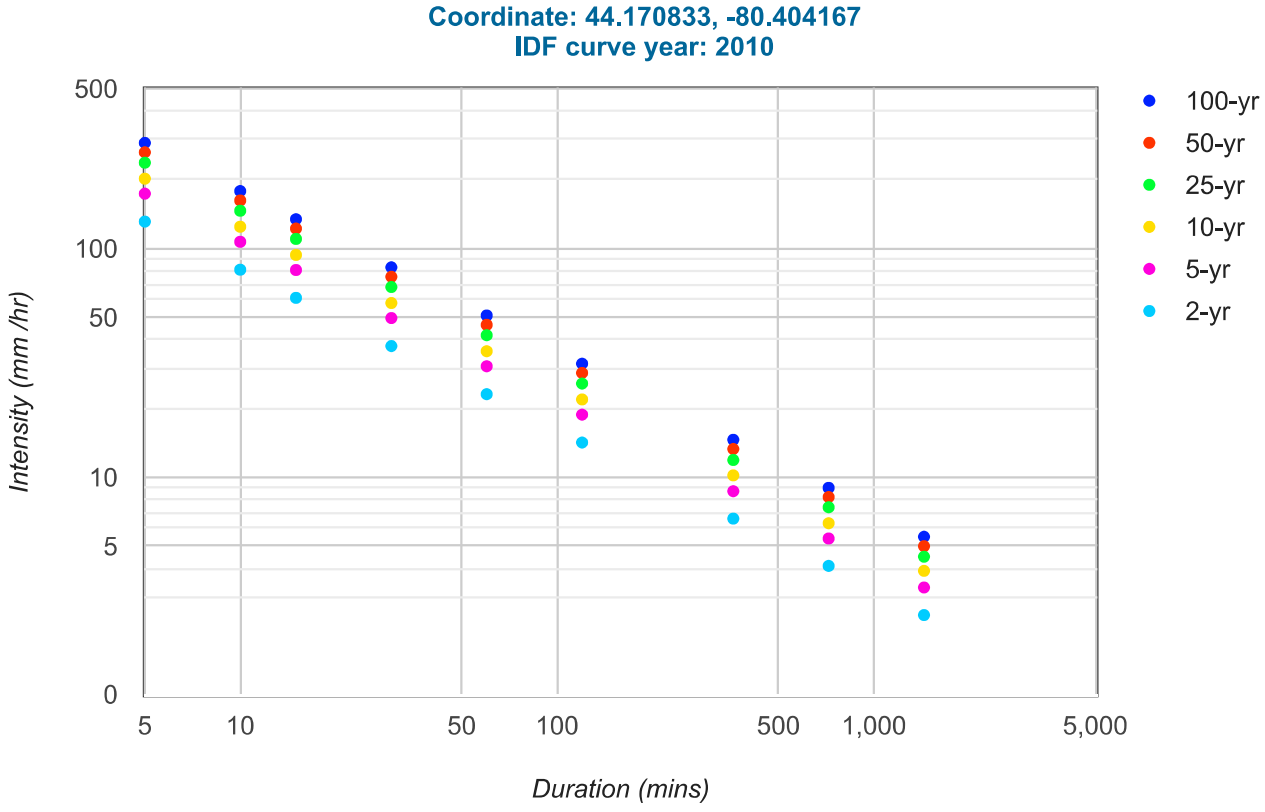
Location summary

These are the locations in the selection.

IDF Curve: 44° 10' 15" N, 80° 24' 15" W (44.170833,-80.404167)

Results

An IDF curve was found.



Coefficient summary

IDF Curve: 44° 10' 15" N, 80° 24' 15" W (44.170833,-80.404167)

Retrieved: Mon, 16 Jan 2023 18:30:15 GMT

Data year: 2010
IDF curve year: 2010

Return period	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
A	23.1	30.6	35.6	41.8	46.4	51.0
B	-0.699	-0.699	-0.699	-0.699	-0.699	-0.699

Statistics

Rainfall intensity (mm hr^{-1})

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	131.2	80.8	60.9	37.5	23.1	14.2	6.6	4.1	2.5
5-yr	173.8	107.1	80.6	49.7	30.6	18.8	8.7	5.4	3.3
10-yr	202.2	124.6	93.8	57.8	35.6	21.9	10.2	6.3	3.9
25-yr	237.4	146.3	110.2	67.9	41.8	25.7	11.9	7.4	4.5
50-yr	263.6	162.3	122.3	75.3	46.4	28.6	13.3	8.2	5.0
100-yr	289.7	178.4	134.4	82.8	51.0	31.4	14.6	9.0	5.5

Rainfall depth (mm)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	10.9	13.5	15.2	18.8	23.1	28.5	39.6	48.8	60.1
5-yr	14.5	17.8	20.2	24.8	30.6	37.7	52.5	64.6	79.6
10-yr	16.9	20.8	23.5	28.9	35.6	43.9	61.0	75.2	92.7
25-yr	19.8	24.4	27.5	33.9	41.8	51.5	71.7	88.3	108.8
50-yr	22.0	27.1	30.6	37.7	46.4	57.2	79.6	98.0	120.8
100-yr	24.1	29.7	33.6	41.4	51.0	62.8	87.5	107.7	132.7

Terms of Use

Project: Glenelg Expansion Lands
Project No.: 1060-6220
File: Model Schematic (Pre-Development)
Design by: K. Swain
Date: 20223-05-25

Visual OTTHYMO 6.0 Model Schematic

Pre-Development

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\6f6bb
d7d-7403-423d-925d-c82993f4def1\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\6f6bb
d7d-7403-423d-925d-c82993f4def1\scena


DATE: 08-23-2022                          TIME: 11:44:29

USER:


COMMENTS: _____________________________________________


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : 25mm                          **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              ac87f79d-69e0-48a7-b484-801844eb7b93\a4c52d15
| Ptotal= 24.99 mm |    Comments: 25mm
-------------------
                TIME     RAIN |  TIME     RAIN |'  TIME     RAIN |  TIME     RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    1.36 |  1.00    6.91 |  2.00    4.18 |  3.00    1.86
                0.08    1.45 |  1.08   11.02 |  2.08    3.77 |  3.08    1.78
                0.17    1.55 |  1.17   26.16 |  2.17    3.43 |  3.17    1.71
                0.25    1.67 |  1.25   76.07 |  2.25    3.16 |  3.25    1.64
                0.33    1.81 |  1.33   33.71 |  2.33    2.92 |  3.33    1.58
                0.42    1.99 |  1.42   18.64 |  2.42    2.72 |  3.42    1.52
                0.50    2.20 |  1.50   12.61 |  2.50    2.55 |  3.50    1.47
                0.58    2.47 |  1.58    9.46 |  2.58    2.39 |  3.58    1.43
                0.67    2.82 |  1.67    7.55 |  2.67    2.26 |  3.67    1.38
                0.75    3.29 |  1.75    6.28 |  2.75    2.14 |  3.75    1.34
                0.83    3.97 |  1.83    5.38 |  2.83    2.04 |  3.83    1.30
                0.92    5.03 |  1.92    4.70 |  2.92    1.94 |  3.92    1.26

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.024 (i)
     TIME TO PEAK    (hrs)=   1.917
     RUNOFF VOLUME    (mm)=   3.018
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.121

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.054 (i)
     TIME TO PEAK    (hrs)=   2.250
     RUNOFF VOLUME    (mm)=   3.018
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.121
```

```
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.22

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.022 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   3.014
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.121

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.17

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.024 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=   3.007
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.120

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0005)|   Area    (ha)=   2.29   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.40

     Unit Hyd Qpeak  (cms)=   0.219

     PEAK FLOW       (cms)=   0.012 (i)
     TIME TO PEAK    (hrs)=   1.917
     RUNOFF VOLUME    (mm)=   3.018
     TOTAL RAINFALL   (mm)=  24.991
```

```
     RUNOFF COEFFICIENT   =   0.121

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

 FINISH
================================================================================
========================
```

```
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\1ed6f
7fc-248e-41ed-aed5-12089c5bbc2f\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\1ed6f
7fc-248e-41ed-aed5-12089c5bbc2f\scena


DATE: 08-23-2022                          TIME: 11:41:13

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : A. 2yr 3hr 10min Chicago      **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 404.147
| Ptotal= 32.13 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                        used in:   INTENSITY =  A / (t + B)^C

                        Duration of storm  =  3.00 hrs
                        Storm time step    = 10.00 min
                        Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    3.76 |  0.83   80.82 |  1.67    5.83 |  2.50    3.63
                  0.17    4.42 |  1.00   17.11 |  1.83    5.15 |  2.67    3.39
                  0.33    5.48 |  1.17   10.79 |  2.00    4.63 |  2.83    3.20
                  0.50    7.50 |  1.33    8.23 |  2.17    4.23 |
                  0.67   13.95 |  1.50    6.78 |  2.33    3.90 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
                 0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
                 0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
                 0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
                 0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
                 0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
                 0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
                 0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
                 0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.044 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=   5.521
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.172

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
                 0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
                 0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
                 0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
                 0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
                 0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
                 0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
                 0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
                 0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.100 (i)
     TIME TO PEAK    (hrs)=   1.917
     RUNOFF VOLUME    (mm)=   5.522
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.172

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
                 0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
                 0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
                 0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
                 0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
                 0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
```

```
                 0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
                 0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
                 0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.041 (i)
     TIME TO PEAK    (hrs)=   1.250
     RUNOFF VOLUME    (mm)=   5.515
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.172

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
                 0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
                 0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
                 0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
                 0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
                 0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
                 0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
                 0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
                 0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.047 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=   5.502
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.171

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

| NASHYD (0005) | Area (ha)= 2.29 Curve Number (CN)= 74.0
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	3.76	0.833	13.95	1.583	6.78	2.33	4.23
0.167	3.76	0.917	80.82	1.667	6.78	2.42	3.90
0.250	4.42	1.000	80.82	1.750	5.83	2.50	3.90
0.333	4.42	1.083	17.11	1.833	5.83	2.58	3.63
0.417	5.48	1.167	17.11	1.917	5.15	2.67	3.63
0.500	5.48	1.250	10.79	2.000	5.15	2.75	3.39
0.583	7.50	1.333	10.79	2.083	4.63	2.83	3.39
0.667	7.50	1.417	8.23	2.167	4.63	2.92	3.20
0.750	13.95	1.500	8.23	2.250	4.23	3.00	3.20

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.022 (i)
TIME TO PEAK (hrs)= 1.500
RUNOFF VOLUME (mm)= 5.521
TOTAL RAINFALL (mm)= 32.132
RUNOFF COEFFICIENT = 0.172

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\6363c
f35-5dd6-44fd-aaa1-674dc05eef3c\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\6363c
f35-5dd6-44fd-aaa1-674dc05eef3c\scena


DATE: 08-23-2022                          TIME: 11:41:14

USER:



COMMENTS: _____________________________________________________


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : B. 5yr 3hr 10min Chicago      **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 535.364
| Ptotal= 42.56 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                        used in:   INTENSITY =  A / (t + B)^C

                        Duration of storm  =  3.00 hrs
                        Storm time step    = 10.00 min
                        Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    4.98 |  0.83  107.07 |  1.67    7.72 |  2.50    4.80
                  0.17    5.86 |  1.00   22.67 |  1.83    6.82 |  2.67    4.50
                  0.33    7.26 |  1.17   14.30 |  2.00    6.14 |  2.83    4.24
                  0.50    9.93 |  1.33   10.90 |  2.17    5.60 |
                  0.67   18.47 |  1.50    8.98 |  2.33    5.16 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
                 0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
                 0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
                 0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
                 0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
                 0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
                 0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
                 0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
                 0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.086 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=  10.132
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.238

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
                 0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
                 0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
                 0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
                 0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
                 0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
                 0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
                 0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
                 0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.190 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=  10.134
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.238

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
                 0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
                 0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
                 0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
                 0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
                 0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
```

```
                 0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
                 0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
                 0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.081 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  10.121
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.238

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
                 0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
                 0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
                 0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
                 0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
                 0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
                 0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
                 0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
                 0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.093 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  10.098
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.237

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

| NASHYD (0005) | Area (ha)= 2.29 Curve Number (CN)= 74.0
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.98	0.833	18.47	1.583	8.98	2.33	5.60
0.167	4.98	0.917	107.07	1.667	8.98	2.42	5.16
0.250	5.86	1.000	107.07	1.750	7.72	2.50	5.16
0.333	5.86	1.083	22.67	1.833	7.72	2.58	4.80
0.417	7.26	1.167	22.67	1.917	6.82	2.67	4.80
0.500	7.26	1.250	14.30	2.000	6.82	2.75	4.50
0.583	9.93	1.333	14.30	2.083	6.14	2.83	4.50
0.667	9.93	1.417	10.90	2.167	6.14	2.92	4.24
0.750	18.47	1.500	10.90	2.250	5.60	3.00	4.24

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.042 (i)
TIME TO PEAK (hrs)= 1.500
RUNOFF VOLUME (mm)= 10.133
TOTAL RAINFALL (mm)= 42.565
RUNOFF COEFFICIENT = 0.238

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\26c8c
d4b-b0a5-4ee8-938e-92ef2ca0db10\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\26c8c
d4b-b0a5-4ee8-938e-92ef2ca0db10\scena


DATE: 08-23-2022                          TIME: 11:41:14

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : C. 10yr 3hr 10min Chicago     **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 622.842
| Ptotal= 49.52 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    5.79 |  0.83  124.56 |  1.67    8.98 |  2.50    5.59
                  0.17    6.82 |  1.00   26.38 |  1.83    7.93 |  2.67    5.23
                  0.33    8.45 |  1.17   16.63 |  2.00    7.14 |  2.83    4.93
                  0.50   11.56 |  1.33   12.68 |  2.17    6.51 |
                  0.67   21.49 |  1.50   10.45 |  2.33    6.01 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
                 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
                 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
                 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
                 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
                 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
                 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
                 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
                 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.119 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=  13.718
     TOTAL RAINFALL   (mm)=  49.520
     RUNOFF COEFFICIENT   =   0.277

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
                 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
                 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
                 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
                 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
                 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
                 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
                 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
                 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.261 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=  13.721
     TOTAL RAINFALL   (mm)=  49.520
     RUNOFF COEFFICIENT   =   0.277

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
                 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
                 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
                 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
                 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
                 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
```

```
                 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
                 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
                 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.115 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  13.703
     TOTAL RAINFALL   (mm)=  49.520
     RUNOFF COEFFICIENT   =   0.277

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
                 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
                 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
                 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
                 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
                 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
                 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
                 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
                 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.131 (i)
     TIME TO PEAK    (hrs)=   1.083
     RUNOFF VOLUME    (mm)=  13.672
     TOTAL RAINFALL   (mm)=  49.520
     RUNOFF COEFFICIENT   =   0.276

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

| NASHYD (0005) | Area (ha)= 2.29 | Curve Number (CN)= 74.0
|ID= 1 DT= 5.0 min | Ia (mm)= 7.00 | # of Linear Res.(N)= 3.00
| | U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	5.79	0.833	21.49	1.583	10.45	2.33	6.51
0.167	5.79	0.917	124.56	1.667	10.45	2.42	6.01
0.250	6.82	1.000	124.56	1.750	8.98	2.50	6.01
0.333	6.82	1.083	26.38	1.833	8.98	2.58	5.59
0.417	8.45	1.167	26.38	1.917	7.93	2.67	5.59
0.500	8.45	1.250	16.63	2.000	7.93	2.75	5.23
0.583	11.56	1.333	16.63	2.083	7.14	2.83	5.23
0.667	11.56	1.417	12.68	2.167	7.14	2.92	4.93
0.750	21.49	1.500	12.68	2.250	6.51	3.00	4.93

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 1.500
RUNOFF VOLUME (mm)= 13.719
TOTAL RAINFALL (mm)= 49.520
RUNOFF COEFFICIENT = 0.277

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\a293c
c6c-5f29-47bd-a0cf-3c1334c578f2\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\a293c
c6c-5f29-47bd-a0cf-3c1334c578f2\scena


DATE: 08-23-2022                          TIME: 11:41:14

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : D. 25yr 3hr 10min Chicago     **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 731.314
| Ptotal= 58.14 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                        used in:   INTENSITY =  A / (t + B)^C

                        Duration of storm  =  3.00 hrs
                        Storm time step    = 10.00 min
                        Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    6.80 |  0.83  146.25 |  1.67   10.54 |  2.50    6.56
                  0.17    8.01 |  1.00   30.97 |  1.83    9.31 |  2.67    6.14
                  0.33    9.92 |  1.17   19.53 |  2.00    8.38 |  2.83    5.79
                  0.50   13.57 |  1.33   14.89 |  2.17    7.65 |
                  0.67   25.24 |  1.50   12.27 |  2.33    7.05 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.166 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=  18.628
     TOTAL RAINFALL   (mm)=  58.144
     RUNOFF COEFFICIENT   =   0.320

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.361 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=  18.631
     TOTAL RAINFALL   (mm)=  58.144
     RUNOFF COEFFICIENT   =   0.320

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
```

```
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.162 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  18.607
     TOTAL RAINFALL   (mm)=  58.144
     RUNOFF COEFFICIENT   =   0.320

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.186 (i)
     TIME TO PEAK    (hrs)=   1.083
     RUNOFF VOLUME    (mm)=  18.565
     TOTAL RAINFALL   (mm)=  58.144
     RUNOFF COEFFICIENT   =   0.319

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

| NASHYD (0005) | Area (ha)= 2.29 | Curve Number (CN)= 74.0
|ID= 1 DT= 5.0 min | Ia (mm)= 7.00 | # of Linear Res.(N)= 3.00
| | U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.80	0.833	25.24	1.583	12.27	2.33	7.65
0.167	6.80	0.917	146.25	1.667	12.27	2.42	7.05
0.250	8.01	1.000	146.25	1.750	10.54	2.50	7.05
0.333	8.01	1.083	30.97	1.833	10.54	2.58	6.56
0.417	9.92	1.167	30.97	1.917	9.31	2.67	6.56
0.500	9.92	1.250	19.53	2.000	9.31	2.75	6.14
0.583	13.57	1.333	19.53	2.083	8.38	2.83	6.14
0.667	13.57	1.417	14.89	2.167	8.38	2.92	5.79
0.750	25.24	1.500	14.89	2.250	7.65	3.00	5.79

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.082 (i)
TIME TO PEAK (hrs)= 1.417
RUNOFF VOLUME (mm)= 18.629
TOTAL RAINFALL (mm)= 58.144
RUNOFF COEFFICIENT = 0.320

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\c7d91
7e4-5d43-485b-9fd7-58c9707dae8e\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\c7d91
7e4-5d43-485b-9fd7-58c9707dae8e\scena


DATE: 08-23-2022                          TIME: 11:41:14

USER:



COMMENTS: _____________________________________________________


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : E. 50yr 3hr 10min Chicago     **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 811.794
| Ptotal= 64.54 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                    0.00    7.55 |  0.83  162.35 |  1.67   11.70 |  2.50    7.28
                    0.17    8.89 |  1.00   34.38 |  1.83   10.34 |  2.67    6.82
                    0.33   11.01 |  1.17   21.68 |  2.00    9.30 |  2.83    6.42
                    0.50   15.06 |  1.33   16.53 |  2.17    8.49 |
                    0.67   28.01 |  1.50   13.62 |  2.33    7.83 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                               ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
                   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
                   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
                   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
                   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
                   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
                   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
                   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
                   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.204 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=  22.553
     TOTAL RAINFALL   (mm)=  64.542
     RUNOFF COEFFICIENT   =   0.349

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                               ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
                   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
                   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
                   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
                   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
                   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
                   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
                   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
                   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.442 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=  22.557
     TOTAL RAINFALL   (mm)=  64.542
     RUNOFF COEFFICIENT   =   0.349

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                               ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
                   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
                   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
                   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
                   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
                   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
```

```
                   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
                   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
                   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.200 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  22.528
     TOTAL RAINFALL   (mm)=  64.542
     RUNOFF COEFFICIENT   =   0.349

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                               ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
                   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
                   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
                   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
                   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
                   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
                   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
                   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
                   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.230 (i)
     TIME TO PEAK    (hrs)=   1.083
     RUNOFF VOLUME    (mm)=  22.477
     TOTAL RAINFALL   (mm)=  64.542
     RUNOFF COEFFICIENT   =   0.348

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

| NASHYD (0005) | Area (ha)= 2.29 Curve Number (CN)= 74.0
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.40

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	7.55	0.833	28.01	1.583	13.62	2.33	8.49
0.167	7.55	0.917	162.35	1.667	13.62	2.42	7.83
0.250	8.89	1.000	162.35	1.750	11.70	2.50	7.83
0.333	8.89	1.083	34.38	1.833	11.70	2.58	7.28
0.417	11.01	1.167	34.38	1.917	10.34	2.67	7.28
0.500	11.01	1.250	21.68	2.000	10.34	2.75	6.82
0.583	15.06	1.333	21.68	2.083	9.30	2.83	6.82
0.667	15.06	1.417	16.53	2.167	9.30	2.92	6.42
0.750	28.01	1.500	16.53	2.250	8.49	3.00	6.42

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.101 (i)
TIME TO PEAK (hrs)= 1.417
RUNOFF VOLUME (mm)= 22.554
TOTAL RAINFALL (mm)= 64.542
RUNOFF COEFFICIENT = 0.349

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\aa5ac
d95-4301-4ff3-8e1d-3d4cf191cfd4\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\aa5ac
d95-4301-4ff3-8e1d-3d4cf191cfd4\scena


DATE: 08-23-2022                          TIME: 11:41:14

USER:



COMMENTS: _____________________________________________________


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : F. 100yr 3hr 10min Chicago    **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 892.273
| Ptotal= 70.94 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                    0.00    8.30 |  0.83  178.44 |  1.67   12.86 |  2.50    8.00
                    0.17    9.77 |  1.00   37.79 |  1.83   11.36 |  2.67    7.50
                    0.33   12.10 |  1.17   23.83 |  2.00   10.23 |  2.83    7.06
                    0.50   16.55 |  1.33   18.17 |  2.17    9.33 |
                    0.67   30.79 |  1.50   14.97 |  2.33    8.61 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.36

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                                ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
                   0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
                   0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
                   0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
                   0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
                   0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
                   0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
                   0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
                   0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.458

     PEAK FLOW       (cms)=   0.244 (i)
     TIME TO PEAK    (hrs)=   1.333
     RUNOFF VOLUME    (mm)=  26.684
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.376

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
```

```
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.62

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                                ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
                   0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
                   0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
                   0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
                   0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
                   0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
                   0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
                   0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
                   0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.821

     PEAK FLOW       (cms)=   0.528 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=  26.689
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.376

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0003)|   Area    (ha)=   3.05   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.22

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                                ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
                   0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
                   0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
                   0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
                   0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
                   0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
```

```
                   0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
                   0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
                   0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.530

     PEAK FLOW       (cms)=   0.241 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  26.654
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.376

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0004)|   Area    (ha)=   3.00   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.17

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                                ---- TRANSFORMED HYETOGRAPH ----
                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                   0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
                   0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
                   0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
                   0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
                   0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
                   0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
                   0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
                   0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
                   0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.674

     PEAK FLOW       (cms)=   0.278 (i)
     TIME TO PEAK    (hrs)=   1.083
     RUNOFF VOLUME    (mm)=  26.594
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.375

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
```

```
| NASHYD   (  0005)|   Area    (ha)=   2.29   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.40

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME     RAIN |  TIME     RAIN |'  TIME     RAIN |  TIME     RAIN
                 hrs    mm/hr |   hrs    mm/hr |'   hrs    mm/hr |   hrs    mm/hr
               0.083     8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167     8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250     9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333     9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417    12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500    12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583    16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667    16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750    30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.219

     PEAK FLOW       (cms)=   0.121 (i)
     TIME TO PEAK    (hrs)=   1.417
     RUNOFF VOLUME    (mm)=  26.686
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.376

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---------------------------------------------------------------------------------

 FINISH
================================================================================
=======================
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\c5ec4
37e-755f-46f3-a3ca-11f378bd0c1c\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\c5ec4
37e-755f-46f3-a3ca-11f378bd0c1c\scena


DATE: 08-23-2022                          TIME: 11:47:06

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : G. 2yr 24hr 15min SCS Type II **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\16ec51c6
| Ptotal= 60.13 mm |    Comments: G. 2yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.08	12.50	8.66	18.75	1.08
0.25	0.66	6.50	1.08	12.75	4.45	19.00	1.08
0.50	0.66	6.75	1.08	13.00	4.45	19.25	1.08
0.75	0.66	7.00	1.08	13.25	3.25	19.50	1.08
1.00	0.66	7.25	1.32	13.50	3.25	19.75	1.08
1.25	0.66	7.50	1.32	13.75	2.53	20.00	1.08
1.50	0.66	7.75	1.32	14.00	2.53	20.25	0.72
1.75	0.66	8.00	1.32	14.25	1.80	20.50	0.72
2.00	0.66	8.25	1.56	14.50	1.80	20.75	0.72
2.25	0.78	8.50	1.56	14.75	1.80	21.00	0.72
2.50	0.78	8.75	1.68	15.00	1.80	21.25	0.72
2.75	0.78	9.00	1.68	15.25	1.80	21.50	0.72
3.00	0.78	9.25	1.92	15.50	1.80	21.75	0.72
3.25	0.78	9.50	1.92	15.75	1.80	22.00	0.72
3.50	0.78	9.75	2.16	16.00	1.80	22.25	0.72
3.75	0.78	10.00	2.16	16.25	1.08	22.50	0.72
4.00	0.78	10.25	2.77	16.50	1.08	22.75	0.72
4.25	0.96	10.50	2.77	16.75	1.08	23.00	0.72
4.50	0.96	10.75	3.73	17.00	1.08	23.25	0.72
4.75	0.96	11.00	3.73	17.25	1.08	23.50	0.72
5.00	0.96	11.25	5.77	17.50	1.08	23.75	0.72
5.25	0.96	11.50	5.77	17.75	1.08	24.00	0.72
5.50	0.96	11.75	17.80	18.00	1.08		
5.75	0.96	12.00	73.60	18.25	1.08		
6.00	0.96	12.25	8.66	18.50	1.08		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.143 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  19.823
    TOTAL RAINFALL   (mm)=  60.130
    RUNOFF COEFFICIENT   =   0.330

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08

0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 0.296 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 19.826
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.330

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0003) | Area (ha)= 3.05 Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.22

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.144 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 19.801
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
NASHYD (0004) | Area (ha)= 3.00 Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
U.H. Tp(hrs)= 0.17

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08

1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.162 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 19.756
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.329

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0005)	Area	(ha)=	2.29	Curve Number (CN)=	74.0
ID= 1 DT= 5.0 min	Ia	(mm)=	7.00	# of Linear Res.(N)=	3.00
	U.H. Tp(hrs)=		0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08

1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72

5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.070 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 19.824
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.330

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\a4e86
fb0-1ea3-43b7-9518-2160a4ec80a1\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\a4e86
fb0-1ea3-43b7-9518-2160a4ec80a1\scena


DATE: 08-23-2022                          TIME: 11:47:06

USER:


COMMENTS: _____________________________________________________


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : H. 5yr 24hr 15min SCS Type II **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\44344e77
| Ptotal= 79.65 mm |    Comments: H. 5yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.43	12.50	11.47	18.75	1.43
0.25	0.88	6.50	1.43	12.75	5.89	19.00	1.43
0.50	0.88	6.75	1.43	13.00	5.89	19.25	1.43
0.75	0.88	7.00	1.43	13.25	4.30	19.50	1.43
1.00	0.88	7.25	1.75	13.50	4.30	19.75	1.43
1.25	0.88	7.50	1.75	13.75	3.35	20.00	1.43
1.50	0.88	7.75	1.75	14.00	3.35	20.25	0.96
1.75	0.88	8.00	1.75	14.25	2.39	20.50	0.96
2.00	0.88	8.25	2.07	14.50	2.39	20.75	0.96
2.25	1.04	8.50	2.07	14.75	2.39	21.00	0.96
2.50	1.04	8.75	2.23	15.00	2.39	21.25	0.96
2.75	1.04	9.00	2.23	15.25	2.39	21.50	0.96
3.00	1.04	9.25	2.55	15.50	2.39	21.75	0.96
3.25	1.04	9.50	2.55	15.75	2.39	22.00	0.96
3.50	1.04	9.75	2.87	16.00	2.39	22.25	0.96
3.75	1.04	10.00	2.87	16.25	1.43	22.50	0.96
4.00	1.04	10.25	3.66	16.50	1.43	22.75	0.96
4.25	1.27	10.50	3.66	16.75	1.43	23.00	0.96
4.50	1.27	10.75	4.94	17.00	1.43	23.25	0.96
4.75	1.27	11.00	4.94	17.25	1.43	23.50	0.96
5.00	1.27	11.25	7.65	17.50	1.43	23.75	0.96
5.25	1.27	11.50	7.65	17.75	1.43	24.00	0.96
5.50	1.27	11.75	23.58	18.00	1.43		
5.75	1.27	12.00	97.49	18.25	1.43		
6.00	1.27	12.25	11.47	18.50	1.43		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.239 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  32.596
    TOTAL RAINFALL   (mm)=  79.650
    RUNOFF COEFFICIENT   =   0.409

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43

0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 0.495 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 32.601
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.409

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0003)	Area (ha)= 3.05	Curve Number (CN)= 74.0					
ID= 1 DT= 5.0 min	Ia (mm)= 7.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.22						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.241 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 32.559
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.409

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0004)	Area (ha)= 3.00	Curve Number (CN)= 74.0					
ID= 1 DT= 5.0 min	Ia (mm)= 7.00	# of Linear Res.(N)= 3.00					
	U.H. Tp(hrs)= 0.17						

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43

1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.269 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 32.486
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.408

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0005)	Area (ha)= 2.29	Curve Number (CN)= 74.0	
ID= 1 DT= 5.0 min	Ia (mm)= 7.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43

1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96

5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.117 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 32.598
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.409

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\1e611
a0a-0fbb-42e3-a386-83a6276abfcb\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\1e611
a0a-0fbb-42e3-a386-83a6276abfcb\scena


DATE: 08-23-2022                          TIME: 11:47:06

USER:


COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : I. 10yr 24hr 15min SCS Type I **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\94443e77
| Ptotal= 92.66 mm |    Comments: I. 10yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.67	12.50	13.34	18.75	1.67
0.25	1.02	6.50	1.67	12.75	6.86	19.00	1.67
0.50	1.02	6.75	1.67	13.00	6.86	19.25	1.67
0.75	1.02	7.00	1.67	13.25	5.00	19.50	1.67
1.00	1.02	7.25	2.04	13.50	5.00	19.75	1.67
1.25	1.02	7.50	2.04	13.75	3.89	20.00	1.67
1.50	1.02	7.75	2.04	14.00	3.89	20.25	1.11
1.75	1.02	8.00	2.04	14.25	2.78	20.50	1.11
2.00	1.02	8.25	2.41	14.50	2.78	20.75	1.11
2.25	1.20	8.50	2.41	14.75	2.78	21.00	1.11
2.50	1.20	8.75	2.59	15.00	2.78	21.25	1.11
2.75	1.20	9.00	2.59	15.25	2.78	21.50	1.11
3.00	1.20	9.25	2.97	15.50	2.78	21.75	1.11
3.25	1.20	9.50	2.97	15.75	2.78	22.00	1.11
3.50	1.20	9.75	3.34	16.00	2.78	22.25	1.11
3.75	1.20	10.00	3.34	16.25	1.67	22.50	1.11
4.00	1.20	10.25	4.26	16.50	1.67	22.75	1.11
4.25	1.48	10.50	4.26	16.75	1.67	23.00	1.11
4.50	1.48	10.75	5.74	17.00	1.67	23.25	1.11
4.75	1.48	11.00	5.74	17.25	1.67	23.50	1.11
5.00	1.48	11.25	8.90	17.50	1.67	23.75	1.11
5.25	1.48	11.50	8.90	17.75	1.67	24.00	1.11
5.50	1.48	11.75	27.43	18.00	1.67		
5.75	1.48	12.00	113.42	18.25	1.67		
6.00	1.48	12.25	13.34	18.50	1.67		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67

0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11

4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.310 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  41.944
    TOTAL RAINFALL   (mm)=  92.660
    RUNOFF COEFFICIENT   =   0.453

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67

0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 0.643 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 41.952
TOTAL RAINFALL (mm)= 92.660
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0003)	Area (ha)=	3.05	Curve Number (CN)=	74.0	
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.22			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.313 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 41.897
TOTAL RAINFALL (mm)= 92.660
RUNOFF COEFFICIENT = 0.452

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0004)	Area (ha)=	3.00	Curve Number (CN)=	74.0	
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.17			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67

1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.349 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 41.803
TOTAL RAINFALL (mm)= 92.660
RUNOFF COEFFICIENT = 0.451

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0005)	Area (ha)= 2.29	Curve Number (CN)= 74.0	
ID= 1 DT= 5.0 min	Ia (mm)= 7.00	# of Linear Res.(N)= 3.00	
	U.H. Tp(hrs)= 0.40		

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67

1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.152 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 41.947
TOTAL RAINFALL (mm)= 92.660
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\2d543
248-4dd9-46be-b608-32ce2c7c14d5\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\2d543
248-4dd9-46be-b608-32ce2c7c14d5\scena


DATE: 08-23-2022                          TIME: 11:47:07

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : J. 25yr 24hr 15min SCS Type I **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\28d28256
| Ptotal=108.80 mm |    Comments: J. 25yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.96	12.50	15.67	18.75	1.96
0.25	1.20	6.50	1.96	12.75	8.05	19.00	1.96
0.50	1.20	6.75	1.96	13.00	8.05	19.25	1.96
0.75	1.20	7.00	1.96	13.25	5.88	19.50	1.96
1.00	1.20	7.25	2.39	13.50	5.88	19.75	1.96
1.25	1.20	7.50	2.39	13.75	4.57	20.00	1.96
1.50	1.20	7.75	2.39	14.00	4.57	20.25	1.31
1.75	1.20	8.00	2.39	14.25	3.26	20.50	1.31
2.00	1.20	8.25	2.83	14.50	3.26	20.75	1.31
2.25	1.41	8.50	2.83	14.75	3.26	21.00	1.31
2.50	1.41	8.75	3.05	15.00	3.26	21.25	1.31
2.75	1.41	9.00	3.05	15.25	3.26	21.50	1.31
3.00	1.41	9.25	3.48	15.50	3.26	21.75	1.31
3.25	1.41	9.50	3.48	15.75	3.26	22.00	1.31
3.50	1.41	9.75	3.92	16.00	3.26	22.25	1.31
3.75	1.41	10.00	3.92	16.25	1.96	22.50	1.31
4.00	1.41	10.25	5.00	16.50	1.96	22.75	1.31
4.25	1.74	10.50	5.00	16.75	1.96	23.00	1.31
4.50	1.74	10.75	6.75	17.00	1.96	23.25	1.31
4.75	1.74	11.00	6.75	17.25	1.96	23.50	1.31
5.00	1.74	11.25	10.44	17.50	1.96	23.75	1.31
5.25	1.74	11.50	10.44	17.75	1.96	24.00	1.31
5.50	1.74	11.75	32.20	18.00	1.96		
5.75	1.74	12.00	133.17	18.25	1.96		
6.00	1.74	12.25	15.67	18.50	1.96		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96

0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31

4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.404 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  54.235
    TOTAL RAINFALL   (mm)= 108.800
    RUNOFF COEFFICIENT   =   0.498

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96

0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 0.839 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 54.244
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.499

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0003)	Area (ha)=	3.05	Curve Number (CN)=	74.0	
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.22			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.407 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 54.174
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.498

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
NASHYD (0004)	Area (ha)=	3.00	Curve Number (CN)=	74.0	
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)=	3.00	
	U.H. Tp(hrs)=	0.17			

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96

1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.455 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 54.052
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.497

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0005)	Area (ha)=	2.29	Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96

1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.199 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 54.238
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.499

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\38446
1d6-a562-4a70-a749-780bc480b325\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\38446
1d6-a562-4a70-a749-780bc480b325\scena


DATE: 08-23-2022                          TIME: 11:47:07

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : K. 50yr 24hr 15min SCS Type I **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\61904e13
| Ptotal=120.77 mm |    Comments: K. 50yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.17	12.50	17.39	18.75	2.17
0.25	1.33	6.50	2.17	12.75	8.94	19.00	2.17
0.50	1.33	6.75	2.17	13.00	8.94	19.25	2.17
0.75	1.33	7.00	2.17	13.25	6.52	19.50	2.17
1.00	1.33	7.25	2.66	13.50	6.52	19.75	2.17
1.25	1.33	7.50	2.66	13.75	5.07	20.00	2.17
1.50	1.33	7.75	2.66	14.00	5.07	20.25	1.45
1.75	1.33	8.00	2.66	14.25	3.62	20.50	1.45
2.00	1.33	8.25	3.14	14.50	3.62	20.75	1.45
2.25	1.57	8.50	3.14	14.75	3.62	21.00	1.45
2.50	1.57	8.75	3.38	15.00	3.62	21.25	1.45
2.75	1.57	9.00	3.38	15.25	3.62	21.50	1.45
3.00	1.57	9.25	3.86	15.50	3.62	21.75	1.45
3.25	1.57	9.50	3.86	15.75	3.62	22.00	1.45
3.50	1.57	9.75	4.35	16.00	3.62	22.25	1.45
3.75	1.57	10.00	4.35	16.25	2.17	22.50	1.45
4.00	1.57	10.25	5.56	16.50	2.17	22.75	1.45
4.25	1.93	10.50	5.56	16.75	2.17	23.00	1.45
4.50	1.93	10.75	7.49	17.00	2.17	23.25	1.45
4.75	1.93	11.00	7.49	17.25	2.17	23.50	1.45
5.00	1.93	11.25	11.59	17.50	2.17	23.75	1.45
5.25	1.93	11.50	11.59	17.75	2.17	24.00	1.45
5.50	1.93	11.75	35.75	18.00	2.17		
5.75	1.93	12.00	147.82	18.25	2.17		
6.00	1.93	12.25	17.39	18.50	2.17		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.476 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  63.745
    TOTAL RAINFALL   (mm)= 120.770
    RUNOFF COEFFICIENT   =   0.528

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17

0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 0.990 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 63.756
TOTAL RAINFALL (mm)= 120.770
RUNOFF COEFFICIENT = 0.528

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0003)	Area (ha)=	3.05	Curve Number (CN)= 74.0				
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00				
	U.H. Tp(hrs)=	0.22					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.479 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 63.674
TOTAL RAINFALL (mm)= 120.770
RUNOFF COEFFICIENT = 0.527

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
NASHYD (0004)	Area (ha)=	3.00	Curve Number (CN)= 74.0				
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00				
	U.H. Tp(hrs)=	0.17					

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17

1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.537 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 63.530
TOTAL RAINFALL (mm)= 120.770
RUNOFF COEFFICIENT = 0.526

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0005)	Area (ha)=	2.29	Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17

1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.234 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 63.749
TOTAL RAINFALL (mm)= 120.770
RUNOFF COEFFICIENT = 0.528

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\fe2af
437-9abb-43fb-8232-acddf4b89f00\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\5e7e8f9f-3516-4350-9cc9-216f91ea9b42\fe2af
437-9abb-43fb-8232-acddf4b89f00\scena


DATE: 08-23-2022                          TIME: 11:47:07

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : l. 100yr 24hr 15min SCS Type  **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              8ab56956-7981-44cd-9ed6-5a18ca9f22ac\6c20e7fa
| Ptotal=132.74 mm |    Comments: l. 100yr 24hr 15min SCS Type II
-------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.39	12.50	19.11	18.75	2.39
0.25	1.46	6.50	2.39	12.75	9.82	19.00	2.39
0.50	1.46	6.75	2.39	13.00	9.82	19.25	2.39
0.75	1.46	7.00	2.39	13.25	7.17	19.50	2.39
1.00	1.46	7.25	2.92	13.50	7.17	19.75	2.39
1.25	1.46	7.50	2.92	13.75	5.58	20.00	2.39
1.50	1.46	7.75	2.92	14.00	5.58	20.25	1.59
1.75	1.46	8.00	2.92	14.25	3.98	20.50	1.59
2.00	1.46	8.25	3.45	14.50	3.98	20.75	1.59
2.25	1.73	8.50	3.45	14.75	3.98	21.00	1.59
2.50	1.73	8.75	3.72	15.00	3.98	21.25	1.59
2.75	1.73	9.00	3.72	15.25	3.98	21.50	1.59
3.00	1.73	9.25	4.25	15.50	3.98	21.75	1.59
3.25	1.73	9.50	4.25	15.75	3.98	22.00	1.59
3.50	1.73	9.75	4.78	16.00	3.98	22.25	1.59
3.75	1.73	10.00	4.78	16.25	2.39	22.50	1.59
4.00	1.73	10.25	6.11	16.50	2.39	22.75	1.59
4.25	2.12	10.50	6.11	16.75	2.39	23.00	1.59
4.50	2.12	10.75	8.23	17.00	2.39	23.25	1.59
4.75	2.12	11.00	8.23	17.25	2.39	23.50	1.59
5.00	2.12	11.25	12.74	17.50	2.39	23.75	1.59
5.25	2.12	11.50	12.74	17.75	2.39	24.00	1.59
5.50	2.12	11.75	39.29	18.00	2.39		
5.75	2.12	12.00	162.47	18.25	2.39		
6.00	2.12	12.25	19.11	18.50	2.39		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   4.32   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.36

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39

0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59

4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

```
    Unit Hyd Qpeak  (cms)=   0.458

    PEAK FLOW       (cms)=   0.551 (i)
    TIME TO PEAK    (hrs)=  12.500
    RUNOFF VOLUME    (mm)=  73.530
    TOTAL RAINFALL   (mm)= 132.740
    RUNOFF COEFFICIENT   =   0.554

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0002)|   Area    (ha)=  13.33   Curve Number   (CN)= 74.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.62

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39

0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Unit Hyd Qpeak (cms)= 0.821

PEAK FLOW (cms)= 1.146 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 73.542
TOTAL RAINFALL (mm)= 132.740
RUNOFF COEFFICIENT = 0.554

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0003)	Area (ha)=	3.05	Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.22	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Unit Hyd Qpeak (cms)= 0.530

PEAK FLOW (cms)= 0.554 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 73.447
TOTAL RAINFALL (mm)= 132.740
RUNOFF COEFFICIENT = 0.553

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0004)	Area (ha)=	3.00	Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.17	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39

1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Unit Hyd Qpeak (cms)= 0.674

PEAK FLOW (cms)= 0.621 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 73.281
TOTAL RAINFALL (mm)= 132.740
RUNOFF COEFFICIENT = 0.552

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
NASHYD (0005)	Area (ha)=	2.29	Curve Number (CN)= 74.0
ID= 1 DT= 5.0 min	Ia (mm)=	7.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.40	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39

1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Unit Hyd Qpeak (cms)= 0.219

PEAK FLOW (cms)= 0.271 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 73.534
TOTAL RAINFALL (mm)= 132.740
RUNOFF COEFFICIENT = 0.554

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

FINISH

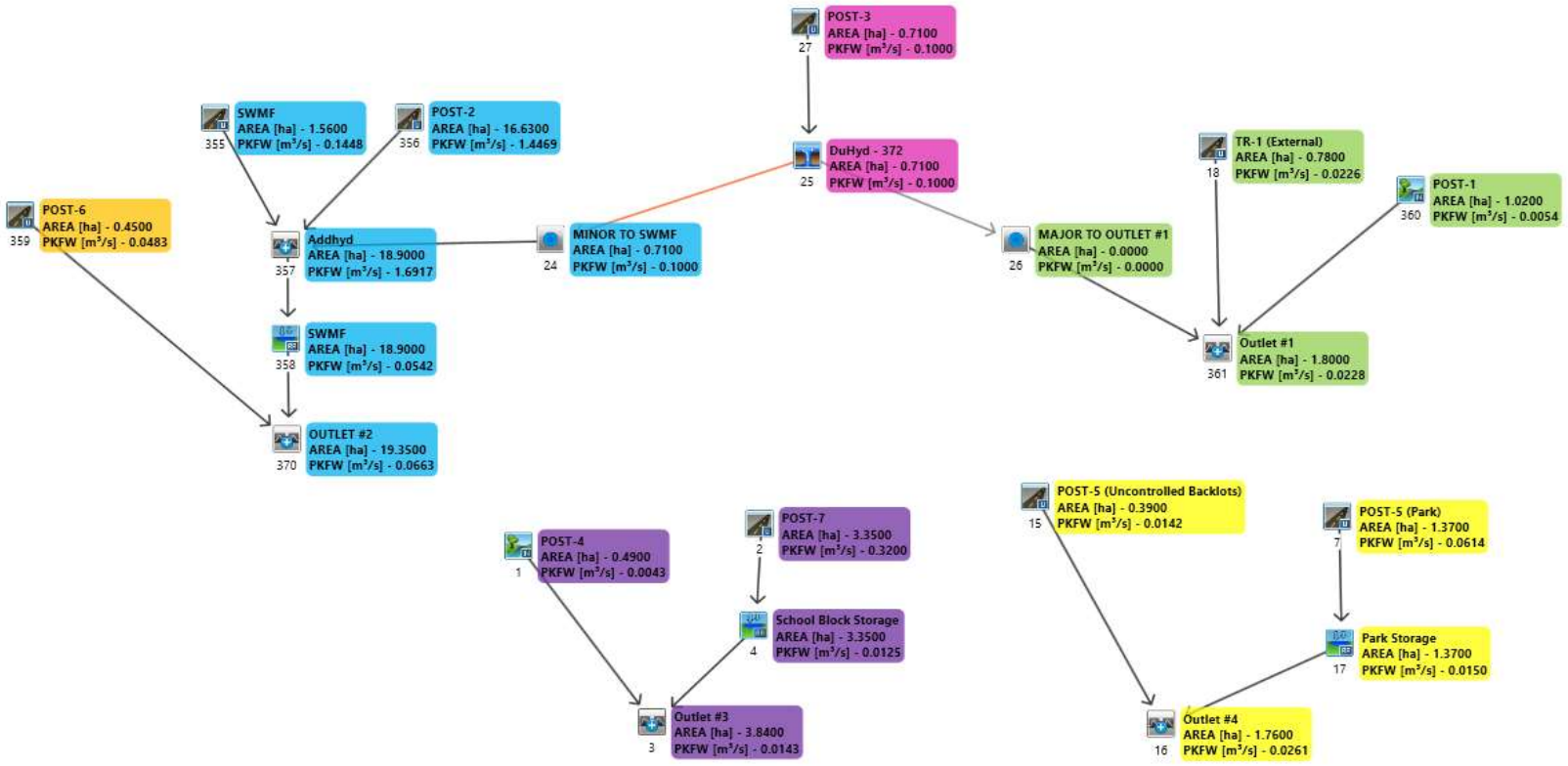
==========

CROZIER & ASSOCIATES
Consulting Engineers

Project: Glenelg Expansion Lands
Project No.: 1060-6220
File: Model Schematic (Post-Development)
Design by: K. Swain
Date: 2023-05-25

Visual OTTHYMO 6.0 Model Schematic

Post-Development



```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L             (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\71ffc
656-096d-4150-bb3a-cc2743f787c0\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\71ffc
656-096d-4150-bb3a-cc2743f787c0\scena


DATE: 05-25-2023                          TIME: 09:50:43

USER:


COMMENTS: _____


--------------------------------------------------------------------------------
----------------------
  ************************************************
  ** SIMULATION : 25mm                          **
  ************************************************


-------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\6945257d
| Ptotal= 24.99 mm |    Comments: 25mm
-------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    1.36 |  1.00    6.91 |  2.00    4.18 |  3.00    1.86
                0.08    1.45 |  1.08   11.02 |  2.08    3.77 |  3.08    1.78
                0.17    1.55 |  1.17   26.16 |  2.17    3.43 |  3.17    1.71
                0.25    1.67 |  1.25   76.07 |  2.25    3.16 |  3.25    1.64
                0.33    1.81 |  1.33   33.71 |  2.33    2.92 |  3.33    1.58
                0.42    1.99 |  1.42   18.64 |  2.42    2.72 |  3.42    1.52
                0.50    2.20 |  1.50   12.61 |  2.50    2.55 |  3.50    1.47
                0.58    2.47 |  1.58    9.46 |  2.58    2.39 |  3.58    1.43
                0.67    2.82 |  1.67    7.55 |  2.67    2.26 |  3.67    1.38
                0.75    3.29 |  1.75    6.28 |  2.75    2.14 |  3.75    1.34
                0.83    3.97 |  1.83    5.38 |  2.83    2.04 |  3.83    1.30
                0.92    5.03 |  1.92    4.70 |  2.92    1.94 |  3.92    1.26

--------------------------------------------------------------------------------


-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.20

     Unit Hyd Qpeak  (cms)=   0.094

     PEAK FLOW       (cms)=   0.004 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=   3.223
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.129

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
-------------------

                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         3.45
```

```
               over (min)        5.00        35.00
     Storage Coeff.  (min)=       3.63 (ii)   30.78 (ii)
     Unit Hyd. Tpeak (min)=       5.00        35.00
     Unit Hyd. peak  (cms)=       0.25         0.04
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.32         0.01          0.320 (iii)
     TIME TO PEAK    (hrs)=       1.33         2.00           1.33
     RUNOFF VOLUME    (mm)=      23.99         3.23          14.64
     TOTAL RAINFALL   (mm)=      24.99        24.99          24.99
     RUNOFF COEFFICIENT   =       0.96         0.13           0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |   0.1340     0.1430
                         0.0270     0.0810   |   0.1670     0.1580
                         0.0620     0.1060   |   0.1980     0.1750
                         0.0930     0.1230   |   0.0000     0.0000

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)      3.350      0.320      1.33      14.64
   OUTFLOW: ID= 1 (  0004)      3.350      0.013      3.25      14.42

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  3.91
                  TIME SHIFT OF PEAK FLOW         (min)=115.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0375

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.004     1.58     3.22
     + ID2= 2 (  0004):     3.35   0.013     3.25    14.42
       ========================================================
       ID = 3 (  0003):     3.84   0.014     1.75    12.99
```

```
     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
-------------------

                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         3.45
               over (min)        5.00        35.00
     Storage Coeff.  (min)=       2.88 (ii)   30.03 (ii)
     Unit Hyd. Tpeak (min)=       5.00        35.00
     Unit Hyd. peak  (cms)=       0.28         0.04
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.14         0.00          0.145 (iii)
     TIME TO PEAK    (hrs)=       1.33         2.00           1.33
     RUNOFF VOLUME    (mm)=      23.99         3.23          13.60
     TOTAL RAINFALL   (mm)=      24.99        24.99          24.99
     RUNOFF COEFFICIENT   =       0.96         0.13           0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
-------------------

                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         7.49
               over (min)        5.00        30.00
     Storage Coeff.  (min)=       5.87 (ii)   25.77 (ii)
```

```
     Unit Hyd. Tpeak (min)=       5.00        30.00
     Unit Hyd. peak  (cms)=       0.19         0.04
                                                    *TOTALS*
     PEAK FLOW       (cms)=       1.44         0.05          1.447 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.92          1.33
     RUNOFF VOLUME    (mm)=      23.99         4.30         16.21
     TOTAL RAINFALL   (mm)=      24.99        24.99         24.99
     RUNOFF COEFFICIENT   =       0.96         0.17          0.65


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07        10.87
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       2.28 (ii)    7.20 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.30         0.14
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.10         0.00          0.100 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50          1.33
     RUNOFF VOLUME    (mm)=      23.99         4.46         18.36
     TOTAL RAINFALL   (mm)=      24.99        24.99         24.99
     RUNOFF COEFFICIENT   =       0.96         0.18          0.73

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
```

```
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.10      1.33   18.36
     ==========================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00    0.00
     MINOR SYS.(ID= 3):   0.71      0.10      1.33   18.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK    TPEAK     R.V.
                          (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.10     1.33    18.36
  OUTFLOW: ID= 2(  0024)    0.71     0.10     1.33    18.36

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.100     1.33    18.36
     + ID2= 2 (  0355):     1.56   0.145     1.33    13.60
       ================================================
       ID = 3 (  0357):     2.27   0.245     1.33    15.09

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.245     1.33    15.09
     + ID2= 2 (  0356):    16.63   1.447     1.33    16.21
       ================================================
       ID = 1 (  0357):    18.90   1.692     1.33    16.08

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
```

```
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.900      1.692      1.33      16.08
   OUTFLOW: ID= 1 (  0358)     18.900      0.054      3.92      16.02

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  3.20
                  TIME SHIFT OF PEAK FLOW         (min)=155.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.2505

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         6.08
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       1.99 (ii)   23.62 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.31         0.05
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.05         0.00          0.048 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.83          1.33
     RUNOFF VOLUME    (mm)=      23.99         4.11         14.71
     TOTAL RAINFALL   (mm)=      24.99        24.99         24.99
     RUNOFF COEFFICIENT   =       0.96         0.16          0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0358):    18.90   0.054     3.92    16.02
     + ID2= 2 (  0359):     0.45   0.048     1.33    14.71
       ================================================
       ID = 3 (  0370):    19.35   0.066     1.33    15.99

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.005 (i)
     TIME TO PEAK    (hrs)=   2.000
     RUNOFF VOLUME    (mm)=   3.228
     TOTAL RAINFALL   (mm)=  24.991
     RUNOFF COEFFICIENT   =   0.129

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         5.02
               over (min)        5.00        30.00
     Storage Coeff.  (min)=       2.34 (ii)   25.69 (ii)
     Unit Hyd. Tpeak (min)=       5.00        30.00
     Unit Hyd. peak  (cms)=       0.30         0.04
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.00          0.023 (iii)
```

```
     TIME TO PEAK    (hrs)=       1.33         1.92          1.33
     RUNOFF VOLUME    (mm)=      19.99         3.95          6.33
     TOTAL RAINFALL   (mm)=      24.99        24.99         24.99
     RUNOFF COEFFICIENT   =       0.80         0.16          0.25

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  -------------------------
  | Junction Command(0026) |
  -------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 8(  0025)    0.00     0.00    0.00     0.00
  OUTFLOW: ID= 2(  0026)    0.00     0.00    0.00     0.00

  ------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
*** W A R N I N G :  HYDROGRAPH   0026 <ID= 2> IS DRY.
*** W A R N I N G :  HYDROGRAPH   0003 = HYDROGRAPH 0001
       ID1= 1 (  0018):     0.78   0.023     1.33     6.33
     + ID2= 2 (  0026):     0.00   0.000     0.00     0.00
       ================================================
       ID = 3 (  0361):     0.78   0.023     1.33     6.33

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.78   0.023     1.33     6.33
     + ID2= 2 (  0360):     1.02   0.005     2.00     3.23
       ================================================
       ID = 1 (  0361):     1.80   0.023     1.33     4.57
```

```
    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.35         1.02
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      95.57        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07         3.63
               over (min)        5.00        30.00
     Storage Coeff.  (min)=       2.77 (ii)   29.36 (ii)
     Unit Hyd. Tpeak (min)=       5.00        30.00
     Unit Hyd. peak  (cms)=       0.28         0.04
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.06         0.01          0.061 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.92           1.33
     RUNOFF VOLUME    (mm)=      23.99         3.32           8.23
     TOTAL RAINFALL   (mm)=      24.99        24.99          24.99
     RUNOFF COEFFICIENT   =       0.96         0.13           0.33

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |   0.1350      0.0340

                              AREA     QPEAK     TPEAK        R.V.
                              (ha)     (cms)     (hrs)        (mm)
   INFLOW : ID= 2 (  0007)     1.370     0.061      1.33        8.23
   OUTFLOW: ID= 1 (  0017)     1.370     0.015      1.58        8.19

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)= 24.36
                    TIME SHIFT OF PEAK FLOW         (min)= 15.00
```

```
                    MAXIMUM  STORAGE   USED       (ha.m.)=  0.0038

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
-------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n           =      0.013        0.250

     Max.Eff.Inten.(mm/hr)=      76.07        42.96
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.90 (ii)   11.80 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.09
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.01          0.014 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.58           1.33
     RUNOFF VOLUME    (mm)=      23.99         8.22          10.56
     TOTAL RAINFALL   (mm)=      24.99        24.99          24.99
     RUNOFF COEFFICIENT   =       0.96         0.33           0.42

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.014     1.33    10.56
     + ID2= 2 (  0017):     1.37   0.015     1.58     8.19
       ================================================
       ID = 3 (  0016):     1.76   0.026     1.50     8.71

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\632e0
16b-d819-4519-8189-415bbe341967\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\632e0
16b-d819-4519-8189-415bbe341967\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
-------------------------
  ************************************************
  ** SIMULATION : A. 2yr 3hr 10min Chicago      **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 404.147
| Ptotal= 32.13 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                    used in:   INTENSITY =  A / (t + B)^C

                    Duration of storm  =  3.00 hrs
                    Storm time step    = 10.00 min
                    Time to peak ratio =  0.33

                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    3.76 |  0.83   80.82 |  1.67    5.83 |  2.50    3.63
                0.17    4.42 |  1.00   17.11 |  1.83    5.15 |  2.67    3.39
                0.33    5.48 |  1.17   10.79 |  2.00    4.63 |  2.83    3.20
                0.50    7.50 |  1.33    8.23 |  2.17    4.23 |
                0.67   13.95 |  1.50    6.78 |  2.33    3.90 |


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                            ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.094

     PEAK FLOW       (cms)=   0.008 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=   5.613
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.175

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
```

```
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                            ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82         6.42
               over (min)        5.00        25.00
     Storage Coeff.  (min)=      3.54 (ii)   24.71 (ii)
     Unit Hyd. Tpeak (min)=      5.00        25.00
     Unit Hyd. peak  (cms)=      0.26         0.05
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.39         0.02        0.396 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.33         1.00
     RUNOFF VOLUME    (mm)=     31.13         5.62        19.65
     TOTAL RAINFALL   (mm)=     32.13        32.13        32.13
     RUNOFF COEFFICIENT   =      0.97         0.18         0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
```

```
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.1340     0.1430
                          0.0270     0.0810   |  0.1670     0.1580
                          0.0620     0.1060   |  0.1980     0.1750
                          0.0930     0.1230   |  0.0000     0.0000

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)     3.350      0.396     1.00       19.65
   OUTFLOW: ID= 1 (  0004)     3.350      0.018     3.00       19.42

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  4.43
                  TIME SHIFT OF PEAK FLOW         (min)=120.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0527

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.008     1.17     5.61
     + ID2= 2 (  0004):     3.35   0.018     3.00    19.42
       ================================================
       ID = 3 (  0003):     3.84   0.020     1.25    17.66

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------

                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                            ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82         6.42
               over (min)        5.00        25.00
     Storage Coeff.  (min)=      2.81 (ii)   23.98 (ii)
     Unit Hyd. Tpeak (min)=      5.00        25.00
     Unit Hyd. peak  (cms)=      0.28         0.05
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.17         0.01        0.173 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.33         1.00
     RUNOFF VOLUME    (mm)=     31.13         5.62        18.37
     TOTAL RAINFALL   (mm)=     32.13        32.13        32.13
     RUNOFF COEFFICIENT   =      0.97         0.18         0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                            ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
```

```
              0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
              0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
              0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
              0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
              0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
              0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82        12.43
               over (min)        5.00        25.00
     Storage Coeff.  (min)=      5.72 (ii)   21.98 (ii)
     Unit Hyd. Tpeak (min)=      5.00        25.00
     Unit Hyd. peak  (cms)=      0.20         0.05
                                            *TOTALS*
     PEAK FLOW       (cms)=      1.93         0.10          1.948 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.33           1.00
     RUNOFF VOLUME    (mm)=     31.13         7.21          21.68
     TOTAL RAINFALL   (mm)=     32.13        32.13          32.13
     RUNOFF COEFFICIENT   =      0.97         0.22           0.67


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
-------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.55         0.16
     Dep. Storage     (mm)=      1.00         5.00
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     68.80        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
     0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
     0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
     0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
     0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
     0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
     0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
     0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
     0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=      2.22 (ii)    7.03 (ii)
     Unit Hyd. Tpeak (min)=      5.00        10.00
     Unit Hyd. peak  (cms)=      0.30         0.14
                                            *TOTALS*
     PEAK FLOW       (cms)=      0.11         0.01          0.117 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=     31.13         7.45          24.31
     TOTAL RAINFALL   (mm)=     32.13        32.13          32.13
     RUNOFF COEFFICIENT   =      0.97         0.23           0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK     R.V.
-------------------      (ha)     (cms)     (hrs)     (mm)
     TOTAL HYD.(ID= 1):   0.71      0.12      1.00    24.31
     ==================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00     0.00
     MINOR SYS.(ID= 3):   0.71      0.12      1.00    24.31

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK    TPEAK     R.V.
                          (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.12     1.00    24.31
  OUTFLOW: ID= 2(  0024)    0.71     0.12     1.00    24.31
```

```
  --------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.117     1.00    24.31
     + ID2= 2 (  0355):     1.56   0.173     1.00    18.37
       ==================================================
       ID = 3 (  0357):     2.27   0.290     1.00    20.23

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.290     1.00    20.23
     + ID2= 2 (  0356):    16.63   1.948     1.00    21.68
       ==================================================
       ID = 1 (  0357):    18.90   2.238     1.00    21.51

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)    18.900     2.238     1.00      21.51
   OUTFLOW: ID= 1 (  0358)    18.900     0.085     3.08      21.46

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  3.78
                  TIME SHIFT OF PEAK FLOW         (min)=125.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.3496

--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
-------------------
```

```
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      0.28         0.17
     Dep. Storage     (mm)=      1.00         5.00
     Average Slope     (%)=      1.00         2.00
     Length            (m)=     54.77        40.00
     Mannings n           =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
     0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
     0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
     0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
     0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
     0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
     0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
     0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
     0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82        11.41
               over (min)        5.00        20.00
     Storage Coeff.  (min)=      1.94 (ii)   18.75 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.31         0.06
                                            *TOTALS*
     PEAK FLOW       (cms)=      0.05         0.00          0.055 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.25           1.00
     RUNOFF VOLUME    (mm)=     31.13         6.93          19.86
     TOTAL RAINFALL   (mm)=     32.13        32.13          32.13
     RUNOFF COEFFICIENT   =      0.97         0.22           0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0358):    18.90   0.085     3.08    21.46
```

```
      + ID2= 2 (  0359):     0.45   0.055     1.00    19.86
        ==================================================
        ID = 3 (  0370):    19.35   0.088     1.00    21.42

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.009 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=   5.623
     TOTAL RAINFALL   (mm)=  32.132
     RUNOFF COEFFICIENT   =   0.175

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------
                         IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
     Mannings n           =      0.013        0.250
```

```
         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82         9.54
               over (min)        5.00        25.00
     Storage Coeff.  (min)=      2.29 (ii)   20.35 (ii)
     Unit Hyd. Tpeak (min)=      5.00        25.00
     Unit Hyd. peak  (cms)=      0.30         0.05
                                                      *TOTALS*
     PEAK FLOW       (cms)=      0.03         0.01        0.028 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.33         1.00
     RUNOFF VOLUME    (mm)=     27.13         6.75         9.79
     TOTAL RAINFALL   (mm)=     32.13        32.13        32.13
     RUNOFF COEFFICIENT   =      0.84         0.21         0.30

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                           AREA     QPEAK   TPEAK     R.V.
                           (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 8(  0025)    0.00     0.00     0.00     0.00
  OUTFLOW: ID= 2(  0026)    0.00     0.00     0.00     0.00
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
*** W A R N I N G :  HYDROGRAPH   0026 <ID= 2> IS DRY.
*** W A R N I N G :  HYDROGRAPH   0003 = HYDROGRAPH 0001
       ID1= 1 (  0018):     0.78   0.028     1.00     9.79
     + ID2= 2 (  0026):     0.00   0.000     0.00     0.00
       ==================================================
       ID = 3 (  0361):     0.78   0.028     1.00     9.79

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.78   0.028     1.00     9.79
     + ID2= 2 (  0360):     1.02   0.009     1.67     5.62
       ==================================================
       ID = 1 (  0361):     1.80   0.029     1.00     7.43

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
--------------------
                         IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.35         1.02
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      95.57        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
               0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
               0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
               0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
               0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
```

```
               0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
               0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
               0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
               0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82         7.67
               over (min)        5.00        25.00
     Storage Coeff.  (min)=      2.71 (ii)   22.42 (ii)
     Unit Hyd. Tpeak (min)=      5.00        25.00
     Unit Hyd. peak  (cms)=      0.29         0.05
                                                      *TOTALS*
     PEAK FLOW       (cms)=      0.07         0.01        0.074 (iii)
     TIME TO PEAK    (hrs)=      1.00         1.33         1.00
     RUNOFF VOLUME    (mm)=     31.13         5.76        11.79
     TOTAL RAINFALL   (mm)=     32.13        32.13        32.13
     RUNOFF COEFFICIENT   =      0.97         0.18         0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.1350      0.0340

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)      1.370     0.074      1.00      11.79
   OUTFLOW: ID= 1 (  0017)      1.370     0.020      1.42      11.75

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 27.20
                  TIME SHIFT OF PEAK FLOW         (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0051

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                         IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
```

```
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    3.76 | 0.833   13.95 | 1.583    6.78 |  2.33    4.23
              0.167    3.76 | 0.917   80.82 | 1.667    6.78 |  2.42    3.90
              0.250    4.42 | 1.000   80.82 | 1.750    5.83 |  2.50    3.90
              0.333    4.42 | 1.083   17.11 | 1.833    5.83 |  2.58    3.63
              0.417    5.48 | 1.167   17.11 | 1.917    5.15 |  2.67    3.63
              0.500    5.48 | 1.250   10.79 | 2.000    5.15 |  2.75    3.39
              0.583    7.50 | 1.333   10.79 | 2.083    4.63 |  2.83    3.39
              0.667    7.50 | 1.417    8.23 | 2.167    4.63 |  2.92    3.20
              0.750   13.95 | 1.500    8.23 | 2.250    4.23 |  3.00    3.20

     Max.Eff.Inten.(mm/hr)=      80.82        72.00
                over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.86 (ii)    9.91 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.11
                                                  *TOTALS*
     PEAK FLOW       (cms)=       0.01         0.02          0.026 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      31.13        12.70          15.45
     TOTAL RAINFALL   (mm)=      32.13        32.13          32.13
     RUNOFF COEFFICIENT   =       0.97         0.40           0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0015):     0.39   0.026     1.00    15.45
```

```
      + ID2= 2 (  0017):     1.37   0.020     1.42    11.75
        ================================================
        ID = 3 (  0016):     1.76   0.040     1.00    12.57

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.

                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\3e2d2
4a4-a888-48c0-8d5a-85d13b7e4f65\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\3e2d2
4a4-a888-48c0-8d5a-85d13b7e4f65\scena


DATE: 05-25-2023                          TIME: 09:50:41

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
----------------------
  ************************************************
  ** SIMULATION : B. 5yr 3hr 10min Chicago      **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 535.364
| Ptotal= 42.56 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                     0.00    4.98 |  0.83  107.07 |  1.67    7.72 |  2.50    4.80
                     0.17    5.86 |  1.00   22.67 |  1.83    6.82 |  2.67    4.50
                     0.33    7.26 |  1.17   14.30 |  2.00    6.14 |  2.83    4.24
                     0.50    9.93 |  1.33   10.90 |  2.17    5.60 |
                     0.67   18.47 |  1.50    8.98 |  2.33    5.16 |


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                               ---- TRANSFORMED HYETOGRAPH ----
                     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                    0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
                    0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
                    0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
                    0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
                    0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
                    0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
                    0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
                    0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
                    0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.094

     PEAK FLOW       (cms)=   0.014 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=   9.966
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.234

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
```

```
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
               0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
               0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
               0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
               0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
               0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
               0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
               0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
               0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Max.Eff.Inten.(mm/hr)=     107.07        15.74
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       3.16 (ii)   17.95 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.27         0.06
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.53         0.04          0.539 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25           1.00
     RUNOFF VOLUME    (mm)=      41.56         9.99          27.35
     TOTAL RAINFALL   (mm)=      42.56        42.56          42.56
     RUNOFF COEFFICIENT   =       0.98         0.23           0.64

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
```

```
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.1340     0.1430
                          0.0270     0.0810   |  0.1670     0.1580
                          0.0620     0.1060   |  0.1980     0.1750
                          0.0930     0.1230   |  0.0000     0.0000

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)      3.350     0.539      1.00      27.35
   OUTFLOW: ID= 1 (  0004)      3.350     0.025      3.00      27.13

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  4.55
                  TIME SHIFT OF PEAK FLOW         (min)=120.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0736

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.014     1.17     9.97
     + ID2= 2 (  0004):     3.35   0.025     3.00    27.13
       ================================================
       ID = 3 (  0003):     3.84   0.031     1.25    24.94

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
               0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
```

```
               0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
               0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
               0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
               0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
               0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
               0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
               0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Max.Eff.Inten.(mm/hr)=     107.07        15.74
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       2.52 (ii)   17.30 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.29         0.06
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.23         0.02          0.234 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25           1.00
     RUNOFF VOLUME    (mm)=      41.56         9.99          25.77
     TOTAL RAINFALL   (mm)=      42.56        42.56          42.56
     RUNOFF COEFFICIENT   =       0.98         0.23           0.61

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
               0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
               0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
```

```
               0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
               0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
               0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
               0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
               0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
               0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Max.Eff.Inten.(mm/hr)=     107.07        25.74
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       5.12 (ii)   17.26 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.21         0.06
                                                      *TOTALS*
     PEAK FLOW       (cms)=       2.64         0.20          2.701 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25           1.00
     RUNOFF VOLUME    (mm)=      41.56        12.37          30.03
     TOTAL RAINFALL   (mm)=      42.56        42.56          42.56
     RUNOFF COEFFICIENT   =       0.98         0.29           0.71


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
               0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
               0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
               0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
               0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
```

```
              0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
              0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
              0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
              0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Max.Eff.Inten.(mm/hr)=     107.07     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.99 (ii)    6.28 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.31         0.15
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.15         0.01          0.159 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      41.56        12.72          33.25
     TOTAL RAINFALL   (mm)=      42.56        42.56          42.56
     RUNOFF COEFFICIENT   =       0.98         0.30           0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.16      1.00   33.25
     ==================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00    0.00
     MINOR SYS.(ID= 3):   0.71      0.16      1.00   33.25

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.16    1.00    33.25
  OUTFLOW: ID= 2(  0024)    0.71     0.16    1.00    33.25
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.159     1.00    33.25
     + ID2= 2 (  0355):     1.56   0.234     1.00    25.77
       ================================================
       ID = 3 (  0357):     2.27   0.393     1.00    28.11

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.393     1.00    28.11
     + ID2= 2 (  0356):    16.63   2.701     1.00    30.03
       ================================================
       ID = 1 (  0357):    18.90   3.094     1.00    29.80

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.7410      0.8760
                          0.0430     0.1680   |  1.3270      1.1950
                          0.0650     0.3300   |  1.8380      1.4460
                          0.3870     0.6500   |  3.9290      1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.900     3.094     1.00      29.80
   OUTFLOW: ID= 1 (  0358)     18.900     0.182     3.00      29.75

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  5.90
                  TIME SHIFT OF PEAK FLOW         (min)=120.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.4468

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------
```

```
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
              0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
              0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
              0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
              0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
              0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
              0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
              0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
              0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Max.Eff.Inten.(mm/hr)=     107.07        23.77
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.73 (ii)   14.27 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.08
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.07         0.01          0.075 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      41.56        11.96          27.78
     TOTAL RAINFALL   (mm)=      42.56        42.56          42.56
     RUNOFF COEFFICIENT   =       0.98         0.28           0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0358):    18.90   0.182     3.00    29.75
```

```
     + ID2= 2 (  0359):     0.45   0.075     1.00    27.78
       ================================================
       ID = 3 (  0370):    19.35   0.187     3.00    29.70

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    4.98 | 0.833   18.47 | 1.583    8.98 |  2.33    5.60
              0.167    4.98 | 0.917  107.07 | 1.667    8.98 |  2.42    5.16
              0.250    5.86 | 1.000  107.07 | 1.750    7.72 |  2.50    5.16
              0.333    5.86 | 1.083   22.67 | 1.833    7.72 |  2.58    4.80
              0.417    7.26 | 1.167   22.67 | 1.917    6.82 |  2.67    4.80
              0.500    7.26 | 1.250   14.30 | 2.000    6.82 |  2.75    4.50
              0.583    9.93 | 1.333   14.30 | 2.083    6.14 |  2.83    4.50
              0.667    9.93 | 1.417   10.90 | 2.167    6.14 |  2.92    4.24
              0.750   18.47 | 1.500   10.90 | 2.250    5.60 |  3.00    4.24

     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.017 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=   9.984
     TOTAL RAINFALL   (mm)=  42.565
     RUNOFF COEFFICIENT   =   0.235

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------

                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
     Mannings n           =      0.013        0.250
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.98	0.833	18.47	1.583	8.98	2.33	5.60
0.167	4.98	0.917	107.07	1.667	8.98	2.42	5.16
0.250	5.86	1.000	107.07	1.750	7.72	2.50	5.16
0.333	5.86	1.083	22.67	1.833	7.72	2.58	4.80
0.417	7.26	1.167	22.67	1.917	6.82	2.67	4.80
0.500	7.26	1.250	14.30	2.000	6.82	2.75	4.50
0.583	9.93	1.333	14.30	2.083	6.14	2.83	4.50
0.667	9.93	1.417	10.90	2.167	6.14	2.92	4.24
0.750	18.47	1.500	10.90	2.250	5.60	3.00	4.24

Max.Eff.Inten.(mm/hr)=	107.07	20.20	
over (min)	5.00	20.00	
Storage Coeff. (min)=	2.04 (ii)	15.43 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.31	0.07	
			TOTALS
PEAK FLOW (cms)=	0.03	0.02	0.041 (iii)
TIME TO PEAK (hrs)=	1.00	1.25	1.00
RUNOFF VOLUME (mm)=	37.56	11.76	15.62
TOTAL RAINFALL (mm)=	42.56	42.56	42.56
RUNOFF COEFFICIENT =	0.88	0.28	0.37

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.00	0.00	0.00	0.00
OUTFLOW: ID= 2(0026)	0.00	0.00	0.00	0.00

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0018):	0.78	0.041	1.00	15.62
	+ ID2= 2 (0026):	0.00	0.000	0.00	0.00
	ID = 3 (0361):	0.78	0.041	1.00	15.62

*** W A R N I N G : HYDROGRAPH 0026 <ID= 2> IS DRY.
*** W A R N I N G : HYDROGRAPH 0003 = HYDROGRAPH 0001

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0361):	0.78	0.041	1.00	15.62
	+ ID2= 2 (0360):	1.02	0.017	1.58	9.98
	ID = 1 (0361):	1.80	0.044	1.00	12.43

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	STANDHYD (0007)	Area (ha)= 1.37
ID= 1 DT= 5.0 min	Total Imp(%)= 25.40	Dir. Conn.(%)= 23.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.35	1.02
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	95.57	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.98	0.833	18.47	1.583	8.98	2.33	5.60
0.167	4.98	0.917	107.07	1.667	8.98	2.42	5.16
0.250	5.86	1.000	107.07	1.750	7.72	2.50	5.16
0.333	5.86	1.083	22.67	1.833	7.72	2.58	4.80
0.417	7.26	1.167	22.67	1.917	6.82	2.67	4.80
0.500	7.26	1.250	14.30	2.000	6.82	2.75	4.50
0.583	9.93	1.333	14.30	2.083	6.14	2.83	4.50
0.667	9.93	1.417	10.90	2.167	6.14	2.92	4.24
0.750	18.47	1.500	10.90	2.250	5.60	3.00	4.24

Max.Eff.Inten.(mm/hr)=	107.07	16.47	
over (min)	5.00	20.00	
Storage Coeff. (min)=	2.42 (ii)	16.94 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.30	0.06	
			TOTALS
PEAK FLOW (cms)=	0.10	0.03	0.103 (iii)
TIME TO PEAK (hrs)=	1.00	1.25	1.00
RUNOFF VOLUME (mm)=	41.56	10.19	17.65
TOTAL RAINFALL (mm)=	42.56	42.56	42.56
RUNOFF COEFFICIENT =	0.98	0.24	0.41

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0017)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1350	0.0340

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0007)	1.370	0.103	1.00	17.65
OUTFLOW: ID= 1 (0017)	1.370	0.031	1.50	17.61

PEAK FLOW REDUCTION [Qout/Qin](%)= 30.33
TIME SHIFT OF PEAK FLOW (min)= 30.00
MAXIMUM STORAGE USED (ha.m.)= 0.0079

CALIB	STANDHYD (0015)	Area (ha)= 0.39
ID= 1 DT= 5.0 min	Total Imp(%)= 66.10	Dir. Conn.(%)= 15.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.26	0.13
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	4.98	0.833	18.47	1.583	8.98	2.33	5.60
0.167	4.98	0.917	107.07	1.667	8.98	2.42	5.16
0.250	5.86	1.000	107.07	1.750	7.72	2.50	5.16
0.333	5.86	1.083	22.67	1.833	7.72	2.58	4.80
0.417	7.26	1.167	22.67	1.917	6.82	2.67	4.80
0.500	7.26	1.250	14.30	2.000	6.82	2.75	4.50
0.583	9.93	1.333	14.30	2.083	6.14	2.83	4.50
0.667	9.93	1.417	10.90	2.167	6.14	2.92	4.24
0.750	18.47	1.500	10.90	2.250	5.60	3.00	4.24

Max.Eff.Inten.(mm/hr)=	107.07	118.39	
over (min)	5.00	10.00	
Storage Coeff. (min)=	1.66 (ii)	8.26 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.32	0.13	
			TOTALS
PEAK FLOW (cms)=	0.02	0.03	0.041 (iii)
TIME TO PEAK (hrs)=	1.00	1.08	1.00
RUNOFF VOLUME (mm)=	41.56	20.09	23.30
TOTAL RAINFALL (mm)=	42.56	42.56	42.56
RUNOFF COEFFICIENT =	0.98	0.47	0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0016)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0015):	0.39	0.041	1.00	23.30

```
 + ID2= 2 (  0017):     1.37   0.031     1.50    17.61
   ================================================
   ID = 3 (  0016):     1.76   0.061     1.00    18.87

  NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\9aa1e
0bc-4057-4dac-82a7-fd09817b9763\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\9aa1e
0bc-4057-4dac-82a7-fd09817b9763\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : C. 10yr 3hr 10min Chicago     **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 622.842
| Ptotal= 49.52 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                    used in:   INTENSITY =  A / (t + B)^C

                    Duration of storm  =  3.00 hrs
                    Storm time step    = 10.00 min
                    Time to peak ratio =  0.33

               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.00    5.79 |  0.83  124.56 |  1.67    8.98 |  2.50    5.59
               0.17    6.82 |  1.00   26.38 |  1.83    7.93 |  2.67    5.23
               0.33    8.45 |  1.17   16.63 |  2.00    7.14 |  2.83    4.93
               0.50   11.56 |  1.33   12.68 |  2.17    6.51 |
               0.67   21.49 |  1.50   10.45 |  2.33    6.01 |


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0001)|   Area     (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia       (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
              0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
              0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
              0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
              0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
              0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
              0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
              0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
              0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

    Unit Hyd Qpeak  (cms)=   0.094

    PEAK FLOW       (cms)=   0.020 (i)
    TIME TO PEAK    (hrs)=   1.167
    RUNOFF VOLUME    (mm)=  13.342
    TOTAL RAINFALL   (mm)=  49.520
    RUNOFF COEFFICIENT   =   0.269

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
```

```
| CALIB            |
| STANDHYD (  0002)|   Area     (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------

                                IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84          1.51
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     149.44         40.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
              0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
              0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
              0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
              0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
              0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
              0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
              0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
              0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

    Max.Eff.Inten.(mm/hr)=     124.56        21.67
                over (min)        5.00        20.00
    Storage Coeff.  (min)=       2.98 (ii)   15.99 (ii)
    Unit Hyd. Tpeak (min)=       5.00        20.00
    Unit Hyd. peak  (cms)=       0.28         0.07
                                                        *TOTALS*
    PEAK FLOW       (cms)=       0.62         0.05         0.635 (iii)
    TIME TO PEAK    (hrs)=       1.00         1.25          1.00
    RUNOFF VOLUME    (mm)=      48.52        13.37         32.70
    TOTAL RAINFALL   (mm)=      49.52        49.52         49.52
    RUNOFF COEFFICIENT   =       0.98         0.27          0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
```

```
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |   0.1340     0.1430
                         0.0270     0.0810   |   0.1670     0.1580
                         0.0620     0.1060   |   0.1980     0.1750
                         0.0930     0.1230   |   0.0000     0.0000

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)     3.350     0.635      1.00      32.70
   OUTFLOW: ID= 1 (  0004)     3.350     0.035      3.00      32.47

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)=  5.47
                    TIME SHIFT OF PEAK FLOW         (min)=120.00
                    MAXIMUM  STORAGE   USED       (ha.m.)=  0.0866

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.020     1.17    13.34
     + ID2= 2 (  0004):     3.35   0.035     3.00    32.47
       ================================================
       ID = 3 (  0003):     3.84   0.039     1.17    30.03

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Max.Eff.Inten.(mm/hr)=     124.56        21.67
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       2.37 (ii)   15.38 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.30         0.07
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.27         0.03        0.275 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.25         1.00
     RUNOFF VOLUME    (mm)=      48.52        13.37        30.94
     TOTAL RAINFALL   (mm)=      49.52        49.52        49.52
     RUNOFF COEFFICIENT   =       0.98         0.27         0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Max.Eff.Inten.(mm/hr)=     124.56        44.78
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       4.82 (ii)    9.78 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.22         0.11
                                                      *TOTALS*
     PEAK FLOW       (cms)=       3.12         0.41        3.420 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08         1.00
     RUNOFF VOLUME    (mm)=      48.52        16.29        35.79
     TOTAL RAINFALL   (mm)=      49.52        49.52        49.52
     RUNOFF COEFFICIENT   =       0.98         0.33         0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
 0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
 0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
 0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
 0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
 0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
 0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
 0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
 0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Max.Eff.Inten.(mm/hr)=     124.56     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.87 (ii)    5.91 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.15
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.17         0.02        0.187 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08         1.00
     RUNOFF VOLUME    (mm)=      48.52        16.71        39.36
     TOTAL RAINFALL   (mm)=      49.52        49.52        49.52
     RUNOFF COEFFICIENT   =       0.98         0.34         0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK     R.V.
-------------------      (ha)     (cms)     (hrs)     (mm)
     TOTAL HYD.(ID= 1):   0.71      0.19      1.00    39.36
     ================================================================
     MAJOR SYS.(ID= 2):   0.02      0.03      1.00    39.36
     MINOR SYS.(ID= 3):   0.69      0.16      0.92    39.36

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  -------------------------
  | Junction Command(0024) |
  -------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.69     0.16    0.92    39.36
  OUTFLOW: ID= 2(  0024)    0.69     0.16    0.92    39.36
```

```
  ------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.69   0.162     0.92    39.36
     + ID2= 2 (  0355):     1.56   0.275     1.00    30.94
       ====================================================
       ID = 3 (  0357):     2.25   0.437     1.00    33.51

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.25   0.437     1.00    33.51
     + ID2= 2 (  0356):    16.63   3.420     1.00    35.79
       ====================================================
       ID = 1 (  0357):    18.88   3.857     1.00    35.52

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------       (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.876      3.857      1.00      35.52
   OUTFLOW: ID= 1 (  0358)     18.876      0.246      2.67      35.46

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  6.37
                  TIME SHIFT OF PEAK FLOW         (min)=100.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.5095

------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
```

```
-------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
               0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
               0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
               0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
               0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
               0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
               0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
               0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
               0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Max.Eff.Inten.(mm/hr)=     124.56        32.13
                 over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.63 (ii)   12.74 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.08         0.01          0.088 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      48.52        15.79          33.28
     TOTAL RAINFALL   (mm)=      49.52        49.52          49.52
     RUNOFF COEFFICIENT   =       0.98         0.32           0.67

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0358):    18.88   0.246     2.67    35.46
     + ID2= 2 (  0359):     0.45   0.088     1.00    33.28
       ====================================================
       ID = 3 (  0370):    19.33   0.251     2.67    35.41

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
               0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
               0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
               0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
               0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
               0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
               0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
               0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
               0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.023 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=  13.366
     TOTAL RAINFALL   (mm)=  49.520
     RUNOFF COEFFICIENT   =   0.270

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
-------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
```

```
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
               0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
               0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
               0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
               0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
               0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
               0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
               0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
               0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

     Max.Eff.Inten.(mm/hr)=     124.56        27.51
                 over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.92 (ii)   13.75 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.04         0.03          0.054 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      44.52        15.59          19.92
     TOTAL RAINFALL   (mm)=      49.52        49.52          49.52
     RUNOFF COEFFICIENT   =       0.90         0.31           0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 8(  0025)    0.02     0.03    1.00    39.36
  OUTFLOW: ID= 2(  0026)    0.02     0.03    1.00    39.36
```

```
  ------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0018):     0.78   0.054     1.00    19.92
     + ID2= 2 (  0026):     0.02   0.025     1.00    39.36
       ==================================================
       ID = 3 (  0361):     0.80   0.079     1.00    20.51

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.80   0.079     1.00    20.51
     + ID2= 2 (  0360):     1.02   0.023     1.58    13.37
       ==================================================
       ID = 1 (  0361):     1.82   0.083     1.00    16.52

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.35         1.02
    Dep. Storage     (mm)=       1.00         5.00
    Average Slope     (%)=       1.00         2.00
    Length            (m)=      95.57        40.00
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
    hrs   mm/hr |    hrs   mm/hr |'    hrs   mm/hr |    hrs   mm/hr
  0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
  0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
  0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
  0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
  0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
  0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
  0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
  0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
  0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

    Max.Eff.Inten.(mm/hr)=     124.56        22.63
              over (min)        5.00        20.00
    Storage Coeff.  (min)=      2.28 (ii)   15.06 (ii)
    Unit Hyd. Tpeak (min)=      5.00        20.00
    Unit Hyd. peak  (cms)=      0.30         0.07
                                                    *TOTALS*
    PEAK FLOW       (cms)=      0.11         0.04          0.124 (iii)
    TIME TO PEAK    (hrs)=      1.00         1.25           1.00
    RUNOFF VOLUME    (mm)=     48.52        13.62          21.92
    TOTAL RAINFALL   (mm)=     49.52        49.52          49.52
    RUNOFF COEFFICIENT   =      0.98         0.28           0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |   0.1350     0.0340

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)      1.370     0.124      1.00      21.92
   OUTFLOW: ID= 1 (  0017)      1.370     0.040      1.50      21.88

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 32.01
                  TIME SHIFT OF PEAK FLOW         (min)= 30.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0100

------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
-------------------

                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.26         0.13
    Dep. Storage     (mm)=       1.00         5.00

    Average Slope     (%)=       1.00         2.00
    Length            (m)=      50.99        40.00
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
    hrs   mm/hr |    hrs   mm/hr |'    hrs   mm/hr |    hrs   mm/hr
  0.083    5.79 | 0.833   21.49 | 1.583   10.45 |  2.33    6.51
  0.167    5.79 | 0.917  124.56 | 1.667   10.45 |  2.42    6.01
  0.250    6.82 | 1.000  124.56 | 1.750    8.98 |  2.50    6.01
  0.333    6.82 | 1.083   26.38 | 1.833    8.98 |  2.58    5.59
  0.417    8.45 | 1.167   26.38 | 1.917    7.93 |  2.67    5.59
  0.500    8.45 | 1.250   16.63 | 2.000    7.93 |  2.75    5.23
  0.583   11.56 | 1.333   16.63 | 2.083    7.14 |  2.83    5.23
  0.667   11.56 | 1.417   12.68 | 2.167    7.14 |  2.92    4.93
  0.750   21.49 | 1.500   12.68 | 2.250    6.51 |  3.00    4.93

    Max.Eff.Inten.(mm/hr)=     124.56       152.58
              over (min)        5.00        10.00
    Storage Coeff.  (min)=      1.56 (ii)    7.52 (ii)
    Unit Hyd. Tpeak (min)=      5.00        10.00
    Unit Hyd. peak  (cms)=      0.33         0.13
                                                    *TOTALS*
    PEAK FLOW       (cms)=      0.02         0.04          0.052 (iii)
    TIME TO PEAK    (hrs)=      1.00         1.08           1.00
    RUNOFF VOLUME    (mm)=     48.52        25.41          28.86
    TOTAL RAINFALL   (mm)=     49.52        49.52          49.52
    RUNOFF COEFFICIENT   =      0.98         0.51           0.58

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.052     1.00    28.86
     + ID2= 2 (  0017):     1.37   0.040     1.50    21.88
       ==================================================
       ID = 3 (  0016):     1.76   0.077     1.00    23.43

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.

                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\bed9e
aca-3845-4afd-9326-3b4ed0117276\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\bed9e
aca-3845-4afd-9326-3b4ed0117276\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____


--------------------------------------------------------------------------------
------------------------
  ************************************************
  ** SIMULATION : D. 25yr 3hr 10min Chicago     **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 731.314
| Ptotal= 58.14 mm |                          B=   0.000
--------------------                          C=   0.699
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                  0.00    6.80 |  0.83  146.25 |  1.67   10.54 |  2.50    6.56
                  0.17    8.01 |  1.00   30.97 |  1.83    9.31 |  2.67    6.14
                  0.33    9.92 |  1.17   19.53 |  2.00    8.38 |  2.83    5.79
                  0.50   13.57 |  1.33   14.89 |  2.17    7.65 |
                  0.67   25.24 |  1.50   12.27 |  2.33    7.05 |


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Unit Hyd Qpeak  (cms)=   0.094

     PEAK FLOW       (cms)=   0.027 (i)
     TIME TO PEAK    (hrs)=   1.167
     RUNOFF VOLUME    (mm)=  17.966
     TOTAL RAINFALL   (mm)=  58.144
     RUNOFF COEFFICIENT   =   0.309

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------

                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
                 0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
                 0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
                 0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
                 0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
                 0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
                 0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
                 0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25        29.94
                 over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.79 (ii)   14.23 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.28         0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.73         0.08          0.768 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      57.14        18.00          39.53
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.31           0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.1340     0.1430
                          0.0270     0.0810   |  0.1670     0.1580
                          0.0620     0.1060   |  0.1980     0.1750
                          0.0930     0.1230   |  0.0000     0.0000

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)     3.350     0.768     1.00       39.53
   OUTFLOW: ID= 1 (  0004)     3.350     0.052     2.58       39.30

                 PEAK   FLOW   REDUCTION [Qout/Qin](%)=  6.74
                 TIME SHIFT OF PEAK FLOW         (min)= 95.00
                 MAXIMUM  STORAGE   USED       (ha.m.)=  0.0987

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.027     1.17    17.97
     + ID2= 2 (  0004):     3.35   0.052     2.58    39.30
       ================================================
       ID = 3 (  0003):     3.84   0.057     2.42    36.58

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------

                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                 0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
                 0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
```

```
              0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25        29.94
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.22 (ii)   13.65 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.30         0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.31         0.04          0.333 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      57.14        18.00          37.57
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.31           0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
    0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
    0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
    0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
```

```
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       4.52 (ii)    9.17 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.23         0.12
                                                      *TOTALS*
     PEAK FLOW       (cms)=       3.71         0.57          4.150 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      57.14        21.57          43.09
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.37           0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
    0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
    0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
    0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
    0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
```

```
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.75 (ii)    5.54 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.16
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.20         0.02          0.223 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      57.14        22.09          47.05
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.38           0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.22      1.00   47.05
     ==========================================================
     MAJOR SYS.(ID= 2):   0.06      0.06      1.00   47.05
     MINOR SYS.(ID= 3):   0.65      0.16      0.92   47.05

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                         AREA     QPEAK   TPEAK     R.V.
                         (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 9(  0025)    0.65     0.16    0.92    47.05
  OUTFLOW: ID= 2(  0024)    0.65     0.16    0.92    47.05
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.65   0.162     0.92    47.05
     + ID2= 2 (  0355):     1.56   0.333     1.00    37.57
       ================================================
       ID = 3 (  0357):     2.21   0.495     1.00    40.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.21   0.495     1.00    40.34
     + ID2= 2 (  0356):    16.63   4.150     1.00    43.09
       ================================================
       ID = 1 (  0357):    18.84   4.646     1.00    42.77

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.7410      0.8760
                          0.0430     0.1680   |  1.3270      1.1950
                          0.0650     0.3300   |  1.8380      1.4460
                          0.3870     0.6500   |  3.9290      1.7080

                               AREA     QPEAK     TPEAK      R.V.
                               (ha)     (cms)     (hrs)      (mm)
   INFLOW : ID= 2 (  0357)    18.836     4.646     1.00      42.77
   OUTFLOW: ID= 1 (  0358)    18.836     0.327     2.42      42.72

                 PEAK   FLOW   REDUCTION [Qout/Qin](%)=  7.03
                 TIME SHIFT OF PEAK FLOW         (min)= 85.00
                 MAXIMUM  STORAGE   USED       (ha.m.)=  0.5901

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
```

```
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
              0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
              0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25        56.56
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.53 (ii)   10.39 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.33         0.09
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.10         0.02          0.105 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      57.14        20.97          40.31
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.36           0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0358):    18.84   0.327     2.42    42.72
     + ID2= 2 (  0359):     0.45   0.105     1.00    40.31
       ================================================
       ID = 3 (  0370):    19.29   0.334     2.33    42.66

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
              0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
              0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

    Unit Hyd Qpeak  (cms)=   0.080

    PEAK FLOW       (cms)=   0.031 (i)
    TIME TO PEAK    (hrs)=   1.583
    RUNOFF VOLUME    (mm)=  17.999
    TOTAL RAINFALL   (mm)=  58.144
    RUNOFF COEFFICIENT   =   0.310

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
```

```
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
              0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
              0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25        48.63
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.80 (ii)   11.22 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.09
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.05         0.05          0.070 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      53.14        20.78          25.62
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.91         0.36           0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  -------------------------
  | Junction Command(0026) |
  -------------------------

                         AREA     QPEAK   TPEAK     R.V.
                         (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 8(  0025)    0.06     0.06    1.00    47.05
  OUTFLOW: ID= 2(  0026)    0.06     0.06    1.00    47.05
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0018):     0.78   0.070     1.00    25.62
     + ID2= 2 (  0026):     0.06   0.061     1.00    47.05
       ================================================
       ID = 3 (  0361):     0.84   0.131     1.00    27.25

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.84   0.131     1.00    27.25
     + ID2= 2 (  0360):     1.02   0.031     1.58    18.00
       ================================================
       ID = 1 (  0361):     1.86   0.136     1.00    22.19

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
--------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.35         1.02
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      95.57        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
              0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
              0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
              0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
              0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
              0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
```

```
              0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
              0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
              0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25        31.22
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.14 (ii)   13.38 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.08
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.13         0.06          0.158 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      57.14        18.31          27.55
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.31           0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.1350     0.0340

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)     1.370     0.158      1.00      27.55
   OUTFLOW: ID= 1 (  0017)     1.370     0.052      1.42      27.51

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 32.83
                  TIME SHIFT OF PEAK FLOW         (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0131

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
     Dep. Storage     (mm)=       1.00         5.00
```

```
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.80 | 0.833   25.24 | 1.583   12.27 |  2.33    7.65
               0.167    6.80 | 0.917  146.25 | 1.667   12.27 |  2.42    7.05
               0.250    8.01 | 1.000  146.25 | 1.750   10.54 |  2.50    7.05
               0.333    8.01 | 1.083   30.97 | 1.833   10.54 |  2.58    6.56
               0.417    9.92 | 1.167   30.97 | 1.917    9.31 |  2.67    6.56
               0.500    9.92 | 1.250   19.53 | 2.000    9.31 |  2.75    6.14
               0.583   13.57 | 1.333   19.53 | 2.083    8.38 |  2.83    6.14
               0.667   13.57 | 1.417   14.89 | 2.167    8.38 |  2.92    5.79
               0.750   25.24 | 1.500   14.89 | 2.250    7.65 |  3.00    5.79

     Max.Eff.Inten.(mm/hr)=     146.25       197.72
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.46 (ii)    6.84 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.14
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.05          0.068 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      57.14        32.33          36.04
     TOTAL RAINFALL   (mm)=      58.14        58.14          58.14
     RUNOFF COEFFICIENT   =       0.98         0.56           0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.068     1.00    36.04
     + ID2= 2 (  0017):     1.37   0.052     1.42    27.51
```

```
       ================================================
       ID = 3 (  0016):     1.76   0.098     1.00    29.40

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\f7dba
4c4-6309-4bdb-a8f2-37551663c398\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\f7dba
4c4-6309-4bdb-a8f2-37551663c398\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ************************************************
  ** SIMULATION : E. 50yr 3hr 10min Chicago     **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 811.794
| Ptotal= 64.54 mm |                          B=   0.000
--------------------                          C=   0.699
```

used in: INTENSITY = A / (t + B)^C

Duration of storm = 3.00 hrs
Storm time step = 10.00 min
Time to peak ratio = 0.33

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	7.55	0.83	162.35	1.67	11.70	2.50	7.28
0.17	8.89	1.00	34.38	1.83	10.34	2.67	6.82
0.33	11.01	1.17	21.68	2.00	9.30	2.83	6.42
0.50	15.06	1.33	16.53	2.17	8.49		
0.67	28.01	1.50	13.62	2.33	7.83		

CALIB	
NASHYD (0001)	Area (ha)= 0.49 Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.20

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	7.55	0.833	28.01	1.583	13.62	2.33	8.49
0.167	7.55	0.917	162.35	1.667	13.62	2.42	7.83
0.250	8.89	1.000	162.35	1.750	11.70	2.50	7.83
0.333	8.89	1.083	34.38	1.833	11.70	2.58	7.28
0.417	11.01	1.167	34.38	1.917	10.34	2.67	7.28
0.500	11.01	1.250	21.68	2.000	10.34	2.75	6.82
0.583	15.06	1.333	21.68	2.083	9.30	2.83	6.82
0.667	15.06	1.417	16.53	2.167	9.30	2.92	6.42
0.750	28.01	1.500	16.53	2.250	8.49	3.00	6.42

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 1.167
RUNOFF VOLUME (mm)= 21.670
TOTAL RAINFALL (mm)= 64.542
RUNOFF COEFFICIENT = 0.336

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

IN= 2---> OUT= 1					
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)	
	0.0000	0.0000	0.1340	0.1430	
	0.0270	0.0810	0.1670	0.1580	
	0.0620	0.1060	0.1980	0.1750	
	0.0930	0.1230	0.0000	0.0000	

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.864	1.00	44.72
OUTFLOW: ID= 1 (0004)	3.350	0.065	2.33	44.49

PEAK FLOW REDUCTION [Qout/Qin](%)= 7.56
TIME SHIFT OF PEAK FLOW (min)= 80.00
MAXIMUM STORAGE USED (ha.m.)= 0.1079

ADD HYD (0003)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0001):	0.49	0.033	1.17	21.67
	+ ID2= 2 (0004):	3.35	0.065	2.33	44.49
	ID = 3 (0003):	3.84	0.073	2.17	41.58

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (0355)	Area (ha)= 1.56
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.78	0.78
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	101.98	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	7.55	0.833	28.01	1.583	13.62	2.33	8.49
0.167	7.55	0.917	162.35	1.667	13.62	2.42	7.83

CALIB	
STANDHYD (0002)	Area (ha)= 3.35
ID= 1 DT= 5.0 min	Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	1.84	1.51
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	149.44	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	7.55	0.833	28.01	1.583	13.62	2.33	8.49
0.167	7.55	0.917	162.35	1.667	13.62	2.42	7.83
0.250	8.89	1.000	162.35	1.750	11.70	2.50	7.83
0.333	8.89	1.083	34.38	1.833	11.70	2.58	7.28
0.417	11.01	1.167	34.38	1.917	10.34	2.67	7.28
0.500	11.01	1.250	21.68	2.000	10.34	2.75	6.82
0.583	15.06	1.333	21.68	2.083	9.30	2.83	6.82
0.667	15.06	1.417	16.53	2.167	9.30	2.92	6.42
0.750	28.01	1.500	16.53	2.250	8.49	3.00	6.42

			TOTALS
Max.Eff.Inten.(mm/hr)=	162.35	47.39	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.68 (ii)	12.19 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.29	0.09	
PEAK FLOW (cms)=	0.81	0.11	0.864 (iii)
TIME TO PEAK (hrs)=	1.00	1.17	1.00
RUNOFF VOLUME (mm)=	63.54	21.71	44.72
TOTAL RAINFALL (mm)=	64.54	64.54	64.54
RUNOFF COEFFICIENT =	0.98	0.34	0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF

0.250	8.89	1.000	162.35	1.750	11.70	2.50	7.83
0.333	8.89	1.083	34.38	1.833	11.70	2.58	7.28
0.417	11.01	1.167	34.38	1.917	10.34	2.67	7.28
0.500	11.01	1.250	21.68	2.000	10.34	2.75	6.82
0.583	15.06	1.333	21.68	2.083	9.30	2.83	6.82
0.667	15.06	1.417	16.53	2.167	9.30	2.92	6.42
0.750	28.01	1.500	16.53	2.250	8.49	3.00	6.42

			TOTALS
Max.Eff.Inten.(mm/hr)=	162.35	47.39	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.13 (ii)	11.64 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.31	0.09	
PEAK FLOW (cms)=	0.35	0.06	0.376 (iii)
TIME TO PEAK (hrs)=	1.00	1.17	1.00
RUNOFF VOLUME (mm)=	63.54	21.71	42.62
TOTAL RAINFALL (mm)=	64.54	64.54	64.54
RUNOFF COEFFICIENT =	0.98	0.34	0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0356)	Area (ha)= 16.63
ID= 1 DT= 5.0 min	Total Imp(%)= 68.80 Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	7.55	0.833	28.01	1.583	13.62	2.33	8.49
0.167	7.55	0.917	162.35	1.667	13.62	2.42	7.83
0.250	8.89	1.000	162.35	1.750	11.70	2.50	7.83

```
              0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
              0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
              0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
              0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
              0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
              0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Max.Eff.Inten.(mm/hr)=     162.35     ********
               over (min)        5.00       10.00
     Storage Coeff.  (min)=       4.33 (ii)    8.79 (ii)
     Unit Hyd. Tpeak (min)=       5.00       10.00
     Unit Hyd. peak  (cms)=       0.23        0.12
                                                    *TOTALS*
     PEAK FLOW       (cms)=       4.16        0.70         4.707 (iii)
     TIME TO PEAK    (hrs)=       1.00        1.08          1.00
     RUNOFF VOLUME    (mm)=      63.54       25.76         48.62
     TOTAL RAINFALL   (mm)=      64.54       64.54         64.54
     RUNOFF COEFFICIENT   =       0.98        0.40          0.75

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
 0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
 0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
 0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
```

```
              0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
              0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
              0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
              0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
              0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Max.Eff.Inten.(mm/hr)=     162.35     ********
               over (min)        5.00       10.00
     Storage Coeff.  (min)=       1.68 (ii)    5.32 (ii)
     Unit Hyd. Tpeak (min)=       5.00       10.00
     Unit Hyd. peak  (cms)=       0.32        0.16
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.23        0.03         0.250 (iii)
     TIME TO PEAK    (hrs)=       1.00        1.08          1.00
     RUNOFF VOLUME    (mm)=      63.54       26.34         52.83
     TOTAL RAINFALL   (mm)=      64.54       64.54         64.54
     RUNOFF COEFFICIENT   =       0.98        0.41          0.82

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK     R.V.
--------------------      (ha)     (cms)     (hrs)     (mm)
     TOTAL HYD.(ID= 1):   0.71      0.25      1.00    52.83
     ================================================
     MAJOR SYS.(ID= 2):   0.09      0.09      1.00    52.83
     MINOR SYS.(ID= 3):   0.62      0.16      0.92    52.83

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                           AREA     QPEAK   TPEAK     R.V.
                           (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.62     0.16    0.92    52.83
  OUTFLOW: ID= 2(  0024)    0.62     0.16    0.92    52.83
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.62   0.162     0.92    52.83
     + ID2= 2 (  0355):     1.56   0.376     1.00    42.62
       ================================================
       ID = 3 (  0357):     2.18   0.538     1.00    45.54

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.18   0.538     1.00    45.54
     + ID2= 2 (  0356):    16.63   4.707     1.00    48.62
       ================================================
       ID = 1 (  0357):    18.81   5.245     1.00    48.26

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.7410     0.8760
                          0.0430     0.1680   |  1.3270     1.1950
                          0.0650     0.3300   |  1.8380     1.4460
                          0.3870     0.6500   |  3.9290     1.7080

                             AREA     QPEAK     TPEAK       R.V.
                             (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.814      5.245      1.00      48.26
   OUTFLOW: ID= 1 (  0358)     18.814      0.390      2.33      48.21

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  7.44
                  TIME SHIFT OF PEAK FLOW         (min)= 80.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.6521

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
```

```
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
 0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
 0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
 0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
 0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
 0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
 0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
 0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
 0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Max.Eff.Inten.(mm/hr)=     162.35        68.75
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.47 (ii)    9.67 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.11
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.11         0.02          0.124 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08          1.00
     RUNOFF VOLUME    (mm)=      63.54        25.07         45.64
     TOTAL RAINFALL   (mm)=      64.54        64.54         64.54
     RUNOFF COEFFICIENT   =       0.98         0.39          0.71

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0358):    18.81   0.390     2.33    48.21
     + ID2= 2 (  0359):     0.45   0.124     1.00    45.64
       ================================================
       ID = 3 (  0370):    19.26   0.399     2.33    48.15

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

    Unit Hyd Qpeak  (cms)=   0.080

    PEAK FLOW       (cms)=   0.038 (i)
    TIME TO PEAK    (hrs)=   1.583
    RUNOFF VOLUME    (mm)=  21.710
    TOTAL RAINFALL   (mm)=  64.542
    RUNOFF COEFFICIENT   =   0.336

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------
                         IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.16         0.62
    Dep. Storage     (mm)=       5.00         5.00
    Average Slope     (%)=       1.00         2.00
    Length            (m)=      72.11        40.00
```

```
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

    Max.Eff.Inten.(mm/hr)=    162.35        59.31
              over (min)        5.00        15.00
    Storage Coeff.  (min)=     1.73 (ii)   10.43 (ii)
    Unit Hyd. Tpeak (min)=     5.00        15.00
    Unit Hyd. peak  (cms)=     0.32         0.09
                                                    *TOTALS*
    PEAK FLOW       (cms)=     0.05         0.06         0.081 (iii)
    TIME TO PEAK    (hrs)=     1.00         1.17         1.00
    RUNOFF VOLUME    (mm)=    59.54        24.89        30.08
    TOTAL RAINFALL   (mm)=    64.54        64.54        64.54
    RUNOFF COEFFICIENT   =     0.92         0.39         0.47

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                           AREA     QPEAK   TPEAK     R.V.
                           (ha)     (cms)   (hrs)     (mm)
  INFLOW : ID= 8(  0025)    0.09     0.09    1.00    52.83
  OUTFLOW: ID= 2(  0026)    0.09     0.09    1.00    52.83
```

```
  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0018):     0.78   0.081     1.00    30.08
     + ID2= 2 (  0026):     0.09   0.088     1.00    52.83
       ================================================
       ID = 3 (  0361):     0.87   0.169     1.00    32.35

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.87   0.169     1.00    32.35
     + ID2= 2 (  0360):     1.02   0.038     1.58    21.71
       ================================================
       ID = 1 (  0361):     1.89   0.177     1.00    26.59

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
--------------------
                         IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.35         1.02
    Dep. Storage     (mm)=       1.00         5.00
    Average Slope     (%)=       1.00         2.00
    Length            (m)=      95.57        40.00
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
   0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
   0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
   0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
   0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
   0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
   0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
```

```
   0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
   0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
   0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

    Max.Eff.Inten.(mm/hr)=    162.35        49.38
              over (min)        5.00        15.00
    Storage Coeff.  (min)=     2.05 (ii)   11.41 (ii)
    Unit Hyd. Tpeak (min)=     5.00        15.00
    Unit Hyd. peak  (cms)=     0.31         0.09
                                                    *TOTALS*
    PEAK FLOW       (cms)=     0.15         0.08         0.183 (iii)
    TIME TO PEAK    (hrs)=     1.00         1.17         1.00
    RUNOFF VOLUME    (mm)=    63.54        22.07        31.94
    TOTAL RAINFALL   (mm)=    64.54        64.54        64.54
    RUNOFF COEFFICIENT   =     0.98         0.34         0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |   0.1350     0.0340

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)      1.370     0.183      1.00      31.94
   OUTFLOW: ID= 1 (  0017)      1.370     0.062      1.42      31.89

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 33.75
                  TIME SHIFT OF PEAK FLOW         (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0155

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                         IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       0.26         0.13
    Dep. Storage     (mm)=       1.00         5.00
```

```
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n            =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    7.55 | 0.833   28.01 | 1.583   13.62 |  2.33    8.49
               0.167    7.55 | 0.917  162.35 | 1.667   13.62 |  2.42    7.83
               0.250    8.89 | 1.000  162.35 | 1.750   11.70 |  2.50    7.83
               0.333    8.89 | 1.083   34.38 | 1.833   11.70 |  2.58    7.28
               0.417   11.01 | 1.167   34.38 | 1.917   10.34 |  2.67    7.28
               0.500   11.01 | 1.250   21.68 | 2.000   10.34 |  2.75    6.82
               0.583   15.06 | 1.333   21.68 | 2.083    9.30 |  2.83    6.82
               0.667   15.06 | 1.417   16.53 | 2.167    9.30 |  2.92    6.42
               0.750   28.01 | 1.500   16.53 | 2.250    8.49 |  3.00    6.42

     Max.Eff.Inten.(mm/hr)=     162.35       232.77
                 over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.40 (ii)    6.44 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.14
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.06          0.080 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      63.54        37.65          41.52
     TOTAL RAINFALL   (mm)=      64.54        64.54          64.54
     RUNOFF COEFFICIENT   =       0.98         0.58           0.64

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0015):     0.39   0.080     1.00    41.52
      + ID2= 2 (  0017):     1.37   0.062     1.42    31.89
```

```
           ================================================
           ID = 3 (  0016):     1.76   0.115     1.08    34.03

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\e7623
c75-8e36-41a9-8fcc-f8a6c3028cb1\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\e7623
c75-8e36-41a9-8fcc-f8a6c3028cb1\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:



COMMENTS: _____


--------------------------------------------------------------------------------
----------------------
  ************************************************
  ** SIMULATION : F. 100yr 3hr 10min Chicago    **
  ************************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 892.273
| Ptotal= 70.94 mm |                          B=   0.000
--------------------                          C=   0.699
```

```
                          used in:   INTENSITY =  A / (t + B)^C

                          Duration of storm  =  3.00 hrs
                          Storm time step    = 10.00 min
                          Time to peak ratio =  0.33

                    TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                     hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                    0.00    8.30 |  0.83  178.44 |  1.67   12.86 |  2.50    8.00
                    0.17    9.77 |  1.00   37.79 |  1.83   11.36 |  2.67    7.50
                    0.33   12.10 |  1.17   23.83 |  2.00   10.23 |  2.83    7.06
                    0.50   16.55 |  1.33   18.17 |  2.17    9.33 |
                    0.67   30.79 |  1.50   14.97 |  2.33    8.61 |


--------------------------------------------------------------------------------
-------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

    Unit Hyd Qpeak  (cms)=   0.094

    PEAK FLOW       (cms)=   0.040 (i)
    TIME TO PEAK    (hrs)=   1.167
    RUNOFF VOLUME    (mm)=  25.575
    TOTAL RAINFALL   (mm)=  70.941
    RUNOFF COEFFICIENT   =   0.361

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
```

```
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44        56.81
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.58 (ii)   11.43 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.29         0.09
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.90         0.13          0.961 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      69.94        25.62          50.00
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.99         0.36           0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
```

```
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.1340     0.1430
                          0.0270     0.0810   |  0.1670     0.1580
                          0.0620     0.1060   |  0.1980     0.1750
                          0.0930     0.1230   |  0.0000     0.0000

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0002)      3.350     0.961      1.00      50.00
   OUTFLOW: ID= 1 (  0004)      3.350     0.081      2.17      49.77

                   PEAK   FLOW   REDUCTION [Qout/Qin](%)=  8.48
                   TIME SHIFT OF PEAK FLOW         (min)= 70.00
                   MAXIMUM  STORAGE   USED       (ha.m.)=  0.1167

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.040     1.17    25.58
     + ID2= 2 (  0004):     3.35   0.081     2.17    49.77
       ================================================
       ID = 3 (  0003):     3.84   0.091     1.92    46.68

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
```

```
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44        56.81
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.05 (ii)   10.90 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.09
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.38         0.07          0.418 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      69.94        25.62          47.78
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.99         0.36           0.67

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0356)|   Area    (ha)=  16.63
|ID= 1 DT= 5.0 min |   Total Imp(%)=  68.80   Dir. Conn.(%)=  60.50
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      11.44         5.19
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     332.97        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
```

```
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44     ********
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       4.17 (ii)    8.47 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.24         0.12
                                                      *TOTALS*
     PEAK FLOW       (cms)=       4.61         0.85          5.276 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      69.94        30.13          54.22
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.99         0.42           0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
```

```
              0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
              0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
              0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
              0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
              0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44     ********
               over (min)        5.00       10.00
     Storage Coeff.  (min)=      1.62 (ii)    5.12 (ii)
     Unit Hyd. Tpeak (min)=      5.00       10.00
     Unit Hyd. peak  (cms)=      0.32        0.16
                                                  *TOTALS*
     PEAK FLOW       (cms)=      0.25        0.03          0.278 (iii)
     TIME TO PEAK    (hrs)=      1.00        1.08           1.00
     RUNOFF VOLUME    (mm)=     69.94       30.78          58.66
     TOTAL RAINFALL   (mm)=     70.94       70.94          70.94
     RUNOFF COEFFICIENT   =      0.99        0.43           0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK     R.V.
--------------------      (ha)     (cms)     (hrs)     (mm)
     TOTAL HYD.(ID= 1):   0.71      0.28      1.00    58.66
     ================================================
     MAJOR SYS.(ID= 2):   0.10      0.12      1.00    58.66
     MINOR SYS.(ID= 3):   0.61      0.16      0.92    58.66

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                           AREA     QPEAK    TPEAK     R.V.
                           (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.61      0.16    0.92     58.66
  OUTFLOW: ID= 2(  0024)    0.61      0.16    0.92     58.66
```

```
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.61   0.162     0.92    58.66
     + ID2= 2 (  0355):     1.56   0.418     1.00    47.78
       ================================================
       ID = 3 (  0357):     2.17   0.580     1.00    50.82

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.17   0.580     1.00    50.82
     + ID2= 2 (  0356):    16.63   5.276     1.00    54.22
       ================================================
       ID = 1 (  0357):    18.80   5.856     1.00    53.83

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.796      5.856      1.00      53.83
   OUTFLOW: ID= 1 (  0358)     18.796      0.480      2.17      53.77

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  8.20
                  TIME SHIFT OF PEAK FLOW         (min)= 70.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.7094

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
```

```
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44     ********
               over (min)        5.00       10.00
     Storage Coeff.  (min)=      1.41 (ii)    6.30 (ii)
     Unit Hyd. Tpeak (min)=      5.00       10.00
     Unit Hyd. peak  (cms)=      0.33        0.15
                                                  *TOTALS*
     PEAK FLOW       (cms)=      0.12        0.03          0.143 (iii)
     TIME TO PEAK    (hrs)=      1.00        1.08           1.00
     RUNOFF VOLUME    (mm)=     69.94       29.37          51.07
     TOTAL RAINFALL   (mm)=     70.94       70.94          70.94
     RUNOFF COEFFICIENT   =      0.99        0.41           0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0358):    18.80   0.480     2.17    53.77
     + ID2= 2 (  0359):     0.45   0.143     1.00    51.07
       ================================================
       ID = 3 (  0370):    19.25   0.491     2.17    53.71

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.045 (i)
     TIME TO PEAK    (hrs)=   1.583
     RUNOFF VOLUME    (mm)=  25.622
     TOTAL RAINFALL   (mm)=  70.941
     RUNOFF COEFFICIENT   =   0.361

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
```

```
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44        70.64
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.67 (ii)    9.78 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.11
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.06         0.08          0.117 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      65.94        29.20          34.71
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.93         0.41           0.49

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  74.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 8(  0025)    0.10     0.12    1.00    58.66
  OUTFLOW: ID= 2(  0026)    0.10     0.12    1.00    58.66
```

```
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0018):     0.78   0.117     1.00    34.71
     + ID2= 2 (  0026):     0.10   0.115     1.00    58.66
       ================================================
       ID = 3 (  0361):     0.88   0.232     1.00    37.53

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.88   0.232     1.00    37.53
     + ID2= 2 (  0360):     1.02   0.045     1.58    25.62
       ================================================
       ID = 1 (  0361):     1.90   0.241     1.00    31.15

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.35         1.02
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      95.57        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
```

```
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44        59.13
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.97 (ii)   10.68 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.09
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.16         0.09          0.207 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.17           1.00
     RUNOFF VOLUME    (mm)=      69.94        26.02          36.47
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.99         0.37           0.51

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.1350     0.0340

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)    1.370     0.207     1.00      36.47
   OUTFLOW: ID= 1 (  0017)    1.370     0.071     1.42      36.43

                PEAK   FLOW   REDUCTION [Qout/Qin](%)= 34.43
                TIME SHIFT OF PEAK FLOW         (min)= 25.00
                MAXIMUM  STORAGE   USED       (ha.m.)=  0.0180

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
     Dep. Storage     (mm)=       1.00         5.00
```

```
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    8.30 | 0.833   30.79 | 1.583   14.97 |  2.33    9.33
               0.167    8.30 | 0.917  178.44 | 1.667   14.97 |  2.42    8.61
               0.250    9.77 | 1.000  178.44 | 1.750   12.86 |  2.50    8.61
               0.333    9.77 | 1.083   37.79 | 1.833   12.86 |  2.58    8.00
               0.417   12.10 | 1.167   37.79 | 1.917   11.36 |  2.67    8.00
               0.500   12.10 | 1.250   23.83 | 2.000   11.36 |  2.75    7.50
               0.583   16.55 | 1.333   23.83 | 2.083   10.23 |  2.83    7.50
               0.667   16.55 | 1.417   18.17 | 2.167   10.23 |  2.92    7.06
               0.750   30.79 | 1.500   18.17 | 2.250    9.33 |  3.00    7.06

     Max.Eff.Inten.(mm/hr)=     178.44       268.90
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.35 (ii)    6.10 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.15
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.07          0.093 (iii)
     TIME TO PEAK    (hrs)=       1.00         1.08           1.00
     RUNOFF VOLUME    (mm)=      69.94        43.09          47.11
     TOTAL RAINFALL   (mm)=      70.94        70.94          70.94
     RUNOFF COEFFICIENT   =       0.99         0.61           0.66

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.093     1.00    47.11
     + ID2= 2 (  0017):     1.37   0.071     1.42    36.43
```

```
       ==================================================
       ID = 3 (  0016):     1.76   0.132     1.08    38.80

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\452a4
938-6be4-49c9-ae33-c2484ec632d7\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\452a4
938-6be4-49c9-ae33-c2484ec632d7\scena


DATE: 05-25-2023                          TIME: 09:50:41

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ************************************************
  ** SIMULATION : G. 2yr 24hr 15min SCS Type II **
  ************************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\719a2500
| Ptotal= 60.13 mm |    Comments: G. 2yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.08	12.50	8.66	18.75	1.08
0.25	0.66	6.50	1.08	12.75	4.45	19.00	1.08
0.50	0.66	6.75	1.08	13.00	4.45	19.25	1.08
0.75	0.66	7.00	1.08	13.25	3.25	19.50	1.08
1.00	0.66	7.25	1.32	13.50	3.25	19.75	1.08
1.25	0.66	7.50	1.32	13.75	2.53	20.00	1.08
1.50	0.66	7.75	1.32	14.00	2.53	20.25	0.72
1.75	0.66	8.00	1.32	14.25	1.80	20.50	0.72
2.00	0.66	8.25	1.56	14.50	1.80	20.75	0.72
2.25	0.78	8.50	1.56	14.75	1.80	21.00	0.72
2.50	0.78	8.75	1.68	15.00	1.80	21.25	0.72
2.75	0.78	9.00	1.68	15.25	1.80	21.50	0.72
3.00	0.78	9.25	1.92	15.50	1.80	21.75	0.72
3.25	0.78	9.50	1.92	15.75	1.80	22.00	0.72
3.50	0.78	9.75	2.16	16.00	1.80	22.25	0.72
3.75	0.78	10.00	2.16	16.25	1.08	22.50	0.72
4.00	0.78	10.25	2.77	16.50	1.08	22.75	0.72
4.25	0.96	10.50	2.77	16.75	1.08	23.00	0.72
4.50	0.96	10.75	3.73	17.00	1.08	23.25	0.72
4.75	0.96	11.00	3.73	17.25	1.08	23.50	0.72
5.00	0.96	11.25	5.77	17.50	1.08	23.75	0.72
5.25	0.96	11.50	5.77	17.75	1.08	24.00	0.72
5.50	0.96	11.75	17.80	18.00	1.08		
5.75	0.96	12.00	73.60	18.25	1.08		
6.00	0.96	12.25	8.66	18.50	1.08		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72

4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 19.093
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.318

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0002)
ID= 1 DT= 5.0 min

Area (ha)= 3.35
Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.51
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	149.44	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)=	73.60	26.06	
over (min)	5.00	20.00	
Storage Coeff. (min)=	3.68 (ii)	15.76 (ii)	
Unit Hyd. Tpeak (min)=	5.00	20.00	
Unit Hyd. peak (cms)=	0.25	0.07	
			TOTALS
PEAK FLOW (cms)=	0.37	0.06	0.410 (iii)
TIME TO PEAK (hrs)=	12.25	12.42	12.25
RUNOFF VOLUME (mm)=	59.13	19.13	41.13
TOTAL RAINFALL (mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT =	0.98	0.32	0.68

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)
IN= 2---> OUT= 1
DT= 5.0 min

OVERFLOW IS OFF

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1340	0.1430
0.0270	0.0810	0.1670	0.1580
0.0620	0.1060	0.1980	0.1750
0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.410	12.25	41.13
OUTFLOW: ID= 1 (0004)	3.350	0.027	13.50	40.90

PEAK FLOW REDUCTION [Qout/Qin](%)= 6.52
TIME SHIFT OF PEAK FLOW (min)= 75.00
MAXIMUM STORAGE USED (ha.m.)= 0.0802

ADD HYD (0003)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	0.49	0.024	12.33	19.09
+ ID2= 2 (0004):	3.35	0.027	13.50	40.90
ID = 3 (0003):	3.84	0.045	12.33	38.12

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (0355)
ID= 1 DT= 5.0 min

Area (ha)= 1.56
Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.78	0.78
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	101.98	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08

0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)=		73.60	26.06	
	over (min)	5.00	20.00	
Storage Coeff. (min)=		2.92 (ii)	15.01 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.28	0.07	
				TOTALS
PEAK FLOW	(cms)=	0.16	0.03	0.179 (iii)
TIME TO PEAK	(hrs)=	12.25	12.42	12.25
RUNOFF VOLUME	(mm)=	59.13	19.13	39.12
TOTAL RAINFALL	(mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT	=	0.98	0.32	0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0356)
ID= 1 DT= 5.0 min

Area (ha)= 16.63
Total Imp(%)= 68.80 Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)=		73.60	42.90	
	over (min)	5.00	20.00	
Storage Coeff. (min)=		5.94 (ii)	15.84 (ii)	
Unit Hyd. Tpeak (min)=		5.00	20.00	
Unit Hyd. peak (cms)=		0.19	0.07	
				TOTALS
PEAK FLOW	(cms)=	1.93	0.31	2.135 (iii)
TIME TO PEAK	(hrs)=	12.25	12.42	12.25
RUNOFF VOLUME	(mm)=	59.13	22.85	44.80
TOTAL RAINFALL	(mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT	=	0.98	0.38	0.75

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 6.167    0.96 |12.250   73.60 | 18.33    1.08
               0.167    0.00 | 6.250    0.96 |12.333    8.67 | 18.42    1.08
               0.250    0.00 | 6.333    1.08 |12.417    8.66 | 18.50    1.08
               0.333    0.66 | 6.417    1.08 |12.500    8.66 | 18.58    1.08
               0.417    0.66 | 6.500    1.08 |12.583    8.66 | 18.67    1.08
               0.500    0.66 | 6.583    1.08 |12.667    8.66 | 18.75    1.08
               0.583    0.66 | 6.667    1.08 |12.750    8.66 | 18.83    1.08
               0.667    0.66 | 6.750    1.08 |12.833    4.45 | 18.92    1.08
               0.750    0.66 | 6.833    1.08 |12.917    4.45 | 19.00    1.08
               0.833    0.66 | 6.917    1.08 |13.000    4.45 | 19.08    1.08
               0.917    0.66 | 7.000    1.08 |13.083    4.45 | 19.17    1.08
               1.000    0.66 | 7.083    1.08 |13.167    4.45 | 19.25    1.08
               1.083    0.66 | 7.167    1.08 |13.250    4.45 | 19.33    1.08
               1.167    0.66 | 7.250    1.08 |13.333    3.25 | 19.42    1.08
               1.250    0.66 | 7.333    1.32 |13.417    3.25 | 19.50    1.08
               1.333    0.66 | 7.417    1.32 |13.500    3.25 | 19.58    1.08
               1.417    0.66 | 7.500    1.32 |13.583    3.25 | 19.67    1.08
               1.500    0.66 | 7.583    1.32 |13.667    3.25 | 19.75    1.08
               1.583    0.66 | 7.667    1.32 |13.750    3.25 | 19.83    1.08
               1.667    0.66 | 7.750    1.32 |13.833    2.53 | 19.92    1.08
               1.750    0.66 | 7.833    1.32 |13.917    2.53 | 20.00    1.08
               1.833    0.66 | 7.917    1.32 |14.000    2.53 | 20.08    1.08
               1.917    0.66 | 8.000    1.32 |14.083    2.53 | 20.17    1.08
               2.000    0.66 | 8.083    1.32 |14.167    2.53 | 20.25    1.08
               2.083    0.66 | 8.167    1.32 |14.250    2.53 | 20.33    0.72
               2.167    0.66 | 8.250    1.32 |14.333    1.80 | 20.42    0.72
               2.250    0.66 | 8.333    1.56 |14.417    1.80 | 20.50    0.72
               2.333    0.78 | 8.417    1.56 |14.500    1.80 | 20.58    0.72
               2.417    0.78 | 8.500    1.56 |14.583    1.80 | 20.67    0.72
               2.500    0.78 | 8.583    1.56 |14.667    1.80 | 20.75    0.72
               2.583    0.78 | 8.667    1.56 |14.750    1.80 | 20.83    0.72
               2.667    0.78 | 8.750    1.56 |14.833    1.80 | 20.92    0.72
               2.750    0.78 | 8.833    1.68 |14.917    1.80 | 21.00    0.72
               2.833    0.78 | 8.917    1.68 |15.000    1.80 | 21.08    0.72
               2.917    0.78 | 9.000    1.68 |15.083    1.80 | 21.17    0.72
               3.000    0.78 | 9.083    1.68 |15.167    1.80 | 21.25    0.72
               3.083    0.78 | 9.167    1.68 |15.250    1.80 | 21.33    0.72
               3.167    0.78 | 9.250    1.68 |15.333    1.80 | 21.42    0.72
               3.250    0.78 | 9.333    1.92 |15.417    1.80 | 21.50    0.72
               3.333    0.78 | 9.417    1.92 |15.500    1.80 | 21.58    0.72
               3.417    0.78 | 9.500    1.92 |15.583    1.80 | 21.67    0.72
               3.500    0.78 | 9.583    1.92 |15.667    1.80 | 21.75    0.72
               3.583    0.78 | 9.667    1.92 |15.750    1.80 | 21.83    0.72
               3.667    0.78 | 9.750    1.92 |15.833    1.80 | 21.92    0.72
               3.750    0.78 | 9.833    2.16 |15.917    1.80 | 22.00    0.72
               3.833    0.78 | 9.917    2.16 |16.000    1.80 | 22.08    0.72
               3.917    0.78 |10.000    2.16 |16.083    1.80 | 22.17    0.72
               4.000    0.78 |10.083    2.16 |16.167    1.80 | 22.25    0.72
               4.083    0.78 |10.167    2.16 |16.250    1.80 | 22.33    0.72
               4.167    0.78 |10.250    2.16 |16.333    1.08 | 22.42    0.72
               4.250    0.78 |10.333    2.77 |16.417    1.08 | 22.50    0.72
               4.333    0.96 |10.417    2.77 |16.500    1.08 | 22.58    0.72
               4.417    0.96 |10.500    2.77 |16.583    1.08 | 22.67    0.72
               4.500    0.96 |10.583    2.77 |16.667    1.08 | 22.75    0.72
               4.583    0.96 |10.667    2.77 |16.750    1.08 | 22.83    0.72
               4.667    0.96 |10.750    2.77 |16.833    1.08 | 22.92    0.72
               4.750    0.96 |10.833    3.73 |16.917    1.08 | 23.00    0.72
               4.833    0.96 |10.917    3.73 |17.000    1.08 | 23.08    0.72
               4.917    0.96 |11.000    3.73 |17.083    1.08 | 23.17    0.72
               5.000    0.96 |11.083    3.73 |17.167    1.08 | 23.25    0.72
               5.083    0.96 |11.167    3.73 |17.250    1.08 | 23.33    0.72
               5.167    0.96 |11.250    3.73 |17.333    1.08 | 23.42    0.72
               5.250    0.96 |11.333    5.77 |17.417    1.08 | 23.50    0.72
               5.333    0.96 |11.417    5.77 |17.500    1.08 | 23.58    0.72
               5.417    0.96 |11.500    5.77 |17.583    1.08 | 23.67    0.72
               5.500    0.96 |11.583    5.77 |17.667    1.08 | 23.75    0.72
               5.583    0.96 |11.667    5.77 |17.750    1.08 | 23.83    0.72
               5.667    0.96 |11.750    5.77 |17.833    1.08 | 23.92    0.72
               5.750    0.96 |11.833   17.80 |17.917    1.08 | 24.00    0.72
               5.833    0.96 |11.917   17.80 |18.000    1.08 | 24.08    0.72
               5.917    0.96 |12.000   17.80 |18.083    1.08 | 24.17    0.72
               6.000    0.96 |12.083   73.59 |18.167    1.08 | 24.25    0.72
               6.083    0.96 |12.167   73.60 |18.250    1.08 |

     Max.Eff.Inten.(mm/hr)=      73.60        45.41
               over (min)        5.00        10.00
     Storage Coeff.  (min)=      2.31 (ii)    7.30 (ii)
     Unit Hyd. Tpeak (min)=      5.00        10.00
     Unit Hyd. peak  (cms)=      0.30         0.14
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.10         0.02          0.118 (iii)
     TIME TO PEAK    (hrs)=     12.25        12.25          12.25

     RUNOFF VOLUME    (mm)=     59.13        23.39          48.83
     TOTAL RAINFALL   (mm)=     60.13        60.13          60.13
     RUNOFF COEFFICIENT   =      0.98         0.39           0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.12     12.25   48.83
     ==================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00    0.00
     MINOR SYS.(ID= 3):   0.71      0.12     12.25   48.83

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK    TPEAK     R.V.
                          (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.12    12.25    48.83
  OUTFLOW: ID= 2(  0024)    0.71     0.12    12.25    48.83

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK     TPEAK     R.V.
--------------------         (ha)    (cms)     (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.118    12.25    48.83
     + ID2= 2 (  0355):     1.56   0.179    12.25    39.12
       ==================================================
       ID = 3 (  0357):     2.27   0.298    12.25    42.16

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK     TPEAK     R.V.
--------------------         (ha)    (cms)     (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.298    12.25    42.16
     + ID2= 2 (  0356):    16.63   2.135    12.25    44.80
       ==================================================
       ID = 1 (  0357):    18.90   2.433    12.25    44.48

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.900     2.433     12.25      44.48
   OUTFLOW: ID= 1 (  0358)     18.900     0.223     13.25      44.43

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  9.18
                  TIME SHIFT OF PEAK FLOW         (min)= 60.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.4874

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
```

0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)=	73.60	37.16	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.01 (ii)	12.50 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.31	0.08	
			TOTALS
PEAK FLOW (cms)=	0.05	0.01	0.059 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	59.13	22.22	41.95
TOTAL RAINFALL (mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT =	0.98	0.37	0.70

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0370)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
ID1= 1 (0358):	18.90	0.223	13.25	44.43	
+ ID2= 2 (0359):	0.45	0.059	12.25	41.95	
ID = 3 (0370):	19.35	0.228	13.17	44.37	

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB				
NASHYD (0360)|	Area	(ha)=	1.02	Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min |	Ia	(mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=		0.49	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Unit Hyd Qpeak (cms)= 0.080

PEAK FLOW (cms)= 0.026 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 19.128
TOTAL RAINFALL (mm)= 60.130
RUNOFF COEFFICIENT = 0.318

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB STANDHYD (0018) ID= 1 DT= 5.0 min	Area (ha)= 0.78 Total Imp(%)= 20.00 Dir. Conn.(%)= 15.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.16	0.62
Dep. Storage (mm)=	5.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	72.11	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)=	73.60	32.24
over (min)	5.00	15.00
Storage Coeff. (min)=	2.37 (ii)	13.47 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.30	0.08
		TOTALS
PEAK FLOW (cms)=	0.02	0.03 0.053 (iii)
TIME TO PEAK (hrs)=	12.25	12.33 12.25
RUNOFF VOLUME (mm)=	55.13	22.03 26.99
TOTAL RAINFALL (mm)=	60.13	60.13 60.13
RUNOFF COEFFICIENT =	0.92	0.37 0.45

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.00	0.00	0.00	0.00
OUTFLOW: ID= 2(0026)	0.00	0.00	0.00	0.00

ADD HYD (0361) 1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)

*** W A R N I N G : HYDROGRAPH 0026 <ID= 2> IS DRY.
*** W A R N I N G : HYDROGRAPH 0003 = HYDROGRAPH 0001

ID1= 1 (0018):	0.78	0.053	12.25	26.99
+ ID2= 2 (0026):	0.00	0.000	0.00	0.00
ID = 3 (0361):	0.78	0.053	12.25	26.99

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361) 3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0361):	0.78	0.053	12.25	26.99
+ ID2= 2 (0360):	1.02	0.026	12.67	19.13
ID = 1 (0361):	1.80	0.065	12.25	22.53

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB STANDHYD (0007) ID= 1 DT= 5.0 min	Area (ha)= 1.37 Total Imp(%)= 25.40 Dir. Conn.(%)= 23.80

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.35	1.02
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	95.57	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72

2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)= 73.60 27.10
over (min) 5.00 15.00

Storage Coeff. (min)= 2.81 (ii) 14.71 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.28 0.08

			TOTALS
PEAK FLOW	(cms)=	0.07	0.05	0.104 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.25
RUNOFF VOLUME	(mm)=	59.13	19.46	28.89
TOTAL RAINFALL	(mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT	=	0.98	0.32	0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0017)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	OUTFLOW (cms) / STORAGE (ha.m.)	OUTFLOW (cms) / STORAGE (ha.m.)
	0.0000 / 0.0000	0.1350 / 0.0340

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0007)	1.370	0.104	12.25	28.89
OUTFLOW: ID= 1 (0017)	1.370	0.039	12.58	28.85

PEAK FLOW REDUCTION [Qout/Qin](%)= 37.79
TIME SHIFT OF PEAK FLOW (min)= 20.00
MAXIMUM STORAGE USED (ha.m.)= 0.0099

CALIB	
STANDHYD (0015)	Area (ha)= 0.39
ID= 1 DT= 5.0 min	Total Imp(%)= 66.10 Dir. Conn.(%)= 15.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.26	0.13
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	0.96	12.250	73.60	18.33	1.08
0.167	0.00	6.250	0.96	12.333	8.67	18.42	1.08
0.250	0.00	6.333	1.08	12.417	8.66	18.50	1.08
0.333	0.66	6.417	1.08	12.500	8.66	18.58	1.08
0.417	0.66	6.500	1.08	12.583	8.66	18.67	1.08
0.500	0.66	6.583	1.08	12.667	8.66	18.75	1.08
0.583	0.66	6.667	1.08	12.750	8.66	18.83	1.08
0.667	0.66	6.750	1.08	12.833	4.45	18.92	1.08
0.750	0.66	6.833	1.08	12.917	4.45	19.00	1.08
0.833	0.66	6.917	1.08	13.000	4.45	19.08	1.08
0.917	0.66	7.000	1.08	13.083	4.45	19.17	1.08
1.000	0.66	7.083	1.08	13.167	4.45	19.25	1.08
1.083	0.66	7.167	1.08	13.250	4.45	19.33	1.08
1.167	0.66	7.250	1.08	13.333	3.25	19.42	1.08
1.250	0.66	7.333	1.32	13.417	3.25	19.50	1.08
1.333	0.66	7.417	1.32	13.500	3.25	19.58	1.08
1.417	0.66	7.500	1.32	13.583	3.25	19.67	1.08
1.500	0.66	7.583	1.32	13.667	3.25	19.75	1.08
1.583	0.66	7.667	1.32	13.750	3.25	19.83	1.08
1.667	0.66	7.750	1.32	13.833	2.53	19.92	1.08
1.750	0.66	7.833	1.32	13.917	2.53	20.00	1.08
1.833	0.66	7.917	1.32	14.000	2.53	20.08	1.08
1.917	0.66	8.000	1.32	14.083	2.53	20.17	1.08
2.000	0.66	8.083	1.32	14.167	2.53	20.25	1.08
2.083	0.66	8.167	1.32	14.250	2.53	20.33	0.72
2.167	0.66	8.250	1.32	14.333	1.80	20.42	0.72
2.250	0.66	8.333	1.56	14.417	1.80	20.50	0.72
2.333	0.78	8.417	1.56	14.500	1.80	20.58	0.72
2.417	0.78	8.500	1.56	14.583	1.80	20.67	0.72
2.500	0.78	8.583	1.56	14.667	1.80	20.75	0.72
2.583	0.78	8.667	1.56	14.750	1.80	20.83	0.72
2.667	0.78	8.750	1.56	14.833	1.80	20.92	0.72
2.750	0.78	8.833	1.68	14.917	1.80	21.00	0.72
2.833	0.78	8.917	1.68	15.000	1.80	21.08	0.72
2.917	0.78	9.000	1.68	15.083	1.80	21.17	0.72
3.000	0.78	9.083	1.68	15.167	1.80	21.25	0.72
3.083	0.78	9.167	1.68	15.250	1.80	21.33	0.72
3.167	0.78	9.250	1.68	15.333	1.80	21.42	0.72
3.250	0.78	9.333	1.92	15.417	1.80	21.50	0.72
3.333	0.78	9.417	1.92	15.500	1.80	21.58	0.72
3.417	0.78	9.500	1.92	15.583	1.80	21.67	0.72
3.500	0.78	9.583	1.92	15.667	1.80	21.75	0.72
3.583	0.78	9.667	1.92	15.750	1.80	21.83	0.72
3.667	0.78	9.750	1.92	15.833	1.80	21.92	0.72
3.750	0.78	9.833	2.16	15.917	1.80	22.00	0.72
3.833	0.78	9.917	2.16	16.000	1.80	22.08	0.72
3.917	0.78	10.000	2.16	16.083	1.80	22.17	0.72
4.000	0.78	10.083	2.16	16.167	1.80	22.25	0.72
4.083	0.78	10.167	2.16	16.250	1.80	22.33	0.72
4.167	0.78	10.250	2.16	16.333	1.08	22.42	0.72
4.250	0.78	10.333	2.77	16.417	1.08	22.50	0.72
4.333	0.96	10.417	2.77	16.500	1.08	22.58	0.72
4.417	0.96	10.500	2.77	16.583	1.08	22.67	0.72
4.500	0.96	10.583	2.77	16.667	1.08	22.75	0.72
4.583	0.96	10.667	2.77	16.750	1.08	22.83	0.72
4.667	0.96	10.750	2.77	16.833	1.08	22.92	0.72
4.750	0.96	10.833	3.73	16.917	1.08	23.00	0.72
4.833	0.96	10.917	3.73	17.000	1.08	23.08	0.72
4.917	0.96	11.000	3.73	17.083	1.08	23.17	0.72
5.000	0.96	11.083	3.73	17.167	1.08	23.25	0.72
5.083	0.96	11.167	3.73	17.250	1.08	23.33	0.72
5.167	0.96	11.250	3.73	17.333	1.08	23.42	0.72
5.250	0.96	11.333	5.77	17.417	1.08	23.50	0.72
5.333	0.96	11.417	5.77	17.500	1.08	23.58	0.72
5.417	0.96	11.500	5.77	17.583	1.08	23.67	0.72
5.500	0.96	11.583	5.77	17.667	1.08	23.75	0.72
5.583	0.96	11.667	5.77	17.750	1.08	23.83	0.72
5.667	0.96	11.750	5.77	17.833	1.08	23.92	0.72
5.750	0.96	11.833	17.80	17.917	1.08	24.00	0.72
5.833	0.96	11.917	17.80	18.000	1.08	24.08	0.72
5.917	0.96	12.000	17.80	18.083	1.08	24.17	0.72
6.000	0.96	12.083	73.59	18.167	1.08	24.25	0.72
6.083	0.96	12.167	73.60	18.250	1.08		

Max.Eff.Inten.(mm/hr)= 73.60 125.02
over (min) 5.00 10.00
Storage Coeff. (min)= 1.93 (ii) 8.38 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.31 0.12

			TOTALS
PEAK FLOW	(cms)=	0.01	0.03	0.047 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	59.13	33.96	37.73
TOTAL RAINFALL	(mm)=	60.13	60.13	60.13
RUNOFF COEFFICIENT	=	0.98	0.56	0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.047    12.25    37.73
     + ID2= 2 (  0017):     1.37   0.039    12.58    28.85
       ================================================
       ID = 3 (  0016):     1.76   0.076    12.25    30.82

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\0b2d0
d13-31a1-4bb0-84ab-bf64a60a2ee2\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\0b2d0
d13-31a1-4bb0-84ab-bf64a60a2ee2\scena


DATE: 05-25-2023                          TIME: 09:50:41

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : H. 5yr 24hr 15min SCS Type II **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\7c8cbce6
| Ptotal= 79.65 mm |    Comments: H. 5yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.43	12.50	11.47	18.75	1.43
0.25	0.88	6.50	1.43	12.75	5.89	19.00	1.43
0.50	0.88	6.75	1.43	13.00	5.89	19.25	1.43
0.75	0.88	7.00	1.43	13.25	4.30	19.50	1.43
1.00	0.88	7.25	1.75	13.50	4.30	19.75	1.43
1.25	0.88	7.50	1.75	13.75	3.35	20.00	1.43
1.50	0.88	7.75	1.75	14.00	3.35	20.25	0.96
1.75	0.88	8.00	1.75	14.25	2.39	20.50	0.96
2.00	0.88	8.25	2.07	14.50	2.39	20.75	0.96
2.25	1.04	8.50	2.07	14.75	2.39	21.00	0.96
2.50	1.04	8.75	2.23	15.00	2.39	21.25	0.96
2.75	1.04	9.00	2.23	15.25	2.39	21.50	0.96
3.00	1.04	9.25	2.55	15.50	2.39	21.75	0.96
3.25	1.04	9.50	2.55	15.75	2.39	22.00	0.96
3.50	1.04	9.75	2.87	16.00	2.39	22.25	0.96
3.75	1.04	10.00	2.87	16.25	1.43	22.50	0.96
4.00	1.04	10.25	3.66	16.50	1.43	22.75	0.96
4.25	1.27	10.50	3.66	16.75	1.43	23.00	0.96
4.50	1.27	10.75	4.94	17.00	1.43	23.25	0.96
4.75	1.27	11.00	4.94	17.25	1.43	23.50	0.96
5.00	1.27	11.25	7.65	17.50	1.43	23.75	0.96
5.25	1.27	11.50	7.65	17.75	1.43	24.00	0.96
5.50	1.27	11.75	23.58	18.00	1.43		
5.75	1.27	12.00	97.49	18.25	1.43		
6.00	1.27	12.25	11.47	18.50	1.43		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96

4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.039 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 31.177
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.391

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0002)
ID= 1 DT= 5.0 min

Area (ha)= 3.35
Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.51
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	149.44	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)= 97.49 46.32
over (min) 5.00 15.00
Storage Coeff. (min)= 3.28 (ii) 12.89 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.08

			TOTALS
PEAK FLOW (cms)=	0.50	0.11	0.590 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	78.65	31.24	57.31
TOTAL RAINFALL (mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT =	0.99	0.39	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1340	0.1430
0.0270	0.0810	0.1670	0.1580
0.0620	0.1060	0.1980	0.1750
0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.590	12.25	57.31
OUTFLOW: ID= 1 (0004)	3.350	0.061	12.92	57.09

PEAK FLOW REDUCTION [Qout/Qin](%)= 10.37
TIME SHIFT OF PEAK FLOW (min)= 40.00
MAXIMUM STORAGE USED (ha.m.)= 0.1055

ADD HYD (0003)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	0.49	0.039	12.33	31.18
+ ID2= 2 (0004):	3.35	0.061	12.92	57.09
ID = 3 (0003):	3.84	0.081	12.42	53.78

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (0355)
ID= 1 DT= 5.0 min

Area (ha)= 1.56
Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.78	0.78
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	101.98	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43

0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=	97.49	46.32	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.61 (ii)	12.21 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.29	0.09	
			TOTALS
PEAK FLOW (cms)=	0.21	0.06	0.261 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	78.65	31.24	54.94
TOTAL RAINFALL (mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT =	0.99	0.39	0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0356)
ID= 1 DT= 5.0 min

Area (ha)= 16.63
Total Imp(%)= 68.80 Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=	97.49	68.11	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.31 (ii)	13.54 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.21	0.08	
			TOTALS
PEAK FLOW (cms)=	2.60	0.57	3.081 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	78.65	36.35	61.94
TOTAL RAINFALL (mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT =	0.99	0.46	0.78

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 6.167    1.27 |12.250   97.49 | 18.33    1.43
               0.167    0.00 | 6.250    1.27 |12.333   11.48 | 18.42    1.43
               0.250    0.00 | 6.333    1.43 |12.417   11.47 | 18.50    1.43
               0.333    0.88 | 6.417    1.43 |12.500   11.47 | 18.58    1.43
               0.417    0.88 | 6.500    1.43 |12.583   11.47 | 18.67    1.43
               0.500    0.88 | 6.583    1.43 |12.667   11.47 | 18.75    1.43
               0.583    0.88 | 6.667    1.43 |12.750   11.47 | 18.83    1.43
               0.667    0.88 | 6.750    1.43 |12.833    5.89 | 18.92    1.43
               0.750    0.88 | 6.833    1.43 |12.917    5.89 | 19.00    1.43
               0.833    0.88 | 6.917    1.43 |13.000    5.89 | 19.08    1.43
               0.917    0.88 | 7.000    1.43 |13.083    5.89 | 19.17    1.43
               1.000    0.88 | 7.083    1.43 |13.167    5.89 | 19.25    1.43
               1.083    0.88 | 7.167    1.43 |13.250    5.89 | 19.33    1.43
               1.167    0.88 | 7.250    1.43 |13.333    4.30 | 19.42    1.43
               1.250    0.88 | 7.333    1.75 |13.417    4.30 | 19.50    1.43
               1.333    0.88 | 7.417    1.75 |13.500    4.30 | 19.58    1.43
               1.417    0.88 | 7.500    1.75 |13.583    4.30 | 19.67    1.43
               1.500    0.88 | 7.583    1.75 |13.667    4.30 | 19.75    1.43
               1.583    0.88 | 7.667    1.75 |13.750    4.30 | 19.83    1.43
               1.667    0.88 | 7.750    1.75 |13.833    3.35 | 19.92    1.43
               1.750    0.88 | 7.833    1.75 |13.917    3.35 | 20.00    1.43
               1.833    0.88 | 7.917    1.75 |14.000    3.35 | 20.08    1.43
               1.917    0.88 | 8.000    1.75 |14.083    3.35 | 20.17    1.43
               2.000    0.88 | 8.083    1.75 |14.167    3.35 | 20.25    1.43
               2.083    0.88 | 8.167    1.75 |14.250    3.35 | 20.33    0.96
               2.167    0.88 | 8.250    1.75 |14.333    2.39 | 20.42    0.96
               2.250    0.88 | 8.333    2.07 |14.417    2.39 | 20.50    0.96
               2.333    1.04 | 8.417    2.07 |14.500    2.39 | 20.58    0.96
               2.417    1.04 | 8.500    2.07 |14.583    2.39 | 20.67    0.96
               2.500    1.04 | 8.583    2.07 |14.667    2.39 | 20.75    0.96
               2.583    1.04 | 8.667    2.07 |14.750    2.39 | 20.83    0.96
               2.667    1.04 | 8.750    2.07 |14.833    2.39 | 20.92    0.96
               2.750    1.04 | 8.833    2.23 |14.917    2.39 | 21.00    0.96
               2.833    1.04 | 8.917    2.23 |15.000    2.39 | 21.08    0.96
               2.917    1.04 | 9.000    2.23 |15.083    2.39 | 21.17    0.96
               3.000    1.04 | 9.083    2.23 |15.167    2.39 | 21.25    0.96
               3.083    1.04 | 9.167    2.23 |15.250    2.39 | 21.33    0.96
               3.167    1.04 | 9.250    2.23 |15.333    2.39 | 21.42    0.96
               3.250    1.04 | 9.333    2.55 |15.417    2.39 | 21.50    0.96
               3.333    1.04 | 9.417    2.55 |15.500    2.39 | 21.58    0.96
               3.417    1.04 | 9.500    2.55 |15.583    2.39 | 21.67    0.96
               3.500    1.04 | 9.583    2.55 |15.667    2.39 | 21.75    0.96
               3.583    1.04 | 9.667    2.55 |15.750    2.39 | 21.83    0.96
               3.667    1.04 | 9.750    2.55 |15.833    2.39 | 21.92    0.96
               3.750    1.04 | 9.833    2.87 |15.917    2.39 | 22.00    0.96
               3.833    1.04 | 9.917    2.87 |16.000    2.39 | 22.08    0.96
               3.917    1.04 |10.000    2.87 |16.083    2.39 | 22.17    0.96
               4.000    1.04 |10.083    2.87 |16.167    2.39 | 22.25    0.96
               4.083    1.04 |10.167    2.87 |16.250    2.39 | 22.33    0.96
               4.167    1.04 |10.250    2.87 |16.333    1.43 | 22.42    0.96
               4.250    1.04 |10.333    3.66 |16.417    1.43 | 22.50    0.96
               4.333    1.27 |10.417    3.66 |16.500    1.43 | 22.58    0.96
               4.417    1.27 |10.500    3.66 |16.583    1.43 | 22.67    0.96
               4.500    1.27 |10.583    3.66 |16.667    1.43 | 22.75    0.96
               4.583    1.27 |10.667    3.66 |16.750    1.43 | 22.83    0.96
               4.667    1.27 |10.750    3.66 |16.833    1.43 | 22.92    0.96
               4.750    1.27 |10.833    4.94 |16.917    1.43 | 23.00    0.96
               4.833    1.27 |10.917    4.94 |17.000    1.43 | 23.08    0.96
               4.917    1.27 |11.000    4.94 |17.083    1.43 | 23.17    0.96
               5.000    1.27 |11.083    4.94 |17.167    1.43 | 23.25    0.96
               5.083    1.27 |11.167    4.94 |17.250    1.43 | 23.33    0.96
               5.167    1.27 |11.250    4.94 |17.333    1.43 | 23.42    0.96
               5.250    1.27 |11.333    7.65 |17.417    1.43 | 23.50    0.96
               5.333    1.27 |11.417    7.65 |17.500    1.43 | 23.58    0.96
               5.417    1.27 |11.500    7.65 |17.583    1.43 | 23.67    0.96
               5.500    1.27 |11.583    7.65 |17.667    1.43 | 23.75    0.96
               5.583    1.27 |11.667    7.65 |17.750    1.43 | 23.83    0.96
               5.667    1.27 |11.750    7.65 |17.833    1.43 | 23.92    0.96
               5.750    1.27 |11.833   23.57 |17.917    1.43 | 24.00    0.96
               5.833    1.27 |11.917   23.58 |18.000    1.43 | 24.08    0.96
               5.917    1.27 |12.000   23.58 |18.083    1.43 | 24.17    0.96
               6.000    1.27 |12.083   97.48 |18.167    1.43 | 24.25    0.96
               6.083    1.27 |12.167   97.49 |18.250    1.43 |

     Max.Eff.Inten.(mm/hr)=      97.49        71.81
               over (min)        5.00        10.00
     Storage Coeff.  (min)=      2.06 (ii)    6.52 (ii)
     Unit Hyd. Tpeak (min)=      5.00        10.00
     Unit Hyd. peak  (cms)=      0.31         0.14
                                                        *TOTALS*
     PEAK FLOW       (cms)=      0.14         0.03          0.162 (iii)
     TIME TO PEAK    (hrs)=     12.25        12.25          12.25

     RUNOFF VOLUME    (mm)=     78.65        37.08          66.67
     TOTAL RAINFALL   (mm)=     79.65        79.65          79.65
     RUNOFF COEFFICIENT   =      0.99         0.47           0.84

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.16     12.25   66.67
     ==================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00    0.00
     MINOR SYS.(ID= 3):   0.71      0.16     12.25   66.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK    TPEAK     R.V.
                          (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.16   12.25    66.67
  OUTFLOW: ID= 2(  0024)    0.71     0.16   12.25    66.67

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.162    12.25    66.67
     + ID2= 2 (  0355):     1.56   0.261    12.25    54.94
       ==================================================
       ID = 3 (  0357):     2.27   0.423    12.25    58.61

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.423    12.25    58.61
     + ID2= 2 (  0356):    16.63   3.081    12.25    61.94
       ==================================================
       ID = 1 (  0357):    18.90   3.505    12.25    61.54

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.900     3.505     12.25      61.54
   OUTFLOW: ID= 1 (  0358)     18.900     0.388     12.92      61.49

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 11.08
                  TIME SHIFT OF PEAK FLOW         (min)= 40.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.6508

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
```

0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=	97.49	63.98	
over (min)	5.00	15.00	
Storage Coeff. (min)=	1.80 (ii)	10.24 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.32	0.09	
			TOTALS
PEAK FLOW (cms)=	0.07	0.02	0.082 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	78.65	35.50	58.57
TOTAL RAINFALL (mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT =	0.99	0.45	0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0370)	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3				

ID1= 1 (0358): 18.90 0.388 12.92 61.49
+ ID2= 2 (0359): 0.45 0.082 12.25 58.57
==========
ID = 3 (0370): 19.35 0.396 12.92 61.42

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
NASHYD (0360)	Area (ha)= 1.02 Curve Number (CN)= 71.0
ID= 1 DT= 5.0 min	Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
	U.H. Tp(hrs)= 0.49

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Unit Hyd Qpeak (cms)= 0.080

PEAK FLOW (cms)= 0.043 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 31.235
TOTAL RAINFALL (mm)= 79.650
RUNOFF COEFFICIENT = 0.392

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0018)	Area (ha)= 0.78
ID= 1 DT= 5.0 min	Total Imp(%)= 20.00 Dir. Conn.(%)= 15.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.16	0.62
Dep. Storage	(mm)=	5.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	72.11	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=		97.49	55.83
	over (min)	5.00	15.00
Storage Coeff. (min)=		2.12 (ii)	11.03 (ii)
Unit Hyd. Tpeak (min)=		5.00	15.00

				TOTALS
Unit Hyd. peak	(cms)=	0.31	0.09	
PEAK FLOW	(cms)=	0.03	0.06	0.084 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.25
RUNOFF VOLUME	(mm)=	74.65	35.34	41.23
TOTAL RAINFALL	(mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT	=	0.94	0.44	0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.00	0.00	0.00	0.00
OUTFLOW: ID= 2(0026)	0.00	0.00	0.00	0.00

ADD HYD (0361)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
*** W A R N I N G : HYDROGRAPH 0026 <ID= 2> IS DRY.				
*** W A R N I N G : HYDROGRAPH 0003 = HYDROGRAPH 0001				
ID1= 1 (0018):	0.78	0.084	12.25	41.23
+ ID2= 2 (0026):	0.00	0.000	0.00	0.00
ID = 3 (0361):	0.78	0.084	12.25	41.23

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361)				
3 + 2 = 1	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 3 (0361):	0.78	0.084	12.25	41.23
+ ID2= 2 (0360):	1.02	0.043	12.67	31.23
ID = 1 (0361):	1.80	0.105	12.25	35.56

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (0007)	Area (ha)= 1.37
ID= 1 DT= 5.0 min	Total Imp(%)= 25.40 Dir. Conn.(%)= 23.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.35	1.02
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	95.57	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96

2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=	97.49	48.00
over (min)	5.00	15.00

Storage Coeff. (min)=	2.51 (ii)	11.98 (ii)
Unit Hyd. Tpeak (min)=	5.00	15.00
Unit Hyd. peak (cms)=	0.29	0.09

				TOTALS
PEAK FLOW	(cms)=	0.09	0.08	0.158 (iii)
TIME TO PEAK	(hrs)=	12.25	12.33	12.25
RUNOFF VOLUME	(mm)=	78.65	31.69	42.86
TOTAL RAINFALL	(mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT	=	0.99	0.40	0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0017)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1350	0.0340

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0007)	1.370	0.158	12.25	42.86
OUTFLOW: ID= 1 (0017)	1.370	0.061	12.58	42.82

PEAK FLOW REDUCTION [Qout/Qin](%)= 38.41
TIME SHIFT OF PEAK FLOW (min)= 20.00
MAXIMUM STORAGE USED (ha.m.)= 0.0154

CALIB	
STANDHYD (0015)	Area (ha)= 0.39
ID= 1 DT= 5.0 min	Total Imp(%)= 66.10 Dir. Conn.(%)= 15.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.26	0.13
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.27	12.250	97.49	18.33	1.43
0.167	0.00	6.250	1.27	12.333	11.48	18.42	1.43
0.250	0.00	6.333	1.43	12.417	11.47	18.50	1.43
0.333	0.88	6.417	1.43	12.500	11.47	18.58	1.43
0.417	0.88	6.500	1.43	12.583	11.47	18.67	1.43
0.500	0.88	6.583	1.43	12.667	11.47	18.75	1.43
0.583	0.88	6.667	1.43	12.750	11.47	18.83	1.43
0.667	0.88	6.750	1.43	12.833	5.89	18.92	1.43
0.750	0.88	6.833	1.43	12.917	5.89	19.00	1.43
0.833	0.88	6.917	1.43	13.000	5.89	19.08	1.43
0.917	0.88	7.000	1.43	13.083	5.89	19.17	1.43
1.000	0.88	7.083	1.43	13.167	5.89	19.25	1.43
1.083	0.88	7.167	1.43	13.250	5.89	19.33	1.43
1.167	0.88	7.250	1.43	13.333	4.30	19.42	1.43
1.250	0.88	7.333	1.75	13.417	4.30	19.50	1.43
1.333	0.88	7.417	1.75	13.500	4.30	19.58	1.43
1.417	0.88	7.500	1.75	13.583	4.30	19.67	1.43
1.500	0.88	7.583	1.75	13.667	4.30	19.75	1.43
1.583	0.88	7.667	1.75	13.750	4.30	19.83	1.43
1.667	0.88	7.750	1.75	13.833	3.35	19.92	1.43
1.750	0.88	7.833	1.75	13.917	3.35	20.00	1.43
1.833	0.88	7.917	1.75	14.000	3.35	20.08	1.43
1.917	0.88	8.000	1.75	14.083	3.35	20.17	1.43
2.000	0.88	8.083	1.75	14.167	3.35	20.25	1.43
2.083	0.88	8.167	1.75	14.250	3.35	20.33	0.96
2.167	0.88	8.250	1.75	14.333	2.39	20.42	0.96
2.250	0.88	8.333	2.07	14.417	2.39	20.50	0.96
2.333	1.04	8.417	2.07	14.500	2.39	20.58	0.96
2.417	1.04	8.500	2.07	14.583	2.39	20.67	0.96
2.500	1.04	8.583	2.07	14.667	2.39	20.75	0.96
2.583	1.04	8.667	2.07	14.750	2.39	20.83	0.96
2.667	1.04	8.750	2.07	14.833	2.39	20.92	0.96
2.750	1.04	8.833	2.23	14.917	2.39	21.00	0.96
2.833	1.04	8.917	2.23	15.000	2.39	21.08	0.96
2.917	1.04	9.000	2.23	15.083	2.39	21.17	0.96
3.000	1.04	9.083	2.23	15.167	2.39	21.25	0.96
3.083	1.04	9.167	2.23	15.250	2.39	21.33	0.96
3.167	1.04	9.250	2.23	15.333	2.39	21.42	0.96
3.250	1.04	9.333	2.55	15.417	2.39	21.50	0.96
3.333	1.04	9.417	2.55	15.500	2.39	21.58	0.96
3.417	1.04	9.500	2.55	15.583	2.39	21.67	0.96
3.500	1.04	9.583	2.55	15.667	2.39	21.75	0.96
3.583	1.04	9.667	2.55	15.750	2.39	21.83	0.96
3.667	1.04	9.750	2.55	15.833	2.39	21.92	0.96
3.750	1.04	9.833	2.87	15.917	2.39	22.00	0.96
3.833	1.04	9.917	2.87	16.000	2.39	22.08	0.96
3.917	1.04	10.000	2.87	16.083	2.39	22.17	0.96
4.000	1.04	10.083	2.87	16.167	2.39	22.25	0.96
4.083	1.04	10.167	2.87	16.250	2.39	22.33	0.96
4.167	1.04	10.250	2.87	16.333	1.43	22.42	0.96
4.250	1.04	10.333	3.66	16.417	1.43	22.50	0.96
4.333	1.27	10.417	3.66	16.500	1.43	22.58	0.96
4.417	1.27	10.500	3.66	16.583	1.43	22.67	0.96
4.500	1.27	10.583	3.66	16.667	1.43	22.75	0.96
4.583	1.27	10.667	3.66	16.750	1.43	22.83	0.96
4.667	1.27	10.750	3.66	16.833	1.43	22.92	0.96
4.750	1.27	10.833	4.94	16.917	1.43	23.00	0.96
4.833	1.27	10.917	4.94	17.000	1.43	23.08	0.96
4.917	1.27	11.000	4.94	17.083	1.43	23.17	0.96
5.000	1.27	11.083	4.94	17.167	1.43	23.25	0.96
5.083	1.27	11.167	4.94	17.250	1.43	23.33	0.96
5.167	1.27	11.250	4.94	17.333	1.43	23.42	0.96
5.250	1.27	11.333	7.65	17.417	1.43	23.50	0.96
5.333	1.27	11.417	7.65	17.500	1.43	23.58	0.96
5.417	1.27	11.500	7.65	17.583	1.43	23.67	0.96
5.500	1.27	11.583	7.65	17.667	1.43	23.75	0.96
5.583	1.27	11.667	7.65	17.750	1.43	23.83	0.96
5.667	1.27	11.750	7.65	17.833	1.43	23.92	0.96
5.750	1.27	11.833	23.57	17.917	1.43	24.00	0.96
5.833	1.27	11.917	23.58	18.000	1.43	24.08	0.96
5.917	1.27	12.000	23.58	18.083	1.43	24.17	0.96
6.000	1.27	12.083	97.48	18.167	1.43	24.25	0.96
6.083	1.27	12.167	97.49	18.250	1.43		

Max.Eff.Inten.(mm/hr)=	97.49	184.67
over (min)	5.00	10.00
Storage Coeff. (min)=	1.72 (ii)	7.24 (ii)
Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.32	0.14

				TOTALS
PEAK FLOW	(cms)=	0.02	0.05	0.070 (iii)
TIME TO PEAK	(hrs)=	12.25	12.25	12.25
RUNOFF VOLUME	(mm)=	78.65	50.66	54.85
TOTAL RAINFALL	(mm)=	79.65	79.65	79.65
RUNOFF COEFFICIENT	=	0.99	0.64	0.69

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.070    12.25    54.85
     + ID2= 2 (  0017):     1.37   0.061    12.58    42.82
       ================================================
       ID = 3 (  0016):     1.76   0.114    12.25    45.49

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

      V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O
       OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                ***** D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\b2a80
675-d2d0-4984-8aa8-36a22cf6a54d\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\b2a80
675-d2d0-4984-8aa8-36a22cf6a54d\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____
```

```
--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : I. 10yr 24hr 15min SCS Type I **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\a944daaa
| Ptotal= 92.66 mm |    Comments: I. 10yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.67	12.50	13.34	18.75	1.67
0.25	1.02	6.50	1.67	12.75	6.86	19.00	1.67
0.50	1.02	6.75	1.67	13.00	6.86	19.25	1.67
0.75	1.02	7.00	1.67	13.25	5.00	19.50	1.67
1.00	1.02	7.25	2.04	13.50	5.00	19.75	1.67
1.25	1.02	7.50	2.04	13.75	3.89	20.00	1.67
1.50	1.02	7.75	2.04	14.00	3.89	20.25	1.11
1.75	1.02	8.00	2.04	14.25	2.78	20.50	1.11
2.00	1.02	8.25	2.41	14.50	2.78	20.75	1.11
2.25	1.20	8.50	2.41	14.75	2.78	21.00	1.11
2.50	1.20	8.75	2.59	15.00	2.78	21.25	1.11
2.75	1.20	9.00	2.59	15.25	2.78	21.50	1.11
3.00	1.20	9.25	2.97	15.50	2.78	21.75	1.11
3.25	1.20	9.50	2.97	15.75	2.78	22.00	1.11
3.50	1.20	9.75	3.34	16.00	2.78	22.25	1.11
3.75	1.20	10.00	3.34	16.25	1.67	22.50	1.11
4.00	1.20	10.25	4.26	16.50	1.67	22.75	1.11
4.25	1.48	10.50	4.26	16.75	1.67	23.00	1.11
4.50	1.48	10.75	5.74	17.00	1.67	23.25	1.11
4.75	1.48	11.00	5.74	17.25	1.67	23.50	1.11
5.00	1.48	11.25	8.90	17.50	1.67	23.75	1.11
5.25	1.48	11.50	8.90	17.75	1.67	24.00	1.11
5.50	1.48	11.75	27.43	18.00	1.67		
5.75	1.48	12.00	113.42	18.25	1.67		
6.00	1.48	12.25	13.34	18.50	1.67		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11

4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 40.069
TOTAL RAINFALL (mm)= 92.660
RUNOFF COEFFICIENT = 0.432

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0002)
ID= 1 DT= 5.0 min

Area (ha)= 3.35
Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.51
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	149.44	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)= 113.42 59.47
over (min) 5.00 15.00
Storage Coeff. (min)= 3.09 (ii) 11.78 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.09

		TOTALS
PEAK FLOW (cms)=	0.58	0.15 0.707 (iii)
TIME TO PEAK (hrs)=	12.25	12.33 12.25
RUNOFF VOLUME (mm)=	91.66	40.15 68.48
TOTAL RAINFALL (mm)=	92.66	92.66 92.66
RUNOFF COEFFICIENT =	0.99	0.43 0.74

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1340	0.1430
0.0270	0.0810	0.1670	0.1580
0.0620	0.1060	0.1980	0.1750
0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.707	12.25	68.48
OUTFLOW: ID= 1 (0004)	3.350	0.091	12.83	68.25

PEAK FLOW REDUCTION [Qout/Qin](%)= 12.92
TIME SHIFT OF PEAK FLOW (min)= 35.00
MAXIMUM STORAGE USED (ha.m.)= 0.1222

ADD HYD (0003)
1 + 2 = 3

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	0.49	0.050	12.33	40.07
+ ID2= 2 (0004):	3.35	0.091	12.83	68.25
ID = 3 (0003):	3.84	0.118	12.42	64.65

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB
STANDHYD (0355)
ID= 1 DT= 5.0 min

Area (ha)= 1.56
Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.78	0.78
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	101.98	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67

0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)=	113.42	59.47	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.46 (ii)	11.15 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.30	0.09	
			TOTALS
PEAK FLOW (cms)=	0.25	0.08	0.314 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	91.66	40.15	65.90
TOTAL RAINFALL (mm)=	92.66	92.66	92.66
RUNOFF COEFFICIENT =	0.99	0.43	0.71

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0356)	Area (ha)= 16.63		
ID= 1 DT= 5.0 min	Total Imp(%)= 68.80	Dir. Conn.(%)= 60.50	
	IMPERVIOUS	PERVIOUS (i)	
Surface Area (ha)=	11.44	5.19	
Dep. Storage (mm)=	1.00	5.00	
Average Slope (%)=	1.00	2.00	
Length (m)=	332.97	40.00	
Mannings n =	0.013	0.250	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)=	113.42	86.21	
over (min)	5.00	15.00	
Storage Coeff. (min)=	5.00 (ii)	12.49 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.21	0.08	
			TOTALS
PEAK FLOW (cms)=	3.05	0.75	3.692 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	91.66	46.11	73.67
TOTAL RAINFALL (mm)=	92.66	92.66	92.66
RUNOFF COEFFICIENT =	0.99	0.50	0.80

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    1.48 |12.250  113.42 | 18.33    1.67
 0.167    0.00 | 6.250    1.48 |12.333   13.36 | 18.42    1.67
 0.250    0.00 | 6.333    1.67 |12.417   13.34 | 18.50    1.67
 0.333    1.02 | 6.417    1.67 |12.500   13.34 | 18.58    1.67
 0.417    1.02 | 6.500    1.67 |12.583   13.34 | 18.67    1.67
 0.500    1.02 | 6.583    1.67 |12.667   13.34 | 18.75    1.67
 0.583    1.02 | 6.667    1.67 |12.750   13.34 | 18.83    1.67
 0.667    1.02 | 6.750    1.67 |12.833    6.86 | 18.92    1.67
 0.750    1.02 | 6.833    1.67 |12.917    6.86 | 19.00    1.67
 0.833    1.02 | 6.917    1.67 |13.000    6.86 | 19.08    1.67
 0.917    1.02 | 7.000    1.67 |13.083    6.86 | 19.17    1.67
 1.000    1.02 | 7.083    1.67 |13.167    6.86 | 19.25    1.67
 1.083    1.02 | 7.167    1.67 |13.250    6.86 | 19.33    1.67
 1.167    1.02 | 7.250    1.67 |13.333    5.00 | 19.42    1.67
 1.250    1.02 | 7.333    2.04 |13.417    5.00 | 19.50    1.67
 1.333    1.02 | 7.417    2.04 |13.500    5.00 | 19.58    1.67
 1.417    1.02 | 7.500    2.04 |13.583    5.00 | 19.67    1.67
 1.500    1.02 | 7.583    2.04 |13.667    5.00 | 19.75    1.67
 1.583    1.02 | 7.667    2.04 |13.750    5.00 | 19.83    1.67
 1.667    1.02 | 7.750    2.04 |13.833    3.89 | 19.92    1.67
 1.750    1.02 | 7.833    2.04 |13.917    3.89 | 20.00    1.67
 1.833    1.02 | 7.917    2.04 |14.000    3.89 | 20.08    1.67
 1.917    1.02 | 8.000    2.04 |14.083    3.89 | 20.17    1.67
 2.000    1.02 | 8.083    2.04 |14.167    3.89 | 20.25    1.67
 2.083    1.02 | 8.167    2.04 |14.250    3.89 | 20.33    1.11
 2.167    1.02 | 8.250    2.04 |14.333    2.78 | 20.42    1.11
 2.250    1.02 | 8.333    2.41 |14.417    2.78 | 20.50    1.11
 2.333    1.20 | 8.417    2.41 |14.500    2.78 | 20.58    1.11
 2.417    1.20 | 8.500    2.41 |14.583    2.78 | 20.67    1.11
 2.500    1.20 | 8.583    2.41 |14.667    2.78 | 20.75    1.11
 2.583    1.20 | 8.667    2.41 |14.750    2.78 | 20.83    1.11
 2.667    1.20 | 8.750    2.41 |14.833    2.78 | 20.92    1.11
 2.750    1.20 | 8.833    2.59 |14.917    2.78 | 21.00    1.11
 2.833    1.20 | 8.917    2.59 |15.000    2.78 | 21.08    1.11
 2.917    1.20 | 9.000    2.59 |15.083    2.78 | 21.17    1.11
 3.000    1.20 | 9.083    2.59 |15.167    2.78 | 21.25    1.11
 3.083    1.20 | 9.167    2.59 |15.250    2.78 | 21.33    1.11
 3.167    1.20 | 9.250    2.59 |15.333    2.78 | 21.42    1.11
 3.250    1.20 | 9.333    2.97 |15.417    2.78 | 21.50    1.11
 3.333    1.20 | 9.417    2.97 |15.500    2.78 | 21.58    1.11
 3.417    1.20 | 9.500    2.97 |15.583    2.78 | 21.67    1.11
 3.500    1.20 | 9.583    2.97 |15.667    2.78 | 21.75    1.11
 3.583    1.20 | 9.667    2.97 |15.750    2.78 | 21.83    1.11
 3.667    1.20 | 9.750    2.97 |15.833    2.78 | 21.92    1.11
 3.750    1.20 | 9.833    3.34 |15.917    2.78 | 22.00    1.11
 3.833    1.20 | 9.917    3.34 |16.000    2.78 | 22.08    1.11
 3.917    1.20 |10.000    3.34 |16.083    2.78 | 22.17    1.11
 4.000    1.20 |10.083    3.34 |16.167    2.78 | 22.25    1.11
 4.083    1.20 |10.167    3.34 |16.250    2.78 | 22.33    1.11
 4.167    1.20 |10.250    3.34 |16.333    1.67 | 22.42    1.11
 4.250    1.20 |10.333    4.26 |16.417    1.67 | 22.50    1.11
 4.333    1.48 |10.417    4.26 |16.500    1.67 | 22.58    1.11
 4.417    1.48 |10.500    4.26 |16.583    1.67 | 22.67    1.11
 4.500    1.48 |10.583    4.26 |16.667    1.67 | 22.75    1.11
 4.583    1.48 |10.667    4.26 |16.750    1.67 | 22.83    1.11
 4.667    1.48 |10.750    4.26 |16.833    1.67 | 22.92    1.11
 4.750    1.48 |10.833    5.74 |16.917    1.67 | 23.00    1.11
 4.833    1.48 |10.917    5.74 |17.000    1.67 | 23.08    1.11
 4.917    1.48 |11.000    5.74 |17.083    1.67 | 23.17    1.11
 5.000    1.48 |11.083    5.74 |17.167    1.67 | 23.25    1.11
 5.083    1.48 |11.167    5.74 |17.250    1.67 | 23.33    1.11
 5.167    1.48 |11.250    5.74 |17.333    1.67 | 23.42    1.11
 5.250    1.48 |11.333    8.90 |17.417    1.67 | 23.50    1.11
 5.333    1.48 |11.417    8.90 |17.500    1.67 | 23.58    1.11
 5.417    1.48 |11.500    8.90 |17.583    1.67 | 23.67    1.11
 5.500    1.48 |11.583    8.90 |17.667    1.67 | 23.75    1.11
 5.583    1.48 |11.667    8.90 |17.750    1.67 | 23.83    1.11
 5.667    1.48 |11.750    8.90 |17.833    1.67 | 23.92    1.11
 5.750    1.48 |11.833   27.43 |17.917    1.67 | 24.00    1.11
 5.833    1.48 |11.917   27.43 |18.000    1.67 | 24.08    1.11
 5.917    1.48 |12.000   27.43 |18.083    1.67 | 24.17    1.11
 6.000    1.48 |12.083  113.41 |18.167    1.67 | 24.25    1.11
 6.083    1.48 |12.167  113.42 |18.250    1.67 |

    Max.Eff.Inten.(mm/hr)=     113.42        90.71
                over (min)        5.00        10.00
    Storage Coeff.  (min)=       1.94 (ii)    6.14 (ii)
    Unit Hyd. Tpeak (min)=       5.00        10.00
    Unit Hyd. peak  (cms)=       0.31         0.15
                                                        *TOTALS*
    PEAK FLOW       (cms)=       0.16         0.03          0.192 (iii)

    TIME TO PEAK    (hrs)=      12.25        12.25         12.25
    RUNOFF VOLUME    (mm)=      91.66        46.95         78.78
    TOTAL RAINFALL   (mm)=      92.66        92.66         92.66
    RUNOFF COEFFICIENT   =       0.99         0.51          0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
-------------------      (ha)     (cms)     (hrs)    (mm)
    TOTAL HYD.(ID= 1):   0.71      0.19     12.25   78.78
    ==========================================================
    MAJOR SYS.(ID= 2):   0.02      0.03     12.25   78.78
    MINOR SYS.(ID= 3):   0.69      0.16     12.08   78.78

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                         AREA     QPEAK   TPEAK     R.V.
                         (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 9(  0025)    0.69     0.16   12.08    78.78
  OUTFLOW: ID= 2(  0024)    0.69     0.16   12.08    78.78

  --------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.69   0.162    12.08    78.78
     + ID2= 2 (  0355):     1.56   0.314    12.25    65.90
       ================================================
       ID = 3 (  0357):     2.25   0.476    12.25    69.85

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.25   0.476    12.25    69.85
     + ID2= 2 (  0356):    16.63   3.692    12.25    73.67
       ================================================
       ID = 1 (  0357):    18.88   4.168    12.25    73.21

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |  0.7410      0.8760
                         0.0430     0.1680   |  1.3270      1.1950
                         0.0650     0.3300   |  1.8380      1.4460
                         0.3870     0.6500   |  3.9290      1.7080

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)    18.881     4.168     12.25      73.21
   OUTFLOW: ID= 1 (  0358)    18.881     0.552     12.83      73.16

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 13.25
                  TIME SHIFT OF PEAK FLOW         (min)= 35.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.7556

--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
```

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)=	113.42	81.17	
over (min)	5.00	10.00	
Storage Coeff. (min)=	1.69 (ii)	9.36 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.32	0.12	
			TOTALS
PEAK FLOW (cms)=	0.08	0.03	0.103 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	91.66	45.12	70.01
TOTAL RAINFALL (mm)=	92.66	92.66	92.66
RUNOFF COEFFICIENT =	0.99	0.49	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0370)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
ID1= 1 (0358):	18.88	0.552	12.83	73.16
+ ID2= 2 (0359):	0.45	0.103	12.25	70.01
ID = 3 (0370):	19.33	0.564	12.75	73.09

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0360) ID= 1 DT= 5.0 min				
	Area	(ha)=	1.02	Curve Number (CN)= 71.0
	Ia	(mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=		0.49	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Unit Hyd Qpeak (cms)=	0.080	
PEAK FLOW (cms)=	0.055 (i)	
TIME TO PEAK (hrs)=	12.667	
RUNOFF VOLUME (mm)=	40.143	
TOTAL RAINFALL (mm)=	92.660	

```
     RUNOFF COEFFICIENT   =   0.433

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0018)|   Area    (ha)=   0.78
|ID= 1 DT= 5.0 min |   Total Imp(%)=  20.00   Dir. Conn.(%)=  15.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.62
     Dep. Storage     (mm)=       5.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      72.11        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 6.167    1.48 |12.250  113.42 | 18.33    1.67
               0.167    0.00 | 6.250    1.48 |12.333   13.36 | 18.42    1.67
               0.250    0.00 | 6.333    1.67 |12.417   13.34 | 18.50    1.67
               0.333    1.02 | 6.417    1.67 |12.500   13.34 | 18.58    1.67
               0.417    1.02 | 6.500    1.67 |12.583   13.34 | 18.67    1.67
               0.500    1.02 | 6.583    1.67 |12.667   13.34 | 18.75    1.67
               0.583    1.02 | 6.667    1.67 |12.750   13.34 | 18.83    1.67
               0.667    1.02 | 6.750    1.67 |12.833    6.86 | 18.92    1.67
               0.750    1.02 | 6.833    1.67 |12.917    6.86 | 19.00    1.67
               0.833    1.02 | 6.917    1.67 |13.000    6.86 | 19.08    1.67
               0.917    1.02 | 7.000    1.67 |13.083    6.86 | 19.17    1.67
               1.000    1.02 | 7.083    1.67 |13.167    6.86 | 19.25    1.67
               1.083    1.02 | 7.167    1.67 |13.250    6.86 | 19.33    1.67
               1.167    1.02 | 7.250    1.67 |13.333    5.00 | 19.42    1.67
               1.250    1.02 | 7.333    2.04 |13.417    5.00 | 19.50    1.67
               1.333    1.02 | 7.417    2.04 |13.500    5.00 | 19.58    1.67
               1.417    1.02 | 7.500    2.04 |13.583    5.00 | 19.67    1.67
               1.500    1.02 | 7.583    2.04 |13.667    5.00 | 19.75    1.67
               1.583    1.02 | 7.667    2.04 |13.750    5.00 | 19.83    1.67
               1.667    1.02 | 7.750    2.04 |13.833    3.89 | 19.92    1.67
               1.750    1.02 | 7.833    2.04 |13.917    3.89 | 20.00    1.67
               1.833    1.02 | 7.917    2.04 |14.000    3.89 | 20.08    1.67
               1.917    1.02 | 8.000    2.04 |14.083    3.89 | 20.17    1.67
               2.000    1.02 | 8.083    2.04 |14.167    3.89 | 20.25    1.67
               2.083    1.02 | 8.167    2.04 |14.250    3.89 | 20.33    1.11
               2.167    1.02 | 8.250    2.04 |14.333    2.78 | 20.42    1.11
               2.250    1.02 | 8.333    2.41 |14.417    2.78 | 20.50    1.11
               2.333    1.20 | 8.417    2.41 |14.500    2.78 | 20.58    1.11
               2.417    1.20 | 8.500    2.41 |14.583    2.78 | 20.67    1.11
               2.500    1.20 | 8.583    2.41 |14.667    2.78 | 20.75    1.11
               2.583    1.20 | 8.667    2.41 |14.750    2.78 | 20.83    1.11
               2.667    1.20 | 8.750    2.41 |14.833    2.78 | 20.92    1.11
               2.750    1.20 | 8.833    2.59 |14.917    2.78 | 21.00    1.11
               2.833    1.20 | 8.917    2.59 |15.000    2.78 | 21.08    1.11
               2.917    1.20 | 9.000    2.59 |15.083    2.78 | 21.17    1.11
               3.000    1.20 | 9.083    2.59 |15.167    2.78 | 21.25    1.11
               3.083    1.20 | 9.167    2.59 |15.250    2.78 | 21.33    1.11
               3.167    1.20 | 9.250    2.59 |15.333    2.78 | 21.42    1.11
               3.250    1.20 | 9.333    2.97 |15.417    2.78 | 21.50    1.11
               3.333    1.20 | 9.417    2.97 |15.500    2.78 | 21.58    1.11
               3.417    1.20 | 9.500    2.97 |15.583    2.78 | 21.67    1.11
               3.500    1.20 | 9.583    2.97 |15.667    2.78 | 21.75    1.11
               3.583    1.20 | 9.667    2.97 |15.750    2.78 | 21.83    1.11
               3.667    1.20 | 9.750    2.97 |15.833    2.78 | 21.92    1.11
               3.750    1.20 | 9.833    3.34 |15.917    2.78 | 22.00    1.11
               3.833    1.20 | 9.917    3.34 |16.000    2.78 | 22.08    1.11
               3.917    1.20 |10.000    3.34 |16.083    2.78 | 22.17    1.11
               4.000    1.20 |10.083    3.34 |16.167    2.78 | 22.25    1.11
               4.083    1.20 |10.167    3.34 |16.250    2.78 | 22.33    1.11
               4.167    1.20 |10.250    3.34 |16.333    1.67 | 22.42    1.11
               4.250    1.20 |10.333    4.26 |16.417    1.67 | 22.50    1.11
               4.333    1.48 |10.417    4.26 |16.500    1.67 | 22.58    1.11
               4.417    1.48 |10.500    4.26 |16.583    1.67 | 22.67    1.11
               4.500    1.48 |10.583    4.26 |16.667    1.67 | 22.75    1.11
               4.583    1.48 |10.667    4.26 |16.750    1.67 | 22.83    1.11
               4.667    1.48 |10.750    4.26 |16.833    1.67 | 22.92    1.11
               4.750    1.48 |10.833    5.74 |16.917    1.67 | 23.00    1.11
               4.833    1.48 |10.917    5.74 |17.000    1.67 | 23.08    1.11
               4.917    1.48 |11.000    5.74 |17.083    1.67 | 23.17    1.11
               5.000    1.48 |11.083    5.74 |17.167    1.67 | 23.25    1.11
               5.083    1.48 |11.167    5.74 |17.250    1.67 | 23.33    1.11
               5.167    1.48 |11.250    5.74 |17.333    1.67 | 23.42    1.11
               5.250    1.48 |11.333    8.90 |17.417    1.67 | 23.50    1.11
               5.333    1.48 |11.417    8.90 |17.500    1.67 | 23.58    1.11
               5.417    1.48 |11.500    8.90 |17.583    1.67 | 23.67    1.11
               5.500    1.48 |11.583    8.90 |17.667    1.67 | 23.75    1.11
               5.583    1.48 |11.667    8.90 |17.750    1.67 | 23.83    1.11
               5.667    1.48 |11.750    8.90 |17.833    1.67 | 23.92    1.11
               5.750    1.48 |11.833   27.43 |17.917    1.67 | 24.00    1.11
               5.833    1.48 |11.917   27.43 |18.000    1.67 | 24.08    1.11
               5.917    1.48 |12.000   27.43 |18.083    1.67 | 24.17    1.11
               6.000    1.48 |12.083  113.41 |18.167    1.67 | 24.25    1.11
               6.083    1.48 |12.167  113.42 |18.250    1.67 |

     Max.Eff.Inten.(mm/hr)=     113.42        70.91
               over (min)        5.00        15.00
     Storage Coeff.  (min)=      2.00 (ii)   10.09 (ii)

     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.10
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.04         0.08          0.107 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.33          12.25
     RUNOFF VOLUME    (mm)=      87.66        44.99          51.38
     TOTAL RAINFALL   (mm)=      92.66        92.66          92.66
     RUNOFF COEFFICIENT   =       0.95         0.49           0.55

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
             CN*  =  74.0     Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                           AREA     QPEAK   TPEAK     R.V.
                           (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 8(  0025)    0.02     0.03   12.25    78.78
  OUTFLOW: ID= 2(  0026)    0.02     0.03   12.25    78.78

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0018):     0.78   0.107    12.25    51.38
     + ID2= 2 (  0026):     0.02   0.030    12.25    78.78
       ==================================================
       ID = 3 (  0361):     0.80   0.137    12.25    52.05

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.80   0.137    12.25    52.05
     + ID2= 2 (  0360):     1.02   0.055    12.67    40.14

       ================================================
       ID = 1 (  0361):     1.82   0.165    12.25    45.37

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.35         1.02
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      95.57        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 6.167    1.48 |12.250  113.42 | 18.33    1.67
               0.167    0.00 | 6.250    1.48 |12.333   13.36 | 18.42    1.67
               0.250    0.00 | 6.333    1.67 |12.417   13.34 | 18.50    1.67
               0.333    1.02 | 6.417    1.67 |12.500   13.34 | 18.58    1.67
               0.417    1.02 | 6.500    1.67 |12.583   13.34 | 18.67    1.67
               0.500    1.02 | 6.583    1.67 |12.667   13.34 | 18.75    1.67
               0.583    1.02 | 6.667    1.67 |12.750   13.34 | 18.83    1.67
               0.667    1.02 | 6.750    1.67 |12.833    6.86 | 18.92    1.67
               0.750    1.02 | 6.833    1.67 |12.917    6.86 | 19.00    1.67
               0.833    1.02 | 6.917    1.67 |13.000    6.86 | 19.08    1.67
               0.917    1.02 | 7.000    1.67 |13.083    6.86 | 19.17    1.67
               1.000    1.02 | 7.083    1.67 |13.167    6.86 | 19.25    1.67
               1.083    1.02 | 7.167    1.67 |13.250    6.86 | 19.33    1.67
               1.167    1.02 | 7.250    1.67 |13.333    5.00 | 19.42    1.67
               1.250    1.02 | 7.333    2.04 |13.417    5.00 | 19.50    1.67
               1.333    1.02 | 7.417    2.04 |13.500    5.00 | 19.58    1.67
               1.417    1.02 | 7.500    2.04 |13.583    5.00 | 19.67    1.67
               1.500    1.02 | 7.583    2.04 |13.667    5.00 | 19.75    1.67
               1.583    1.02 | 7.667    2.04 |13.750    5.00 | 19.83    1.67
               1.667    1.02 | 7.750    2.04 |13.833    3.89 | 19.92    1.67
               1.750    1.02 | 7.833    2.04 |13.917    3.89 | 20.00    1.67
               1.833    1.02 | 7.917    2.04 |14.000    3.89 | 20.08    1.67
               1.917    1.02 | 8.000    2.04 |14.083    3.89 | 20.17    1.67
               2.000    1.02 | 8.083    2.04 |14.167    3.89 | 20.25    1.67
               2.083    1.02 | 8.167    2.04 |14.250    3.89 | 20.33    1.11
               2.167    1.02 | 8.250    2.04 |14.333    2.78 | 20.42    1.11
               2.250    1.02 | 8.333    2.41 |14.417    2.78 | 20.50    1.11
```

2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)= 113.42 61.55
over (min) 5.00 15.00
Storage Coeff. (min)= 2.36 (ii) 10.93 (ii)

Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.30 0.09

			TOTALS
PEAK FLOW (cms)=	0.10	0.11	0.197 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	91.66	40.68	52.81
TOTAL RAINFALL (mm)=	92.66	92.66	92.66
RUNOFF COEFFICIENT =	0.99	0.44	0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0017)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1350	0.0340

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0007)	1.370	0.197	12.25	52.81
OUTFLOW: ID= 1 (0017)	1.370	0.076	12.58	52.77

PEAK FLOW REDUCTION [Qout/Qin](%)= 38.58
TIME SHIFT OF PEAK FLOW (min)= 20.00
MAXIMUM STORAGE USED (ha.m.)= 0.0193

CALIB			
STANDHYD (0015)	Area (ha)= 0.39		
ID= 1 DT= 5.0 min	Total Imp(%)= 66.10	Dir. Conn.(%)= 15.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.26	0.13
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.48	12.250	113.42	18.33	1.67
0.167	0.00	6.250	1.48	12.333	13.36	18.42	1.67
0.250	0.00	6.333	1.67	12.417	13.34	18.50	1.67
0.333	1.02	6.417	1.67	12.500	13.34	18.58	1.67
0.417	1.02	6.500	1.67	12.583	13.34	18.67	1.67
0.500	1.02	6.583	1.67	12.667	13.34	18.75	1.67
0.583	1.02	6.667	1.67	12.750	13.34	18.83	1.67
0.667	1.02	6.750	1.67	12.833	6.86	18.92	1.67
0.750	1.02	6.833	1.67	12.917	6.86	19.00	1.67
0.833	1.02	6.917	1.67	13.000	6.86	19.08	1.67
0.917	1.02	7.000	1.67	13.083	6.86	19.17	1.67
1.000	1.02	7.083	1.67	13.167	6.86	19.25	1.67
1.083	1.02	7.167	1.67	13.250	6.86	19.33	1.67
1.167	1.02	7.250	1.67	13.333	5.00	19.42	1.67
1.250	1.02	7.333	2.04	13.417	5.00	19.50	1.67
1.333	1.02	7.417	2.04	13.500	5.00	19.58	1.67
1.417	1.02	7.500	2.04	13.583	5.00	19.67	1.67
1.500	1.02	7.583	2.04	13.667	5.00	19.75	1.67
1.583	1.02	7.667	2.04	13.750	5.00	19.83	1.67
1.667	1.02	7.750	2.04	13.833	3.89	19.92	1.67
1.750	1.02	7.833	2.04	13.917	3.89	20.00	1.67
1.833	1.02	7.917	2.04	14.000	3.89	20.08	1.67
1.917	1.02	8.000	2.04	14.083	3.89	20.17	1.67
2.000	1.02	8.083	2.04	14.167	3.89	20.25	1.67
2.083	1.02	8.167	2.04	14.250	3.89	20.33	1.11
2.167	1.02	8.250	2.04	14.333	2.78	20.42	1.11
2.250	1.02	8.333	2.41	14.417	2.78	20.50	1.11
2.333	1.20	8.417	2.41	14.500	2.78	20.58	1.11
2.417	1.20	8.500	2.41	14.583	2.78	20.67	1.11
2.500	1.20	8.583	2.41	14.667	2.78	20.75	1.11
2.583	1.20	8.667	2.41	14.750	2.78	20.83	1.11
2.667	1.20	8.750	2.41	14.833	2.78	20.92	1.11
2.750	1.20	8.833	2.59	14.917	2.78	21.00	1.11
2.833	1.20	8.917	2.59	15.000	2.78	21.08	1.11
2.917	1.20	9.000	2.59	15.083	2.78	21.17	1.11
3.000	1.20	9.083	2.59	15.167	2.78	21.25	1.11
3.083	1.20	9.167	2.59	15.250	2.78	21.33	1.11
3.167	1.20	9.250	2.59	15.333	2.78	21.42	1.11
3.250	1.20	9.333	2.97	15.417	2.78	21.50	1.11
3.333	1.20	9.417	2.97	15.500	2.78	21.58	1.11
3.417	1.20	9.500	2.97	15.583	2.78	21.67	1.11
3.500	1.20	9.583	2.97	15.667	2.78	21.75	1.11
3.583	1.20	9.667	2.97	15.750	2.78	21.83	1.11
3.667	1.20	9.750	2.97	15.833	2.78	21.92	1.11
3.750	1.20	9.833	3.34	15.917	2.78	22.00	1.11
3.833	1.20	9.917	3.34	16.000	2.78	22.08	1.11
3.917	1.20	10.000	3.34	16.083	2.78	22.17	1.11
4.000	1.20	10.083	3.34	16.167	2.78	22.25	1.11
4.083	1.20	10.167	3.34	16.250	2.78	22.33	1.11
4.167	1.20	10.250	3.34	16.333	1.67	22.42	1.11
4.250	1.20	10.333	4.26	16.417	1.67	22.50	1.11
4.333	1.48	10.417	4.26	16.500	1.67	22.58	1.11
4.417	1.48	10.500	4.26	16.583	1.67	22.67	1.11
4.500	1.48	10.583	4.26	16.667	1.67	22.75	1.11
4.583	1.48	10.667	4.26	16.750	1.67	22.83	1.11
4.667	1.48	10.750	4.26	16.833	1.67	22.92	1.11
4.750	1.48	10.833	5.74	16.917	1.67	23.00	1.11
4.833	1.48	10.917	5.74	17.000	1.67	23.08	1.11
4.917	1.48	11.000	5.74	17.083	1.67	23.17	1.11
5.000	1.48	11.083	5.74	17.167	1.67	23.25	1.11
5.083	1.48	11.167	5.74	17.250	1.67	23.33	1.11
5.167	1.48	11.250	5.74	17.333	1.67	23.42	1.11
5.250	1.48	11.333	8.90	17.417	1.67	23.50	1.11
5.333	1.48	11.417	8.90	17.500	1.67	23.58	1.11
5.417	1.48	11.500	8.90	17.583	1.67	23.67	1.11
5.500	1.48	11.583	8.90	17.667	1.67	23.75	1.11
5.583	1.48	11.667	8.90	17.750	1.67	23.83	1.11
5.667	1.48	11.750	8.90	17.833	1.67	23.92	1.11
5.750	1.48	11.833	27.43	17.917	1.67	24.00	1.11
5.833	1.48	11.917	27.43	18.000	1.67	24.08	1.11
5.917	1.48	12.000	27.43	18.083	1.67	24.17	1.11
6.000	1.48	12.083	113.41	18.167	1.67	24.25	1.11
6.083	1.48	12.167	113.42	18.250	1.67		

Max.Eff.Inten.(mm/hr)= 113.42 225.42
over (min) 5.00 10.00
Storage Coeff. (min)= 1.62 (ii) 6.72 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.32 0.14

			TOTALS
PEAK FLOW (cms)=	0.02	0.07	0.087 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	91.66	62.25	66.65
TOTAL RAINFALL (mm)=	92.66	92.66	92.66
RUNOFF COEFFICIENT =	0.99	0.67	0.72

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |          AREA     QPEAK     TPEAK      R.V.
--------------------          (ha)     (cms)     (hrs)      (mm)
       ID1= 1 (  0015):      0.39    0.087     12.25     66.65
     + ID2= 2 (  0017):      1.37    0.076     12.58     52.77
       ================================================
       ID = 3 (  0016):      1.76    0.141     12.25     55.85

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\c09d5
0bd-39c3-4481-ba84-d802b3f29533\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\c09d5
0bd-39c3-4481-ba84-d802b3f29533\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : J. 25yr 24hr 15min SCS Type I **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\110417ef
| Ptotal=108.80 mm |    Comments: J. 25yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	1.96	12.50	15.67	18.75	1.96
0.25	1.20	6.50	1.96	12.75	8.05	19.00	1.96
0.50	1.20	6.75	1.96	13.00	8.05	19.25	1.96
0.75	1.20	7.00	1.96	13.25	5.88	19.50	1.96
1.00	1.20	7.25	2.39	13.50	5.88	19.75	1.96
1.25	1.20	7.50	2.39	13.75	4.57	20.00	1.96
1.50	1.20	7.75	2.39	14.00	4.57	20.25	1.31
1.75	1.20	8.00	2.39	14.25	3.26	20.50	1.31
2.00	1.20	8.25	2.83	14.50	3.26	20.75	1.31
2.25	1.41	8.50	2.83	14.75	3.26	21.00	1.31
2.50	1.41	8.75	3.05	15.00	3.26	21.25	1.31
2.75	1.41	9.00	3.05	15.25	3.26	21.50	1.31
3.00	1.41	9.25	3.48	15.50	3.26	21.75	1.31
3.25	1.41	9.50	3.48	15.75	3.26	22.00	1.31
3.50	1.41	9.75	3.92	16.00	3.26	22.25	1.31
3.75	1.41	10.00	3.92	16.25	1.96	22.50	1.31
4.00	1.41	10.25	5.00	16.50	1.96	22.75	1.31
4.25	1.74	10.50	5.00	16.75	1.96	23.00	1.31
4.50	1.74	10.75	6.75	17.00	1.96	23.25	1.31
4.75	1.74	11.00	6.75	17.25	1.96	23.50	1.31
5.00	1.74	11.25	10.44	17.50	1.96	23.75	1.31
5.25	1.74	11.50	10.44	17.75	1.96	24.00	1.31
5.50	1.74	11.75	32.20	18.00	1.96		
5.75	1.74	12.00	133.17	18.25	1.96		
6.00	1.74	12.25	15.67	18.50	1.96		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31

4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.065 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 51.813
TOTAL RAINFALL (mm)= 108.800
RUNOFF COEFFICIENT = 0.476

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0002)	Area (ha)= 3.35
ID= 1 DT= 5.0 min	Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.51
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	149.44	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)=	133.17	76.76	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.90 (ii)	10.74 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.28	0.09	
			TOTALS
PEAK FLOW (cms)=	0.68	0.21	0.856 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	107.80	51.91	82.65
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.99	0.48	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1340	0.1430
0.0270	0.0810	0.1670	0.1580
0.0620	0.1060	0.1980	0.1750
0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.856	12.25	82.65
OUTFLOW: ID= 1 (0004)	3.350	0.133	12.75	82.42

PEAK FLOW REDUCTION [Qout/Qin](%)= 15.51
TIME SHIFT OF PEAK FLOW (min)= 30.00
MAXIMUM STORAGE USED (ha.m.)= 0.1426

ADD HYD (0003)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	0.49	0.065	12.33	51.81
+ ID2= 2 (0004):	3.35	0.133	12.75	82.42
ID = 3 (0003):	3.84	0.173	12.42	78.52

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (0355)	Area (ha)= 1.56
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.78	0.78
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	101.98	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96

0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)=	133.17	76.76	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.31 (ii)	10.15 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.30	0.10	
			TOTALS
PEAK FLOW (cms)=	0.29	0.11	0.383 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	107.80	51.91	79.85
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.99	0.48	0.73

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0356)
ID= 1 DT= 5.0 min

Area (ha)= 16.63
Total Imp(%)= 68.80 Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)=	133.17	109.65	
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.69 (ii)	9.52 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.22	0.12	
			TOTALS
PEAK FLOW (cms)=	3.61	1.13	4.737 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	107.80	58.85	88.47
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.99	0.54	0.81

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    1.74 |12.250  133.17 | 18.33    1.96
 0.167    0.00 | 6.250    1.74 |12.333   15.68 | 18.42    1.96
 0.250    0.00 | 6.333    1.96 |12.417   15.67 | 18.50    1.96
 0.333    1.20 | 6.417    1.96 |12.500   15.67 | 18.58    1.96
 0.417    1.20 | 6.500    1.96 |12.583   15.67 | 18.67    1.96
 0.500    1.20 | 6.583    1.96 |12.667   15.67 | 18.75    1.96
 0.583    1.20 | 6.667    1.96 |12.750   15.67 | 18.83    1.96
 0.667    1.20 | 6.750    1.96 |12.833    8.05 | 18.92    1.96
 0.750    1.20 | 6.833    1.96 |12.917    8.05 | 19.00    1.96
 0.833    1.20 | 6.917    1.96 |13.000    8.05 | 19.08    1.96
 0.917    1.20 | 7.000    1.96 |13.083    8.05 | 19.17    1.96
 1.000    1.20 | 7.083    1.96 |13.167    8.05 | 19.25    1.96
 1.083    1.20 | 7.167    1.96 |13.250    8.05 | 19.33    1.96
 1.167    1.20 | 7.250    1.96 |13.333    5.88 | 19.42    1.96
 1.250    1.20 | 7.333    2.39 |13.417    5.88 | 19.50    1.96
 1.333    1.20 | 7.417    2.39 |13.500    5.88 | 19.58    1.96
 1.417    1.20 | 7.500    2.39 |13.583    5.88 | 19.67    1.96
 1.500    1.20 | 7.583    2.39 |13.667    5.88 | 19.75    1.96
 1.583    1.20 | 7.667    2.39 |13.750    5.88 | 19.83    1.96
 1.667    1.20 | 7.750    2.39 |13.833    4.57 | 19.92    1.96
 1.750    1.20 | 7.833    2.39 |13.917    4.57 | 20.00    1.96
 1.833    1.20 | 7.917    2.39 |14.000    4.57 | 20.08    1.96
 1.917    1.20 | 8.000    2.39 |14.083    4.57 | 20.17    1.96
 2.000    1.20 | 8.083    2.39 |14.167    4.57 | 20.25    1.96
 2.083    1.20 | 8.167    2.39 |14.250    4.57 | 20.33    1.31
 2.167    1.20 | 8.250    2.39 |14.333    3.26 | 20.42    1.31
 2.250    1.20 | 8.333    2.83 |14.417    3.26 | 20.50    1.31
 2.333    1.41 | 8.417    2.83 |14.500    3.26 | 20.58    1.31
 2.417    1.41 | 8.500    2.83 |14.583    3.26 | 20.67    1.31
 2.500    1.41 | 8.583    2.83 |14.667    3.26 | 20.75    1.31
 2.583    1.41 | 8.667    2.83 |14.750    3.26 | 20.83    1.31
 2.667    1.41 | 8.750    2.83 |14.833    3.26 | 20.92    1.31
 2.750    1.41 | 8.833    3.05 |14.917    3.26 | 21.00    1.31
 2.833    1.41 | 8.917    3.05 |15.000    3.26 | 21.08    1.31
 2.917    1.41 | 9.000    3.05 |15.083    3.26 | 21.17    1.31
 3.000    1.41 | 9.083    3.05 |15.167    3.26 | 21.25    1.31
 3.083    1.41 | 9.167    3.05 |15.250    3.26 | 21.33    1.31
 3.167    1.41 | 9.250    3.05 |15.333    3.26 | 21.42    1.31
 3.250    1.41 | 9.333    3.48 |15.417    3.26 | 21.50    1.31
 3.333    1.41 | 9.417    3.48 |15.500    3.26 | 21.58    1.31
 3.417    1.41 | 9.500    3.48 |15.583    3.26 | 21.67    1.31
 3.500    1.41 | 9.583    3.48 |15.667    3.26 | 21.75    1.31
 3.583    1.41 | 9.667    3.48 |15.750    3.26 | 21.83    1.31
 3.667    1.41 | 9.750    3.48 |15.833    3.26 | 21.92    1.31
 3.750    1.41 | 9.833    3.92 |15.917    3.26 | 22.00    1.31
 3.833    1.41 | 9.917    3.92 |16.000    3.26 | 22.08    1.31
 3.917    1.41 |10.000    3.92 |16.083    3.26 | 22.17    1.31
 4.000    1.41 |10.083    3.92 |16.167    3.26 | 22.25    1.31
 4.083    1.41 |10.167    3.92 |16.250    3.26 | 22.33    1.31
 4.167    1.41 |10.250    3.92 |16.333    1.96 | 22.42    1.31
 4.250    1.41 |10.333    5.00 |16.417    1.96 | 22.50    1.31
 4.333    1.74 |10.417    5.00 |16.500    1.96 | 22.58    1.31
 4.417    1.74 |10.500    5.00 |16.583    1.96 | 22.67    1.31
 4.500    1.74 |10.583    5.00 |16.667    1.96 | 22.75    1.31
 4.583    1.74 |10.667    5.00 |16.750    1.96 | 22.83    1.31
 4.667    1.74 |10.750    5.00 |16.833    1.96 | 22.92    1.31
 4.750    1.74 |10.833    6.75 |16.917    1.96 | 23.00    1.31
 4.833    1.74 |10.917    6.75 |17.000    1.96 | 23.08    1.31
 4.917    1.74 |11.000    6.75 |17.083    1.96 | 23.17    1.31
 5.000    1.74 |11.083    6.75 |17.167    1.96 | 23.25    1.31
 5.083    1.74 |11.167    6.75 |17.250    1.96 | 23.33    1.31
 5.167    1.74 |11.250    6.75 |17.333    1.96 | 23.42    1.31
 5.250    1.74 |11.333   10.44 |17.417    1.96 | 23.50    1.31
 5.333    1.74 |11.417   10.44 |17.500    1.96 | 23.58    1.31
 5.417    1.74 |11.500   10.44 |17.583    1.96 | 23.67    1.31
 5.500    1.74 |11.583   10.44 |17.667    1.96 | 23.75    1.31
 5.583    1.74 |11.667   10.44 |17.750    1.96 | 23.83    1.31
 5.667    1.74 |11.750   10.44 |17.833    1.96 | 23.92    1.31
 5.750    1.74 |11.833   32.20 |17.917    1.96 | 24.00    1.31
 5.833    1.74 |11.917   32.20 |18.000    1.96 | 24.08    1.31
 5.917    1.74 |12.000   32.20 |18.083    1.96 | 24.17    1.31
 6.000    1.74 |12.083  133.16 |18.167    1.96 | 24.25    1.31
 6.083    1.74 |12.167  133.17 |18.250    1.96 |

     Max.Eff.Inten.(mm/hr)=     133.17       115.15
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.82 (ii)    5.75 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.15
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.19         0.04          0.229 (iii)

     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     107.80        59.82         93.98
     TOTAL RAINFALL   (mm)=     108.80       108.80        108.80
     RUNOFF COEFFICIENT   =       0.99         0.55          0.86

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.23     12.25   93.98
     ====================================================
     MAJOR SYS.(ID= 2):   0.05      0.07     12.25   93.98
     MINOR SYS.(ID= 3):   0.66      0.16     12.08   93.98

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                         AREA     QPEAK   TPEAK     R.V.
                         (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 9(  0025)    0.66     0.16   12.08    93.98
  OUTFLOW: ID= 2(  0024)    0.66     0.16   12.08    93.98

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.66   0.162    12.08    93.98
     + ID2= 2 (  0355):     1.56   0.383    12.25    79.85
       ================================================
       ID = 3 (  0357):     2.22   0.545    12.25    84.05

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.22   0.545    12.25    84.05
     + ID2= 2 (  0356):    16.63   4.737    12.25    88.47
       ================================================
       ID = 1 (  0357):    18.85   5.281    12.25    87.95

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.7410     0.8760
                          0.0430     0.1680   |  1.3270     1.1950
                          0.0650     0.3300   |  1.8380     1.4460
                          0.3870     0.6500   |  3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.850      5.281     12.25      87.95
   OUTFLOW: ID= 1 (  0358)     18.850      0.765     12.75      87.89

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 14.48
                  TIME SHIFT OF PEAK FLOW         (min)= 30.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.8895

--------------------------------------------------------------------------------
--------------------
| CALIB             |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
```

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

```
     Max.Eff.Inten.(mm/hr)=     133.17       103.48
                over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.59 (ii)    8.55 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.12
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.09         0.04          0.126 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25          12.25
     RUNOFF VOLUME    (mm)=     107.80        57.71          84.50
     TOTAL RAINFALL   (mm)=     108.80       108.80         108.80
     RUNOFF COEFFICIENT   =       0.99         0.53           0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
```

```
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0358):    18.85   0.765    12.75    87.89
     + ID2= 2 (  0359):     0.45   0.126    12.25    84.50
       ====================================================
       ID = 3 (  0370):    19.30   0.783    12.75    87.81

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

```
     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.072 (i)
     TIME TO PEAK    (hrs)=  12.583
     RUNOFF VOLUME    (mm)=  51.909
     TOTAL RAINFALL   (mm)= 108.800
```

RUNOFF COEFFICIENT = 0.477

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0018)	Area (ha)=	0.78	
ID= 1 DT= 5.0 min	Total Imp(%)=	20.00	Dir. Conn.(%)= 15.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.16	0.62
Dep. Storage	(mm)=	5.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	72.11	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)=	133.17	90.48	
over (min)	5.00	10.00	
Storage Coeff. (min)=	1.87 (ii)	9.22 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.32	0.12	
			TOTALS
PEAK FLOW (cms)=	0.04	0.11	0.157 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	103.80	57.61	64.53
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.95	0.53	0.59

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.05	0.07	12.25	93.98
OUTFLOW: ID= 2(0026)	0.05	0.07	12.25	93.98

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0018):	0.78	0.157	12.25	64.53
	+ ID2= 2 (0026):	0.05	0.067	12.25	93.98
	ID = 3 (0361):	0.83	0.224	12.25	66.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0361):	0.83	0.224	12.25	66.30
	+ ID2= 2 (0360):	1.02	0.072	12.58	51.91
	ID = 1 (0361):	1.85	0.261	12.25	58.37

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0007)	Area (ha)=	1.37	
ID= 1 DT= 5.0 min	Total Imp(%)=	25.40	Dir. Conn.(%)= 23.80

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.35	1.02
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	95.57	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31

2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)= 133.17 79.33
over (min) 5.00 10.00
Storage Coeff. (min)= 2.22 (ii) 9.96 (ii)

Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.30 0.11

			TOTALS
PEAK FLOW (cms)=	0.12	0.16	0.277 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	107.80	52.54	65.69
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.99	0.48	0.60

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0017)	OVERFLOW IS OFF			
IN= 2---> OUT= 1				
DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1350	0.0340

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0007)	1.370	0.277	12.25	65.69
OUTFLOW: ID= 1 (0017)	1.370	0.099	12.50	65.65

PEAK FLOW REDUCTION [Qout/Qin](%)= 35.79
TIME SHIFT OF PEAK FLOW (min)= 15.00
MAXIMUM STORAGE USED (ha.m.)= 0.0251

CALIB			
STANDHYD (0015)	Area (ha)= 0.39		
ID= 1 DT= 5.0 min	Total Imp(%)= 66.10	Dir. Conn.(%)= 15.00	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.26	0.13
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	50.99	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.74	12.250	133.17	18.33	1.96
0.167	0.00	6.250	1.74	12.333	15.68	18.42	1.96
0.250	0.00	6.333	1.96	12.417	15.67	18.50	1.96
0.333	1.20	6.417	1.96	12.500	15.67	18.58	1.96
0.417	1.20	6.500	1.96	12.583	15.67	18.67	1.96
0.500	1.20	6.583	1.96	12.667	15.67	18.75	1.96
0.583	1.20	6.667	1.96	12.750	15.67	18.83	1.96
0.667	1.20	6.750	1.96	12.833	8.05	18.92	1.96
0.750	1.20	6.833	1.96	12.917	8.05	19.00	1.96
0.833	1.20	6.917	1.96	13.000	8.05	19.08	1.96
0.917	1.20	7.000	1.96	13.083	8.05	19.17	1.96
1.000	1.20	7.083	1.96	13.167	8.05	19.25	1.96
1.083	1.20	7.167	1.96	13.250	8.05	19.33	1.96
1.167	1.20	7.250	1.96	13.333	5.88	19.42	1.96
1.250	1.20	7.333	2.39	13.417	5.88	19.50	1.96
1.333	1.20	7.417	2.39	13.500	5.88	19.58	1.96
1.417	1.20	7.500	2.39	13.583	5.88	19.67	1.96
1.500	1.20	7.583	2.39	13.667	5.88	19.75	1.96
1.583	1.20	7.667	2.39	13.750	5.88	19.83	1.96
1.667	1.20	7.750	2.39	13.833	4.57	19.92	1.96
1.750	1.20	7.833	2.39	13.917	4.57	20.00	1.96
1.833	1.20	7.917	2.39	14.000	4.57	20.08	1.96
1.917	1.20	8.000	2.39	14.083	4.57	20.17	1.96
2.000	1.20	8.083	2.39	14.167	4.57	20.25	1.96
2.083	1.20	8.167	2.39	14.250	4.57	20.33	1.31
2.167	1.20	8.250	2.39	14.333	3.26	20.42	1.31
2.250	1.20	8.333	2.83	14.417	3.26	20.50	1.31
2.333	1.41	8.417	2.83	14.500	3.26	20.58	1.31
2.417	1.41	8.500	2.83	14.583	3.26	20.67	1.31
2.500	1.41	8.583	2.83	14.667	3.26	20.75	1.31
2.583	1.41	8.667	2.83	14.750	3.26	20.83	1.31
2.667	1.41	8.750	2.83	14.833	3.26	20.92	1.31
2.750	1.41	8.833	3.05	14.917	3.26	21.00	1.31
2.833	1.41	8.917	3.05	15.000	3.26	21.08	1.31
2.917	1.41	9.000	3.05	15.083	3.26	21.17	1.31
3.000	1.41	9.083	3.05	15.167	3.26	21.25	1.31
3.083	1.41	9.167	3.05	15.250	3.26	21.33	1.31
3.167	1.41	9.250	3.05	15.333	3.26	21.42	1.31
3.250	1.41	9.333	3.48	15.417	3.26	21.50	1.31
3.333	1.41	9.417	3.48	15.500	3.26	21.58	1.31
3.417	1.41	9.500	3.48	15.583	3.26	21.67	1.31
3.500	1.41	9.583	3.48	15.667	3.26	21.75	1.31
3.583	1.41	9.667	3.48	15.750	3.26	21.83	1.31
3.667	1.41	9.750	3.48	15.833	3.26	21.92	1.31
3.750	1.41	9.833	3.92	15.917	3.26	22.00	1.31
3.833	1.41	9.917	3.92	16.000	3.26	22.08	1.31
3.917	1.41	10.000	3.92	16.083	3.26	22.17	1.31
4.000	1.41	10.083	3.92	16.167	3.26	22.25	1.31
4.083	1.41	10.167	3.92	16.250	3.26	22.33	1.31
4.167	1.41	10.250	3.92	16.333	1.96	22.42	1.31
4.250	1.41	10.333	5.00	16.417	1.96	22.50	1.31
4.333	1.74	10.417	5.00	16.500	1.96	22.58	1.31
4.417	1.74	10.500	5.00	16.583	1.96	22.67	1.31
4.500	1.74	10.583	5.00	16.667	1.96	22.75	1.31
4.583	1.74	10.667	5.00	16.750	1.96	22.83	1.31
4.667	1.74	10.750	5.00	16.833	1.96	22.92	1.31
4.750	1.74	10.833	6.75	16.917	1.96	23.00	1.31
4.833	1.74	10.917	6.75	17.000	1.96	23.08	1.31
4.917	1.74	11.000	6.75	17.083	1.96	23.17	1.31
5.000	1.74	11.083	6.75	17.167	1.96	23.25	1.31
5.083	1.74	11.167	6.75	17.250	1.96	23.33	1.31
5.167	1.74	11.250	6.75	17.333	1.96	23.42	1.31
5.250	1.74	11.333	10.44	17.417	1.96	23.50	1.31
5.333	1.74	11.417	10.44	17.500	1.96	23.58	1.31
5.417	1.74	11.500	10.44	17.583	1.96	23.67	1.31
5.500	1.74	11.583	10.44	17.667	1.96	23.75	1.31
5.583	1.74	11.667	10.44	17.750	1.96	23.83	1.31
5.667	1.74	11.750	10.44	17.833	1.96	23.92	1.31
5.750	1.74	11.833	32.20	17.917	1.96	24.00	1.31
5.833	1.74	11.917	32.20	18.000	1.96	24.08	1.31
5.917	1.74	12.000	32.20	18.083	1.96	24.17	1.31
6.000	1.74	12.083	133.16	18.167	1.96	24.25	1.31
6.083	1.74	12.167	133.17	18.250	1.96		

Max.Eff.Inten.(mm/hr)= 133.17 276.52
over (min) 5.00 10.00
Storage Coeff. (min)= 1.52 (ii) 6.22 (ii)
Unit Hyd. Tpeak (min)= 5.00 10.00
Unit Hyd. peak (cms)= 0.33 0.15

			TOTALS
PEAK FLOW (cms)=	0.02	0.09	0.108 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	107.80	76.98	81.59
TOTAL RAINFALL (mm)=	108.80	108.80	108.80
RUNOFF COEFFICIENT =	0.99	0.71	0.75

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.108    12.25    81.59
     + ID2= 2 (  0017):     1.37   0.099    12.50    65.65
       ================================================
       ID = 3 (  0016):     1.76   0.183    12.25    69.18

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\3455c
820-a63b-4fcb-894f-16c79d4da701\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\3455c
820-a63b-4fcb-894f-16c79d4da701\scena


DATE: 05-25-2023                          TIME: 09:50:41

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : K. 50yr 24hr 15min SCS Type I **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\15b81333
| Ptotal=120.77 mm |    Comments: K. 50yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.17	12.50	17.39	18.75	2.17
0.25	1.33	6.50	2.17	12.75	8.94	19.00	2.17
0.50	1.33	6.75	2.17	13.00	8.94	19.25	2.17
0.75	1.33	7.00	2.17	13.25	6.52	19.50	2.17
1.00	1.33	7.25	2.66	13.50	6.52	19.75	2.17
1.25	1.33	7.50	2.66	13.75	5.07	20.00	2.17
1.50	1.33	7.75	2.66	14.00	5.07	20.25	1.45
1.75	1.33	8.00	2.66	14.25	3.62	20.50	1.45
2.00	1.33	8.25	3.14	14.50	3.62	20.75	1.45
2.25	1.57	8.50	3.14	14.75	3.62	21.00	1.45
2.50	1.57	8.75	3.38	15.00	3.62	21.25	1.45
2.75	1.57	9.00	3.38	15.25	3.62	21.50	1.45
3.00	1.57	9.25	3.86	15.50	3.62	21.75	1.45
3.25	1.57	9.50	3.86	15.75	3.62	22.00	1.45
3.50	1.57	9.75	4.35	16.00	3.62	22.25	1.45
3.75	1.57	10.00	4.35	16.25	2.17	22.50	1.45
4.00	1.57	10.25	5.56	16.50	2.17	22.75	1.45
4.25	1.93	10.50	5.56	16.75	2.17	23.00	1.45
4.50	1.93	10.75	7.49	17.00	2.17	23.25	1.45
4.75	1.93	11.00	7.49	17.25	2.17	23.50	1.45
5.00	1.93	11.25	11.59	17.50	2.17	23.75	1.45
5.25	1.93	11.50	11.59	17.75	2.17	24.00	1.45
5.50	1.93	11.75	35.75	18.00	2.17		
5.75	1.93	12.00	147.82	18.25	2.17		
6.00	1.93	12.25	17.39	18.50	2.17		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45

4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Unit Hyd Qpeak (cms)= 0.094

PEAK FLOW (cms)= 0.077 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 60.938
TOTAL RAINFALL (mm)= 120.770
RUNOFF COEFFICIENT = 0.505

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB	
STANDHYD (0002)	Area (ha)= 3.35
ID= 1 DT= 5.0 min	Total Imp(%)= 55.00 Dir. Conn.(%)= 55.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	1.84	1.51
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	149.44	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

			TOTALS
Max.Eff.Inten.(mm/hr)=	147.82	90.11	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.78 (ii)	10.14 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.28	0.10	
PEAK FLOW (cms)=	0.75	0.25	0.970 (iii)
TIME TO PEAK (hrs)=	12.25	12.33	12.25
RUNOFF VOLUME (mm)=	119.77	61.05	93.35
TOTAL RAINFALL (mm)=	120.77	120.77	120.77
RUNOFF COEFFICIENT =	0.99	0.51	0.77

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF
IN= 2---> OUT= 1	
DT= 5.0 min	

OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
0.0000	0.0000	0.1340	0.1430
0.0270	0.0810	0.1670	0.1580
0.0620	0.1060	0.1980	0.1750
0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.970	12.25	93.35
OUTFLOW: ID= 1 (0004)	3.350	0.166	12.75	93.12

PEAK FLOW REDUCTION [Qout/Qin](%)= 17.11
TIME SHIFT OF PEAK FLOW (min)= 30.00
MAXIMUM STORAGE USED (ha.m.)= 0.1576

ADD HYD (0003)				
1 + 2 = 3	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
ID1= 1 (0001):	0.49	0.077	12.33	60.94
+ ID2= 2 (0004):	3.35	0.166	12.75	93.12
ID = 3 (0003):	3.84	0.217	12.42	89.01

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB	
STANDHYD (0355)	Area (ha)= 1.56
ID= 1 DT= 5.0 min	Total Imp(%)= 50.00 Dir. Conn.(%)= 50.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.78	0.78
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	101.98	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17

0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Max.Eff.Inten.(mm/hr)=	147.82	90.11	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.21 (ii)	9.57 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.30	0.11	
			TOTALS
PEAK FLOW (cms)=	0.32	0.14	0.459 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	119.77	61.06	90.41
TOTAL RAINFALL (mm)=	120.77	120.77	120.77
RUNOFF COEFFICIENT =	0.99	0.51	0.75

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB
STANDHYD (0356)
ID= 1 DT= 5.0 min

Area (ha)= 16.63
Total Imp(%)= 68.80 Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Max.Eff.Inten.(mm/hr)=	147.82	127.56	
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.50 (ii)	9.13 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.23	0.12	
			TOTALS
PEAK FLOW (cms)=	4.02	1.35	5.364 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	119.77	68.66	99.58
TOTAL RAINFALL (mm)=	120.77	120.77	120.77
RUNOFF COEFFICIENT =	0.99	0.57	0.82

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    1.93 |12.250  147.82 | 18.33    2.17
 0.167    0.00 | 6.250    1.93 |12.333   17.41 | 18.42    2.17
 0.250    0.00 | 6.333    2.17 |12.417   17.39 | 18.50    2.17
 0.333    1.33 | 6.417    2.17 |12.500   17.39 | 18.58    2.17
 0.417    1.33 | 6.500    2.17 |12.583   17.39 | 18.67    2.17
 0.500    1.33 | 6.583    2.17 |12.667   17.39 | 18.75    2.17
 0.583    1.33 | 6.667    2.17 |12.750   17.39 | 18.83    2.17
 0.667    1.33 | 6.750    2.17 |12.833    8.94 | 18.92    2.17
 0.750    1.33 | 6.833    2.17 |12.917    8.94 | 19.00    2.17
 0.833    1.33 | 6.917    2.17 |13.000    8.94 | 19.08    2.17
 0.917    1.33 | 7.000    2.17 |13.083    8.94 | 19.17    2.17
 1.000    1.33 | 7.083    2.17 |13.167    8.94 | 19.25    2.17
 1.083    1.33 | 7.167    2.17 |13.250    8.94 | 19.33    2.17
 1.167    1.33 | 7.250    2.17 |13.333    6.52 | 19.42    2.17
 1.250    1.33 | 7.333    2.66 |13.417    6.52 | 19.50    2.17
 1.333    1.33 | 7.417    2.66 |13.500    6.52 | 19.58    2.17
 1.417    1.33 | 7.500    2.66 |13.583    6.52 | 19.67    2.17
 1.500    1.33 | 7.583    2.66 |13.667    6.52 | 19.75    2.17
 1.583    1.33 | 7.667    2.66 |13.750    6.52 | 19.83    2.17
 1.667    1.33 | 7.750    2.66 |13.833    5.07 | 19.92    2.17
 1.750    1.33 | 7.833    2.66 |13.917    5.07 | 20.00    2.17
 1.833    1.33 | 7.917    2.66 |14.000    5.07 | 20.08    2.17
 1.917    1.33 | 8.000    2.66 |14.083    5.07 | 20.17    2.17
 2.000    1.33 | 8.083    2.66 |14.167    5.07 | 20.25    2.17
 2.083    1.33 | 8.167    2.66 |14.250    5.07 | 20.33    1.45
 2.167    1.33 | 8.250    2.66 |14.333    3.62 | 20.42    1.45
 2.250    1.33 | 8.333    3.14 |14.417    3.62 | 20.50    1.45
 2.333    1.57 | 8.417    3.14 |14.500    3.62 | 20.58    1.45
 2.417    1.57 | 8.500    3.14 |14.583    3.62 | 20.67    1.45
 2.500    1.57 | 8.583    3.14 |14.667    3.62 | 20.75    1.45
 2.583    1.57 | 8.667    3.14 |14.750    3.62 | 20.83    1.45
 2.667    1.57 | 8.750    3.14 |14.833    3.62 | 20.92    1.45
 2.750    1.57 | 8.833    3.38 |14.917    3.62 | 21.00    1.45
 2.833    1.57 | 8.917    3.38 |15.000    3.62 | 21.08    1.45
 2.917    1.57 | 9.000    3.38 |15.083    3.62 | 21.17    1.45
 3.000    1.57 | 9.083    3.38 |15.167    3.62 | 21.25    1.45
 3.083    1.57 | 9.167    3.38 |15.250    3.62 | 21.33    1.45
 3.167    1.57 | 9.250    3.38 |15.333    3.62 | 21.42    1.45
 3.250    1.57 | 9.333    3.86 |15.417    3.62 | 21.50    1.45
 3.333    1.57 | 9.417    3.86 |15.500    3.62 | 21.58    1.45
 3.417    1.57 | 9.500    3.86 |15.583    3.62 | 21.67    1.45
 3.500    1.57 | 9.583    3.86 |15.667    3.62 | 21.75    1.45
 3.583    1.57 | 9.667    3.86 |15.750    3.62 | 21.83    1.45
 3.667    1.57 | 9.750    3.86 |15.833    3.62 | 21.92    1.45
 3.750    1.57 | 9.833    4.35 |15.917    3.62 | 22.00    1.45
 3.833    1.57 | 9.917    4.35 |16.000    3.62 | 22.08    1.45
 3.917    1.57 |10.000    4.35 |16.083    3.62 | 22.17    1.45
 4.000    1.57 |10.083    4.35 |16.167    3.62 | 22.25    1.45
 4.083    1.57 |10.167    4.35 |16.250    3.62 | 22.33    1.45
 4.167    1.57 |10.250    4.35 |16.333    2.17 | 22.42    1.45
 4.250    1.57 |10.333    5.56 |16.417    2.17 | 22.50    1.45
 4.333    1.93 |10.417    5.56 |16.500    2.17 | 22.58    1.45
 4.417    1.93 |10.500    5.56 |16.583    2.17 | 22.67    1.45
 4.500    1.93 |10.583    5.56 |16.667    2.17 | 22.75    1.45
 4.583    1.93 |10.667    5.56 |16.750    2.17 | 22.83    1.45
 4.667    1.93 |10.750    5.56 |16.833    2.17 | 22.92    1.45
 4.750    1.93 |10.833    7.49 |16.917    2.17 | 23.00    1.45
 4.833    1.93 |10.917    7.49 |17.000    2.17 | 23.08    1.45
 4.917    1.93 |11.000    7.49 |17.083    2.17 | 23.17    1.45
 5.000    1.93 |11.083    7.49 |17.167    2.17 | 23.25    1.45
 5.083    1.93 |11.167    7.49 |17.250    2.17 | 23.33    1.45
 5.167    1.93 |11.250    7.49 |17.333    2.17 | 23.42    1.45
 5.250    1.93 |11.333   11.59 |17.417    2.17 | 23.50    1.45
 5.333    1.93 |11.417   11.59 |17.500    2.17 | 23.58    1.45
 5.417    1.93 |11.500   11.59 |17.583    2.17 | 23.67    1.45
 5.500    1.93 |11.583   11.59 |17.667    2.17 | 23.75    1.45
 5.583    1.93 |11.667   11.59 |17.750    2.17 | 23.83    1.45
 5.667    1.93 |11.750   11.59 |17.833    2.17 | 23.92    1.45
 5.750    1.93 |11.833   35.75 |17.917    2.17 | 24.00    1.45
 5.833    1.93 |11.917   35.75 |18.000    2.17 | 24.08    1.45
 5.917    1.93 |12.000   35.75 |18.083    2.17 | 24.17    1.45
 6.000    1.93 |12.083  147.81 |18.167    2.17 | 24.25    1.45
 6.083    1.93 |12.167  147.82 |18.250    2.17 |

    Max.Eff.Inten.(mm/hr)=     147.82       133.79
                over (min)        5.00        10.00
    Storage Coeff.  (min)=       1.75 (ii)    5.52 (ii)
    Unit Hyd. Tpeak (min)=       5.00        10.00
    Unit Hyd. peak  (cms)=       0.32         0.16
                                                        *TOTALS*
    PEAK FLOW       (cms)=       0.21         0.05          0.258 (iii)

    TIME TO PEAK    (hrs)=      12.25        12.25         12.25
    RUNOFF VOLUME    (mm)=     119.77        69.71        105.35
    TOTAL RAINFALL   (mm)=     120.77       120.77        120.77
    RUNOFF COEFFICIENT   =       0.99         0.58          0.87

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
-------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
-------------------      (ha)     (cms)     (hrs)    (mm)
    TOTAL HYD.(ID= 1):   0.71      0.26     12.25  105.35
    ==========================================================
    MAJOR SYS.(ID= 2):   0.07      0.10     12.25  105.35
    MINOR SYS.(ID= 3):   0.64      0.16     12.08  105.35

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                         AREA     QPEAK   TPEAK     R.V.
                         (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 9(  0025)    0.64     0.16   12.08   105.35
  OUTFLOW: ID= 2(  0024)    0.64     0.16   12.08   105.35

  --------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.64   0.162    12.08   105.35
     + ID2= 2 (  0355):     1.56   0.459    12.25    90.41
       ================================================
       ID = 3 (  0357):     2.20   0.621    12.25    94.77

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.20   0.621    12.25    94.77
     + ID2= 2 (  0356):    16.63   5.364    12.25    99.58
       ================================================
       ID = 1 (  0357):    18.83   5.985    12.25    99.02

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000   |  0.7410     0.8760
                         0.0430     0.1680   |  1.3270     1.1950
                         0.0650     0.3300   |  1.8380     1.4460
                         0.3870     0.6500   |  3.9290     1.7080

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)    18.833     5.985     12.25      99.02
   OUTFLOW: ID= 1 (  0358)    18.833     0.937     12.67      98.97

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 15.66
                  TIME SHIFT OF PEAK FLOW         (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.9833

--------------------------------------------------------------------------------
-------------------
| CALIB             |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
-------------------

                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
```

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

```
     Max.Eff.Inten.(mm/hr)=     147.82       120.56
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.52 (ii)    8.07 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.13
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.10         0.04          0.143 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     119.77        67.41         95.41
     TOTAL RAINFALL   (mm)=     120.77       120.77        120.77
     RUNOFF COEFFICIENT   =       0.99         0.56          0.79

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0370)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
```

```
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0358):    18.83   0.937    12.67    98.97
     + ID2= 2 (  0359):     0.45   0.143    12.25    95.41
       ====================================================
       ID = 3 (  0370):    19.28   0.959    12.67    98.88

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0360)|   Area    (ha)=   1.02   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.49

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

```
     Unit Hyd Qpeak  (cms)=   0.080

     PEAK FLOW       (cms)=   0.085 (i)
     TIME TO PEAK    (hrs)=  12.583
     RUNOFF VOLUME    (mm)=  61.051
     TOTAL RAINFALL   (mm)= 120.770
```

RUNOFF COEFFICIENT = 0.506

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB							
STANDHYD (0018)	Area (ha)= 0.78						
ID= 1 DT= 5.0 min	Total Imp(%)= 20.00	Dir. Conn.(%)= 15.00					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.16	0.62
Dep. Storage (mm)=	5.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	72.11	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

Max.Eff.Inten.(mm/hr)=	147.82	105.45
over (min)	5.00	10.00
Storage Coeff. (min)=	1.80 (ii)	8.71 (ii)

Unit Hyd. Tpeak (min)=	5.00	10.00
Unit Hyd. peak (cms)=	0.32	0.12
		TOTALS
PEAK FLOW (cms)=	0.05	0.14	0.184 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	115.77	67.33	74.60
TOTAL RAINFALL (mm)=	120.77	120.77	120.77
RUNOFF COEFFICIENT =	0.96	0.56	0.62

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.07	0.10	12.25	105.35
OUTFLOW: ID= 2(0026)	0.07	0.10	12.25	105.35

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0018):	0.78	0.184	12.25	74.60
	+ ID2= 2 (0026):	0.07	0.095	12.25	105.35
	ID = 3 (0361):	0.85	0.279	12.25	77.03

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0361):	0.85	0.279	12.25	77.03
	+ ID2= 2 (0360):	1.02	0.085	12.58	61.05

ID = 1 (0361):	1.87	0.324	12.25	68.30

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB							
STANDHYD (0007)	Area (ha)= 1.37						
ID= 1 DT= 5.0 min	Total Imp(%)= 25.40	Dir. Conn.(%)= 23.80					

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.35	1.02
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	95.57	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45

2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

```
Max.Eff.Inten.(mm/hr)=     147.82        93.05
          over (min)         5.00        10.00
Storage Coeff.  (min)=       2.13 (ii)    9.39 (ii)

     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.31         0.12
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.13         0.19         0.323 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     119.77        61.75         75.55
     TOTAL RAINFALL   (mm)=     120.77       120.77        120.77
     RUNOFF COEFFICIENT   =       0.99         0.51          0.63

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.1350     0.0340

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)      1.370     0.323     12.25      75.55
   OUTFLOW: ID= 1 (  0017)      1.370     0.115     12.50      75.51

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 35.71
                  TIME SHIFT OF PEAK FLOW         (min)= 15.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0292

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n             =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	1.93	12.250	147.82	18.33	2.17
0.167	0.00	6.250	1.93	12.333	17.41	18.42	2.17
0.250	0.00	6.333	2.17	12.417	17.39	18.50	2.17
0.333	1.33	6.417	2.17	12.500	17.39	18.58	2.17
0.417	1.33	6.500	2.17	12.583	17.39	18.67	2.17
0.500	1.33	6.583	2.17	12.667	17.39	18.75	2.17
0.583	1.33	6.667	2.17	12.750	17.39	18.83	2.17
0.667	1.33	6.750	2.17	12.833	8.94	18.92	2.17
0.750	1.33	6.833	2.17	12.917	8.94	19.00	2.17
0.833	1.33	6.917	2.17	13.000	8.94	19.08	2.17
0.917	1.33	7.000	2.17	13.083	8.94	19.17	2.17
1.000	1.33	7.083	2.17	13.167	8.94	19.25	2.17
1.083	1.33	7.167	2.17	13.250	8.94	19.33	2.17
1.167	1.33	7.250	2.17	13.333	6.52	19.42	2.17
1.250	1.33	7.333	2.66	13.417	6.52	19.50	2.17
1.333	1.33	7.417	2.66	13.500	6.52	19.58	2.17
1.417	1.33	7.500	2.66	13.583	6.52	19.67	2.17
1.500	1.33	7.583	2.66	13.667	6.52	19.75	2.17
1.583	1.33	7.667	2.66	13.750	6.52	19.83	2.17
1.667	1.33	7.750	2.66	13.833	5.07	19.92	2.17
1.750	1.33	7.833	2.66	13.917	5.07	20.00	2.17
1.833	1.33	7.917	2.66	14.000	5.07	20.08	2.17
1.917	1.33	8.000	2.66	14.083	5.07	20.17	2.17
2.000	1.33	8.083	2.66	14.167	5.07	20.25	2.17
2.083	1.33	8.167	2.66	14.250	5.07	20.33	1.45
2.167	1.33	8.250	2.66	14.333	3.62	20.42	1.45
2.250	1.33	8.333	3.14	14.417	3.62	20.50	1.45
2.333	1.57	8.417	3.14	14.500	3.62	20.58	1.45
2.417	1.57	8.500	3.14	14.583	3.62	20.67	1.45
2.500	1.57	8.583	3.14	14.667	3.62	20.75	1.45
2.583	1.57	8.667	3.14	14.750	3.62	20.83	1.45
2.667	1.57	8.750	3.14	14.833	3.62	20.92	1.45
2.750	1.57	8.833	3.38	14.917	3.62	21.00	1.45
2.833	1.57	8.917	3.38	15.000	3.62	21.08	1.45
2.917	1.57	9.000	3.38	15.083	3.62	21.17	1.45
3.000	1.57	9.083	3.38	15.167	3.62	21.25	1.45
3.083	1.57	9.167	3.38	15.250	3.62	21.33	1.45
3.167	1.57	9.250	3.38	15.333	3.62	21.42	1.45
3.250	1.57	9.333	3.86	15.417	3.62	21.50	1.45
3.333	1.57	9.417	3.86	15.500	3.62	21.58	1.45
3.417	1.57	9.500	3.86	15.583	3.62	21.67	1.45
3.500	1.57	9.583	3.86	15.667	3.62	21.75	1.45
3.583	1.57	9.667	3.86	15.750	3.62	21.83	1.45
3.667	1.57	9.750	3.86	15.833	3.62	21.92	1.45
3.750	1.57	9.833	4.35	15.917	3.62	22.00	1.45
3.833	1.57	9.917	4.35	16.000	3.62	22.08	1.45
3.917	1.57	10.000	4.35	16.083	3.62	22.17	1.45
4.000	1.57	10.083	4.35	16.167	3.62	22.25	1.45
4.083	1.57	10.167	4.35	16.250	3.62	22.33	1.45
4.167	1.57	10.250	4.35	16.333	2.17	22.42	1.45
4.250	1.57	10.333	5.56	16.417	2.17	22.50	1.45
4.333	1.93	10.417	5.56	16.500	2.17	22.58	1.45
4.417	1.93	10.500	5.56	16.583	2.17	22.67	1.45
4.500	1.93	10.583	5.56	16.667	2.17	22.75	1.45
4.583	1.93	10.667	5.56	16.750	2.17	22.83	1.45
4.667	1.93	10.750	5.56	16.833	2.17	22.92	1.45
4.750	1.93	10.833	7.49	16.917	2.17	23.00	1.45
4.833	1.93	10.917	7.49	17.000	2.17	23.08	1.45
4.917	1.93	11.000	7.49	17.083	2.17	23.17	1.45
5.000	1.93	11.083	7.49	17.167	2.17	23.25	1.45
5.083	1.93	11.167	7.49	17.250	2.17	23.33	1.45
5.167	1.93	11.250	7.49	17.333	2.17	23.42	1.45
5.250	1.93	11.333	11.59	17.417	2.17	23.50	1.45
5.333	1.93	11.417	11.59	17.500	2.17	23.58	1.45
5.417	1.93	11.500	11.59	17.583	2.17	23.67	1.45
5.500	1.93	11.583	11.59	17.667	2.17	23.75	1.45
5.583	1.93	11.667	11.59	17.750	2.17	23.83	1.45
5.667	1.93	11.750	11.59	17.833	2.17	23.92	1.45
5.750	1.93	11.833	35.75	17.917	2.17	24.00	1.45
5.833	1.93	11.917	35.75	18.000	2.17	24.08	1.45
5.917	1.93	12.000	35.75	18.083	2.17	24.17	1.45
6.000	1.93	12.083	147.81	18.167	2.17	24.25	1.45
6.083	1.93	12.167	147.82	18.250	2.17		

```
     Max.Eff.Inten.(mm/hr)=     147.82       314.62
               over (min)         5.00        10.00
     Storage Coeff.  (min)=       1.46 (ii)    5.92 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.15
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.10         0.124 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     119.77        88.09         92.83
     TOTAL RAINFALL   (mm)=     120.77       120.77        120.77
     RUNOFF COEFFICIENT   =       0.99         0.73          0.77

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
```

```
--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |          AREA     QPEAK     TPEAK      R.V.
--------------------          (ha)     (cms)     (hrs)      (mm)
       ID1= 1 (  0015):      0.39    0.124     12.25     92.83
     + ID2= 2 (  0017):      1.37    0.115     12.50     75.51
       ================================================
       ID = 3 (  0016):      1.76    0.211     12.25     79.35

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\a0efa
979-b81f-4494-bde2-1f27777e44d5\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\a0efa
979-b81f-4494-bde2-1f27777e44d5\scena


DATE: 05-25-2023                          TIME: 09:50:42

USER:


COMMENTS: _____
```

```
--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : L. 100yr 24hr 15min SCS Type  **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              bf60eaa7-8d48-4e80-ab13-7cb78835f93f\15758074
| Ptotal=132.74 mm |    Comments: L. 100yr 24hr 15min SCS Type II
--------------------
```

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.00	0.00	6.25	2.39	12.50	19.11	18.75	2.39
0.25	1.46	6.50	2.39	12.75	9.82	19.00	2.39
0.50	1.46	6.75	2.39	13.00	9.82	19.25	2.39
0.75	1.46	7.00	2.39	13.25	7.17	19.50	2.39
1.00	1.46	7.25	2.92	13.50	7.17	19.75	2.39
1.25	1.46	7.50	2.92	13.75	5.58	20.00	2.39
1.50	1.46	7.75	2.92	14.00	5.58	20.25	1.59
1.75	1.46	8.00	2.92	14.25	3.98	20.50	1.59
2.00	1.46	8.25	3.45	14.50	3.98	20.75	1.59
2.25	1.73	8.50	3.45	14.75	3.98	21.00	1.59
2.50	1.73	8.75	3.72	15.00	3.98	21.25	1.59
2.75	1.73	9.00	3.72	15.25	3.98	21.50	1.59
3.00	1.73	9.25	4.25	15.50	3.98	21.75	1.59
3.25	1.73	9.50	4.25	15.75	3.98	22.00	1.59
3.50	1.73	9.75	4.78	16.00	3.98	22.25	1.59
3.75	1.73	10.00	4.78	16.25	2.39	22.50	1.59
4.00	1.73	10.25	6.11	16.50	2.39	22.75	1.59
4.25	2.12	10.50	6.11	16.75	2.39	23.00	1.59
4.50	2.12	10.75	8.23	17.00	2.39	23.25	1.59
4.75	2.12	11.00	8.23	17.25	2.39	23.50	1.59
5.00	2.12	11.25	12.74	17.50	2.39	23.75	1.59
5.25	2.12	11.50	12.74	17.75	2.39	24.00	1.59
5.50	2.12	11.75	39.29	18.00	2.39		
5.75	2.12	12.00	162.47	18.25	2.39		
6.00	2.12	12.25	19.11	18.50	2.39		

```
--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 71.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59

```
              4.667    2.12 |10.750    6.11 |16.833    2.39 | 22.92    1.59
              4.750    2.12 |10.833    8.23 |16.917    2.39 | 23.00    1.59
              4.833    2.12 |10.917    8.23 |17.000    2.39 | 23.08    1.59
              4.917    2.12 |11.000    8.23 |17.083    2.39 | 23.17    1.59
              5.000    2.12 |11.083    8.23 |17.167    2.39 | 23.25    1.59
              5.083    2.12 |11.167    8.23 |17.250    2.39 | 23.33    1.59
              5.167    2.12 |11.250    8.23 |17.333    2.39 | 23.42    1.59
              5.250    2.12 |11.333   12.74 |17.417    2.39 | 23.50    1.59
              5.333    2.12 |11.417   12.74 |17.500    2.39 | 23.58    1.59
              5.417    2.12 |11.500   12.74 |17.583    2.39 | 23.67    1.59
              5.500    2.12 |11.583   12.74 |17.667    2.39 | 23.75    1.59
              5.583    2.12 |11.667   12.74 |17.750    2.39 | 23.83    1.59
              5.667    2.12 |11.750   12.74 |17.833    2.39 | 23.92    1.59
              5.750    2.12 |11.833   39.29 |17.917    2.39 | 24.00    1.59
              5.833    2.12 |11.917   39.29 |18.000    2.39 | 24.08    1.59
              5.917    2.12 |12.000   39.29 |18.083    2.39 | 24.17    1.59
              6.000    2.12 |12.083  162.46 |18.167    2.39 | 24.25    1.59
              6.083    2.12 |12.167  162.47 |18.250    2.39 |

     Unit Hyd Qpeak  (cms)=   0.094

     PEAK FLOW       (cms)=   0.089 (i)
     TIME TO PEAK    (hrs)=  12.333
     RUNOFF VOLUME    (mm)=  70.356
     TOTAL RAINFALL   (mm)= 132.740
     RUNOFF COEFFICIENT   =   0.530

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       1.84         1.51
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     149.44        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    0.00 | 6.167    2.12 |12.250  162.47 | 18.33    2.39
              0.167    0.00 | 6.250    2.12 |12.333   19.13 | 18.42    2.39
```

```
              0.250    0.00 | 6.333    2.39 |12.417   19.11 | 18.50    2.39
              0.333    1.46 | 6.417    2.39 |12.500   19.11 | 18.58    2.39
              0.417    1.46 | 6.500    2.39 |12.583   19.11 | 18.67    2.39
              0.500    1.46 | 6.583    2.39 |12.667   19.11 | 18.75    2.39
              0.583    1.46 | 6.667    2.39 |12.750   19.11 | 18.83    2.39
              0.667    1.46 | 6.750    2.39 |12.833    9.82 | 18.92    2.39
              0.750    1.46 | 6.833    2.39 |12.917    9.82 | 19.00    2.39
              0.833    1.46 | 6.917    2.39 |13.000    9.82 | 19.08    2.39
              0.917    1.46 | 7.000    2.39 |13.083    9.82 | 19.17    2.39
              1.000    1.46 | 7.083    2.39 |13.167    9.82 | 19.25    2.39
              1.083    1.46 | 7.167    2.39 |13.250    9.82 | 19.33    2.39
              1.167    1.46 | 7.250    2.39 |13.333    7.17 | 19.42    2.39
              1.250    1.46 | 7.333    2.92 |13.417    7.17 | 19.50    2.39
              1.333    1.46 | 7.417    2.92 |13.500    7.17 | 19.58    2.39
              1.417    1.46 | 7.500    2.92 |13.583    7.17 | 19.67    2.39
              1.500    1.46 | 7.583    2.92 |13.667    7.17 | 19.75    2.39
              1.583    1.46 | 7.667    2.92 |13.750    7.17 | 19.83    2.39
              1.667    1.46 | 7.750    2.92 |13.833    5.58 | 19.92    2.39
              1.750    1.46 | 7.833    2.92 |13.917    5.58 | 20.00    2.39
              1.833    1.46 | 7.917    2.92 |14.000    5.58 | 20.08    2.39
              1.917    1.46 | 8.000    2.92 |14.083    5.58 | 20.17    2.39
              2.000    1.46 | 8.083    2.92 |14.167    5.58 | 20.25    2.39
              2.083    1.46 | 8.167    2.92 |14.250    5.58 | 20.33    1.59
              2.167    1.46 | 8.250    2.92 |14.333    3.98 | 20.42    1.59
              2.250    1.46 | 8.333    3.45 |14.417    3.98 | 20.50    1.59
              2.333    1.73 | 8.417    3.45 |14.500    3.98 | 20.58    1.59
              2.417    1.73 | 8.500    3.45 |14.583    3.98 | 20.67    1.59
              2.500    1.73 | 8.583    3.45 |14.667    3.98 | 20.75    1.59
              2.583    1.73 | 8.667    3.45 |14.750    3.98 | 20.83    1.59
              2.667    1.73 | 8.750    3.45 |14.833    3.98 | 20.92    1.59
              2.750    1.73 | 8.833    3.72 |14.917    3.98 | 21.00    1.59
              2.833    1.73 | 8.917    3.72 |15.000    3.98 | 21.08    1.59
              2.917    1.73 | 9.000    3.72 |15.083    3.98 | 21.17    1.59
              3.000    1.73 | 9.083    3.72 |15.167    3.98 | 21.25    1.59
              3.083    1.73 | 9.167    3.72 |15.250    3.98 | 21.33    1.59
              3.167    1.73 | 9.250    3.72 |15.333    3.98 | 21.42    1.59
              3.250    1.73 | 9.333    4.25 |15.417    3.98 | 21.50    1.59
              3.333    1.73 | 9.417    4.25 |15.500    3.98 | 21.58    1.59
              3.417    1.73 | 9.500    4.25 |15.583    3.98 | 21.67    1.59
              3.500    1.73 | 9.583    4.25 |15.667    3.98 | 21.75    1.59
              3.583    1.73 | 9.667    4.25 |15.750    3.98 | 21.83    1.59
              3.667    1.73 | 9.750    4.25 |15.833    3.98 | 21.92    1.59
              3.750    1.73 | 9.833    4.78 |15.917    3.98 | 22.00    1.59
              3.833    1.73 | 9.917    4.78 |16.000    3.98 | 22.08    1.59
              3.917    1.73 |10.000    4.78 |16.083    3.98 | 22.17    1.59
              4.000    1.73 |10.083    4.78 |16.167    3.98 | 22.25    1.59
              4.083    1.73 |10.167    4.78 |16.250    3.98 | 22.33    1.59
              4.167    1.73 |10.250    4.78 |16.333    2.39 | 22.42    1.59
              4.250    1.73 |10.333    6.11 |16.417    2.39 | 22.50    1.59
              4.333    2.12 |10.417    6.11 |16.500    2.39 | 22.58    1.59
```

```
              4.417    2.12 |10.500    6.11 |16.583    2.39 | 22.67    1.59
              4.500    2.12 |10.583    6.11 |16.667    2.39 | 22.75    1.59
              4.583    2.12 |10.667    6.11 |16.750    2.39 | 22.83    1.59
              4.667    2.12 |10.750    6.11 |16.833    2.39 | 22.92    1.59
              4.750    2.12 |10.833    8.23 |16.917    2.39 | 23.00    1.59
              4.833    2.12 |10.917    8.23 |17.000    2.39 | 23.08    1.59
              4.917    2.12 |11.000    8.23 |17.083    2.39 | 23.17    1.59
              5.000    2.12 |11.083    8.23 |17.167    2.39 | 23.25    1.59
              5.083    2.12 |11.167    8.23 |17.250    2.39 | 23.33    1.59
              5.167    2.12 |11.250    8.23 |17.333    2.39 | 23.42    1.59
              5.250    2.12 |11.333   12.74 |17.417    2.39 | 23.50    1.59
              5.333    2.12 |11.417   12.74 |17.500    2.39 | 23.58    1.59
              5.417    2.12 |11.500   12.74 |17.583    2.39 | 23.67    1.59
              5.500    2.12 |11.583   12.74 |17.667    2.39 | 23.75    1.59
              5.583    2.12 |11.667   12.74 |17.750    2.39 | 23.83    1.59
              5.667    2.12 |11.750   12.74 |17.833    2.39 | 23.92    1.59
              5.750    2.12 |11.833   39.29 |17.917    2.39 | 24.00    1.59
              5.833    2.12 |11.917   39.29 |18.000    2.39 | 24.08    1.59
              5.917    2.12 |12.000   39.29 |18.083    2.39 | 24.17    1.59
              6.000    2.12 |12.083  162.46 |18.167    2.39 | 24.25    1.59
              6.083    2.12 |12.167  162.47 |18.250    2.39 |

     Max.Eff.Inten.(mm/hr)=     162.47       103.83
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       2.68 (ii)    9.63 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.29         0.11
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.83         0.31         1.138 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     131.74        70.49        104.18
     TOTAL RAINFALL   (mm)=     132.74       132.74        132.74
     RUNOFF COEFFICIENT   =       0.99         0.53          0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.1340     0.1430
                          0.0270     0.0810   |   0.1670     0.1580
```

```
                          0.0620     0.1060   |   0.1980     0.1750
                          0.0930     0.1230   |   0.0000     0.0000

                               AREA     QPEAK     TPEAK      R.V.
                               (ha)     (cms)     (hrs)      (mm)
   INFLOW : ID= 2 (  0002)     3.350     1.138     12.25    104.18
   OUTFLOW: ID= 1 (  0004)     3.350     0.196     12.58    103.95

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)= 17.23
                    TIME SHIFT OF PEAK FLOW         (min)= 20.00
                    MAXIMUM  STORAGE   USED       (ha.m.)=  0.1741

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0003)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0001):     0.49   0.089    12.33    70.36
     + ID2= 2 (  0004):     3.35   0.196    12.58   103.95
       ================================================
       ID = 3 (  0003):     3.84   0.267    12.42    99.66

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0355)|   Area    (ha)=   1.56
|ID= 1 DT= 5.0 min |   Total Imp(%)=  50.00   Dir. Conn.(%)=  50.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.78         0.78
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=     101.98        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    0.00 | 6.167    2.12 |12.250  162.47 | 18.33    2.39
              0.167    0.00 | 6.250    2.12 |12.333   19.13 | 18.42    2.39
              0.250    0.00 | 6.333    2.39 |12.417   19.11 | 18.50    2.39
              0.333    1.46 | 6.417    2.39 |12.500   19.11 | 18.58    2.39
              0.417    1.46 | 6.500    2.39 |12.583   19.11 | 18.67    2.39
              0.500    1.46 | 6.583    2.39 |12.667   19.11 | 18.75    2.39
              0.583    1.46 | 6.667    2.39 |12.750   19.11 | 18.83    2.39
```

0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Max.Eff.Inten.(mm/hr)=	162.47	103.83	
over (min)	5.00	10.00	
Storage Coeff. (min)=	2.13 (ii)	9.08 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.31	0.12	
			TOTALS
PEAK FLOW (cms)=	0.35	0.16	0.516 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.74	70.49	101.11
TOTAL RAINFALL (mm)=	132.74	132.74	132.74
RUNOFF COEFFICIENT =	0.99	0.53	0.76

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0356)	Area (ha)= 16.63		
ID= 1 DT= 5.0 min	Total Imp(%)= 68.80	Dir. Conn.(%)= 60.50	

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Max.Eff.Inten.(mm/hr)=	162.47	145.80	
over (min)	5.00	10.00	
Storage Coeff. (min)=	4.33 (ii)	8.79 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.23	0.12	
			TOTALS
PEAK FLOW (cms)=	4.43	1.57	6.000 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.74	78.71	110.79
TOTAL RAINFALL (mm)=	132.74	132.74	132.74
RUNOFF COEFFICIENT =	0.99	0.59	0.83

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------

                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    2.12 |12.250  162.47 | 18.33    2.39
 0.167    0.00 | 6.250    2.12 |12.333   19.13 | 18.42    2.39
 0.250    0.00 | 6.333    2.39 |12.417   19.11 | 18.50    2.39
 0.333    1.46 | 6.417    2.39 |12.500   19.11 | 18.58    2.39
 0.417    1.46 | 6.500    2.39 |12.583   19.11 | 18.67    2.39
 0.500    1.46 | 6.583    2.39 |12.667   19.11 | 18.75    2.39
 0.583    1.46 | 6.667    2.39 |12.750   19.11 | 18.83    2.39
 0.667    1.46 | 6.750    2.39 |12.833    9.82 | 18.92    2.39
 0.750    1.46 | 6.833    2.39 |12.917    9.82 | 19.00    2.39
 0.833    1.46 | 6.917    2.39 |13.000    9.82 | 19.08    2.39
 0.917    1.46 | 7.000    2.39 |13.083    9.82 | 19.17    2.39
 1.000    1.46 | 7.083    2.39 |13.167    9.82 | 19.25    2.39
 1.083    1.46 | 7.167    2.39 |13.250    9.82 | 19.33    2.39
 1.167    1.46 | 7.250    2.39 |13.333    7.17 | 19.42    2.39
 1.250    1.46 | 7.333    2.92 |13.417    7.17 | 19.50    2.39
 1.333    1.46 | 7.417    2.92 |13.500    7.17 | 19.58    2.39
 1.417    1.46 | 7.500    2.92 |13.583    7.17 | 19.67    2.39
 1.500    1.46 | 7.583    2.92 |13.667    7.17 | 19.75    2.39
 1.583    1.46 | 7.667    2.92 |13.750    7.17 | 19.83    2.39
 1.667    1.46 | 7.750    2.92 |13.833    5.58 | 19.92    2.39
 1.750    1.46 | 7.833    2.92 |13.917    5.58 | 20.00    2.39
 1.833    1.46 | 7.917    2.92 |14.000    5.58 | 20.08    2.39
 1.917    1.46 | 8.000    2.92 |14.083    5.58 | 20.17    2.39
 2.000    1.46 | 8.083    2.92 |14.167    5.58 | 20.25    2.39
 2.083    1.46 | 8.167    2.92 |14.250    5.58 | 20.33    1.59
 2.167    1.46 | 8.250    2.92 |14.333    3.98 | 20.42    1.59
 2.250    1.46 | 8.333    3.45 |14.417    3.98 | 20.50    1.59
 2.333    1.73 | 8.417    3.45 |14.500    3.98 | 20.58    1.59
 2.417    1.73 | 8.500    3.45 |14.583    3.98 | 20.67    1.59
 2.500    1.73 | 8.583    3.45 |14.667    3.98 | 20.75    1.59
 2.583    1.73 | 8.667    3.45 |14.750    3.98 | 20.83    1.59
 2.667    1.73 | 8.750    3.45 |14.833    3.98 | 20.92    1.59
 2.750    1.73 | 8.833    3.72 |14.917    3.98 | 21.00    1.59
 2.833    1.73 | 8.917    3.72 |15.000    3.98 | 21.08    1.59
 2.917    1.73 | 9.000    3.72 |15.083    3.98 | 21.17    1.59
 3.000    1.73 | 9.083    3.72 |15.167    3.98 | 21.25    1.59
 3.083    1.73 | 9.167    3.72 |15.250    3.98 | 21.33    1.59
 3.167    1.73 | 9.250    3.72 |15.333    3.98 | 21.42    1.59
 3.250    1.73 | 9.333    4.25 |15.417    3.98 | 21.50    1.59
 3.333    1.73 | 9.417    4.25 |15.500    3.98 | 21.58    1.59
 3.417    1.73 | 9.500    4.25 |15.583    3.98 | 21.67    1.59
 3.500    1.73 | 9.583    4.25 |15.667    3.98 | 21.75    1.59
 3.583    1.73 | 9.667    4.25 |15.750    3.98 | 21.83    1.59
 3.667    1.73 | 9.750    4.25 |15.833    3.98 | 21.92    1.59
 3.750    1.73 | 9.833    4.78 |15.917    3.98 | 22.00    1.59
 3.833    1.73 | 9.917    4.78 |16.000    3.98 | 22.08    1.59
 3.917    1.73 |10.000    4.78 |16.083    3.98 | 22.17    1.59
 4.000    1.73 |10.083    4.78 |16.167    3.98 | 22.25    1.59
 4.083    1.73 |10.167    4.78 |16.250    3.98 | 22.33    1.59
 4.167    1.73 |10.250    4.78 |16.333    2.39 | 22.42    1.59
 4.250    1.73 |10.333    6.11 |16.417    2.39 | 22.50    1.59
 4.333    2.12 |10.417    6.11 |16.500    2.39 | 22.58    1.59
 4.417    2.12 |10.500    6.11 |16.583    2.39 | 22.67    1.59
 4.500    2.12 |10.583    6.11 |16.667    2.39 | 22.75    1.59
 4.583    2.12 |10.667    6.11 |16.750    2.39 | 22.83    1.59
 4.667    2.12 |10.750    6.11 |16.833    2.39 | 22.92    1.59
 4.750    2.12 |10.833    8.23 |16.917    2.39 | 23.00    1.59
 4.833    2.12 |10.917    8.23 |17.000    2.39 | 23.08    1.59
 4.917    2.12 |11.000    8.23 |17.083    2.39 | 23.17    1.59
 5.000    2.12 |11.083    8.23 |17.167    2.39 | 23.25    1.59
 5.083    2.12 |11.167    8.23 |17.250    2.39 | 23.33    1.59
 5.167    2.12 |11.250    8.23 |17.333    2.39 | 23.42    1.59
 5.250    2.12 |11.333   12.74 |17.417    2.39 | 23.50    1.59
 5.333    2.12 |11.417   12.74 |17.500    2.39 | 23.58    1.59
 5.417    2.12 |11.500   12.74 |17.583    2.39 | 23.67    1.59
 5.500    2.12 |11.583   12.74 |17.667    2.39 | 23.75    1.59
 5.583    2.12 |11.667   12.74 |17.750    2.39 | 23.83    1.59
 5.667    2.12 |11.750   12.74 |17.833    2.39 | 23.92    1.59
 5.750    2.12 |11.833   39.29 |17.917    2.39 | 24.00    1.59
 5.833    2.12 |11.917   39.29 |18.000    2.39 | 24.08    1.59
 5.917    2.12 |12.000   39.29 |18.083    2.39 | 24.17    1.59
 6.000    2.12 |12.083  162.46 |18.167    2.39 | 24.25    1.59
 6.083    2.12 |12.167  162.47 |18.250    2.39 |

     Max.Eff.Inten.(mm/hr)=     162.47       152.75
                 over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.68 (ii)    5.31 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.32         0.16
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.23         0.06          0.286 (iii)

     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     131.74        79.84        116.79
     TOTAL RAINFALL   (mm)=     132.74       132.74        132.74
     RUNOFF COEFFICIENT   =       0.99         0.60          0.88

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK    R.V.
--------------------      (ha)     (cms)     (hrs)    (mm)
     TOTAL HYD.(ID= 1):   0.71      0.29     12.25  116.79
     ==========================================================
     MAJOR SYS.(ID= 2):   0.08      0.12     12.25  116.79
     MINOR SYS.(ID= 3):   0.63      0.16     12.08  116.79

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK   TPEAK     R.V.
                          (ha)     (cms)    (hrs)    (mm)
  INFLOW : ID= 9(  0025)    0.63     0.16   12.08   116.79
  OUTFLOW: ID= 2(  0024)    0.63     0.16   12.08   116.79

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.63   0.162    12.08   116.79
     + ID2= 2 (  0355):     1.56   0.516    12.25   101.11
       ================================================
       ID = 3 (  0357):     2.19   0.678    12.25   105.62

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.19   0.678    12.25   105.62
     + ID2= 2 (  0356):    16.63   6.000    12.25   110.79
       ================================================
       ID = 1 (  0357):    18.82   6.677    12.25   110.19

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |  0.7410      0.8760
                          0.0430     0.1680   |  1.3270      1.1950
                          0.0650     0.3300   |  1.8380      1.4460
                          0.3870     0.6500   |  3.9290      1.7080

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.819     6.677     12.25     110.19
   OUTFLOW: ID= 1 (  0358)     18.819     1.111     12.67     110.14

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 16.65
                  TIME SHIFT OF PEAK FLOW          (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  1.0784

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------

                        IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
```

hrs	mm/hr	hrs	mm/hr	hrs	mm/hr	hrs	mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Max.Eff.Inten.(mm/hr)=	162.47	137.98	
over (min)	5.00	10.00	
Storage Coeff. (min)=	1.47 (ii)	7.67 (ii)	
Unit Hyd. Tpeak (min)=	5.00	10.00	
Unit Hyd. peak (cms)=	0.33	0.13	
			TOTALS
PEAK FLOW (cms)=	0.11	0.05	0.160 (iii)
TIME TO PEAK (hrs)=	12.25	12.25	12.25
RUNOFF VOLUME (mm)=	131.74	77.37	106.45
TOTAL RAINFALL (mm)=	132.74	132.74	132.74
RUNOFF COEFFICIENT =	0.99	0.58	0.80

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 71.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0370)				
1 + 2 = 3	AREA	QPEAK	TPEAK	R.V.
ID1= 1 (0358):	18.82	1.111	12.67	110.14
+ ID2= 2 (0359):	0.45	0.160	12.25	106.45
ID = 3 (0370):	19.27	1.137	12.58	110.05

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB NASHYD (0360) ID= 1 DT= 5.0 min				
	Area	(ha)=	1.02	Curve Number (CN)= 71.0
	Ia	(mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=		0.49	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Unit Hyd Qpeak (cms)= 0.080

PEAK FLOW (cms)= 0.098 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 70.485
TOTAL RAINFALL (mm)= 132.740

RUNOFF COEFFICIENT = 0.531

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB					
STANDHYD (0018)	Area (ha)= 0.78				
ID= 1 DT= 5.0 min	Total Imp(%)= 20.00	Dir. Conn.(%)= 15.00			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.16	0.62
Dep. Storage (mm)=	5.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	72.11	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

Max.Eff.Inten.(mm/hr)=	162.47	120.71
over (min)	5.00	10.00
Storage Coeff. (min)=	1.73 (ii)	8.28 (ii)

Unit Hyd. Tpeak (min)=	5.00	10.00		
Unit Hyd. peak (cms)=	0.32	0.13		
			TOTALS	
PEAK FLOW (cms)=	0.05	0.16	0.212 (iii)	
TIME TO PEAK (hrs)=	12.25	12.25	12.25	
RUNOFF VOLUME (mm)=	127.74	77.31	84.87	
TOTAL RAINFALL (mm)=	132.74	132.74	132.74	
RUNOFF COEFFICIENT =	0.96	0.58	0.64	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 74.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0026)

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 8(0025)	0.08	0.12	12.25	116.79
OUTFLOW: ID= 2(0026)	0.08	0.12	12.25	116.79

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0018):	0.78	0.212	12.25	84.87
	+ ID2= 2 (0026):	0.08	0.124	12.25	116.79
	ID = 3 (0361):	0.86	0.336	12.25	87.87

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

ADD HYD (0361)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
3 + 2 = 1	ID1= 3 (0361):	0.86	0.336	12.25	87.87
	+ ID2= 2 (0360):	1.02	0.098	12.58	70.49

ID = 1 (0361):	1.88	0.388	12.25	78.44

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB					
STANDHYD (0007)	Area (ha)= 1.37				
ID= 1 DT= 5.0 min	Total Imp(%)= 25.40	Dir. Conn.(%)= 23.80			

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.35	1.02
Dep. Storage (mm)=	1.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	95.57	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59

2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

```
Max.Eff.Inten.(mm/hr)=     162.47       107.14
          over (min)        5.00        10.00
Storage Coeff.  (min)=       2.05 (ii)    8.91 (ii)
```

```
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.31         0.12
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.15         0.22         0.370 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     131.74        71.24         85.64
     TOTAL RAINFALL   (mm)=     132.74       132.74        132.74
     RUNOFF COEFFICIENT   =       0.99         0.54          0.65

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.1350     0.0340

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)      1.370     0.370     12.25      85.64
   OUTFLOW: ID= 1 (  0017)      1.370     0.132     12.50      85.60

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 35.62
                  TIME SHIFT OF PEAK FLOW         (min)= 15.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0335

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.26         0.13
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      50.99        40.00
     Mannings n             =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	0.00	6.167	2.12	12.250	162.47	18.33	2.39
0.167	0.00	6.250	2.12	12.333	19.13	18.42	2.39
0.250	0.00	6.333	2.39	12.417	19.11	18.50	2.39
0.333	1.46	6.417	2.39	12.500	19.11	18.58	2.39
0.417	1.46	6.500	2.39	12.583	19.11	18.67	2.39
0.500	1.46	6.583	2.39	12.667	19.11	18.75	2.39
0.583	1.46	6.667	2.39	12.750	19.11	18.83	2.39
0.667	1.46	6.750	2.39	12.833	9.82	18.92	2.39
0.750	1.46	6.833	2.39	12.917	9.82	19.00	2.39
0.833	1.46	6.917	2.39	13.000	9.82	19.08	2.39
0.917	1.46	7.000	2.39	13.083	9.82	19.17	2.39
1.000	1.46	7.083	2.39	13.167	9.82	19.25	2.39
1.083	1.46	7.167	2.39	13.250	9.82	19.33	2.39
1.167	1.46	7.250	2.39	13.333	7.17	19.42	2.39
1.250	1.46	7.333	2.92	13.417	7.17	19.50	2.39
1.333	1.46	7.417	2.92	13.500	7.17	19.58	2.39
1.417	1.46	7.500	2.92	13.583	7.17	19.67	2.39
1.500	1.46	7.583	2.92	13.667	7.17	19.75	2.39
1.583	1.46	7.667	2.92	13.750	7.17	19.83	2.39
1.667	1.46	7.750	2.92	13.833	5.58	19.92	2.39
1.750	1.46	7.833	2.92	13.917	5.58	20.00	2.39
1.833	1.46	7.917	2.92	14.000	5.58	20.08	2.39
1.917	1.46	8.000	2.92	14.083	5.58	20.17	2.39
2.000	1.46	8.083	2.92	14.167	5.58	20.25	2.39
2.083	1.46	8.167	2.92	14.250	5.58	20.33	1.59
2.167	1.46	8.250	2.92	14.333	3.98	20.42	1.59
2.250	1.46	8.333	3.45	14.417	3.98	20.50	1.59
2.333	1.73	8.417	3.45	14.500	3.98	20.58	1.59
2.417	1.73	8.500	3.45	14.583	3.98	20.67	1.59
2.500	1.73	8.583	3.45	14.667	3.98	20.75	1.59
2.583	1.73	8.667	3.45	14.750	3.98	20.83	1.59
2.667	1.73	8.750	3.45	14.833	3.98	20.92	1.59
2.750	1.73	8.833	3.72	14.917	3.98	21.00	1.59
2.833	1.73	8.917	3.72	15.000	3.98	21.08	1.59
2.917	1.73	9.000	3.72	15.083	3.98	21.17	1.59
3.000	1.73	9.083	3.72	15.167	3.98	21.25	1.59
3.083	1.73	9.167	3.72	15.250	3.98	21.33	1.59
3.167	1.73	9.250	3.72	15.333	3.98	21.42	1.59
3.250	1.73	9.333	4.25	15.417	3.98	21.50	1.59
3.333	1.73	9.417	4.25	15.500	3.98	21.58	1.59
3.417	1.73	9.500	4.25	15.583	3.98	21.67	1.59
3.500	1.73	9.583	4.25	15.667	3.98	21.75	1.59
3.583	1.73	9.667	4.25	15.750	3.98	21.83	1.59
3.667	1.73	9.750	4.25	15.833	3.98	21.92	1.59
3.750	1.73	9.833	4.78	15.917	3.98	22.00	1.59
3.833	1.73	9.917	4.78	16.000	3.98	22.08	1.59
3.917	1.73	10.000	4.78	16.083	3.98	22.17	1.59
4.000	1.73	10.083	4.78	16.167	3.98	22.25	1.59
4.083	1.73	10.167	4.78	16.250	3.98	22.33	1.59
4.167	1.73	10.250	4.78	16.333	2.39	22.42	1.59
4.250	1.73	10.333	6.11	16.417	2.39	22.50	1.59
4.333	2.12	10.417	6.11	16.500	2.39	22.58	1.59
4.417	2.12	10.500	6.11	16.583	2.39	22.67	1.59
4.500	2.12	10.583	6.11	16.667	2.39	22.75	1.59
4.583	2.12	10.667	6.11	16.750	2.39	22.83	1.59
4.667	2.12	10.750	6.11	16.833	2.39	22.92	1.59
4.750	2.12	10.833	8.23	16.917	2.39	23.00	1.59
4.833	2.12	10.917	8.23	17.000	2.39	23.08	1.59
4.917	2.12	11.000	8.23	17.083	2.39	23.17	1.59
5.000	2.12	11.083	8.23	17.167	2.39	23.25	1.59
5.083	2.12	11.167	8.23	17.250	2.39	23.33	1.59
5.167	2.12	11.250	8.23	17.333	2.39	23.42	1.59
5.250	2.12	11.333	12.74	17.417	2.39	23.50	1.59
5.333	2.12	11.417	12.74	17.500	2.39	23.58	1.59
5.417	2.12	11.500	12.74	17.583	2.39	23.67	1.59
5.500	2.12	11.583	12.74	17.667	2.39	23.75	1.59
5.583	2.12	11.667	12.74	17.750	2.39	23.83	1.59
5.667	2.12	11.750	12.74	17.833	2.39	23.92	1.59
5.750	2.12	11.833	39.29	17.917	2.39	24.00	1.59
5.833	2.12	11.917	39.29	18.000	2.39	24.08	1.59
5.917	2.12	12.000	39.29	18.083	2.39	24.17	1.59
6.000	2.12	12.083	162.46	18.167	2.39	24.25	1.59
6.083	2.12	12.167	162.47	18.250	2.39		

```
     Max.Eff.Inten.(mm/hr)=     162.47       352.80
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.40 (ii)    5.67 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.15
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.11         0.140 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25         12.25
     RUNOFF VOLUME    (mm)=     131.74        99.32        104.17
     TOTAL RAINFALL   (mm)=     132.74       132.74        132.74
     RUNOFF COEFFICIENT   =       0.99         0.75          0.78

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  71.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
```

```
--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0015):     0.39   0.140    12.25   104.17
     + ID2= 2 (  0017):     1.37   0.132    12.50    85.60
       ================================================
       ID = 3 (  0016):     1.76   0.239    12.25    89.71

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

```
================================================================================
========================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2008)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2021 Smart City Water Inc
All rights reserved.


                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\ef43e
57d-e27b-4e24-9f69-e20811a282a8\scena
  Summary filename:
C:\Users\kswain\AppData\Local\Civica\VH5\4c9aa870-2b3a-4142-a551-3404df768702\ef43e
57d-e27b-4e24-9f69-e20811a282a8\scena


DATE: 05-25-2023                          TIME: 09:51:06

USER:


COMMENTS: _____

--------------------------------------------------------------------------------
------------------------
  ***********************************************
  ** SIMULATION : Hazel                        **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\kswain\AppD
|                  |              ata\Local\Temp\
```

```
|                  |              03d7ba42-bc80-4759-9143-04a9234f4a23\867cfaf0
| Ptotal=212.00 mm |    Comments: Hazel
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    6.00 |  3.00   13.00 |  6.00   23.00 |  9.00   53.00
                1.00    4.00 |  4.00   17.00 |  7.00   13.00 | 10.00   38.00
                2.00    6.00 |  5.00   13.00 |  8.00   13.00 | 11.00   13.00

--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0001)|   Area    (ha)=   0.49   Curve Number   (CN)= 85.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.20

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
               0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
               0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
               0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
               0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
               0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
               0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
               0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
               0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
               0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
               0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
               1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
               1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
               1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
               1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
               1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
               1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
               1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
               1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
               1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
               1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
               1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
               1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
               2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
               2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
               2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
               2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
               2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
               2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
               2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
               2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
               2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
               2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
               2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
               2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
               3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

    Unit Hyd Qpeak  (cms)=   0.094

    PEAK FLOW       (cms)=   0.068 (i)
    TIME TO PEAK    (hrs)=  10.000
    RUNOFF VOLUME    (mm)= 169.830
    TOTAL RAINFALL   (mm)= 212.000
    RUNOFF COEFFICIENT   =   0.801

    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0002)|   Area    (ha)=   3.35
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  55.00
--------------------

                             IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=       1.84         1.51
    Dep. Storage     (mm)=       1.00         5.00
    Average Slope     (%)=       1.00         2.00
    Length            (m)=     149.44        40.00
    Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
               0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
               0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
               0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
               0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
               0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
               0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
               0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
               0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
               0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
               0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
```

1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	50.24	
over (min)	5.00	15.00	
Storage Coeff. (min)=	4.19 (ii)	13.49 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.24	0.08	
			TOTALS
PEAK FLOW (cms)=	0.27	0.21	0.477 (iii)
TIME TO PEAK (hrs)=	10.00	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	170.15	192.62
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.80	0.91

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 85.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

RESERVOIR(0004)	OVERFLOW IS OFF
IN= 2---> OUT= 1	

DT= 5.0 min	OUTFLOW (cms)	STORAGE (ha.m.)	OUTFLOW (cms)	STORAGE (ha.m.)
	0.0000	0.0000	0.1340	0.1430
	0.0270	0.0810	0.1670	0.1580
	0.0620	0.1060	0.1980	0.1750
	0.0930	0.1230	0.0000	0.0000

	AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
INFLOW : ID= 2 (0002)	3.350	0.477	10.00	192.62
OUTFLOW: ID= 1 (0004)	3.350	0.317	11.00	192.39

PEAK FLOW REDUCTION [Qout/Qin](%)= 66.36
TIME SHIFT OF PEAK FLOW (min)= 60.00
MAXIMUM STORAGE USED (ha.m.)= 0.2405

ADD HYD (0003)		AREA (ha)	QPEAK (cms)	TPEAK (hrs)	R.V. (mm)
1 + 2 = 3	ID1= 1 (0001):	0.49	0.068	10.00	169.83
	+ ID2= 2 (0004):	3.35	0.317	11.00	192.39
	ID = 3 (0003):	3.84	0.366	11.00	189.51

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
STANDHYD (0355)	Area (ha)=	1.56	
ID= 1 DT= 5.0 min	Total Imp(%)=	50.00	Dir. Conn.(%)= 50.00

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	0.78	0.78
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	101.98	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00

0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	50.24	
over (min)	5.00	15.00	
Storage Coeff. (min)=	3.33 (ii)	12.63 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.26	0.08	
			TOTALS
PEAK FLOW (cms)=	0.11	0.11	0.222 (iii)
TIME TO PEAK (hrs)=	9.83	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	170.16	190.57
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.80	0.90

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 85.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0356)	Area (ha)=	16.63	
ID= 1 DT= 5.0 min	Total Imp(%)=	68.80	Dir. Conn.(%)= 60.50

		IMPERVIOUS	PERVIOUS (i)
Surface Area	(ha)=	11.44	5.19
Dep. Storage	(mm)=	1.00	5.00
Average Slope	(%)=	1.00	2.00
Length	(m)=	332.97	40.00
Mannings n	=	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00

```
              2.333    6.00 |  5.333   13.00 |  8.333   13.00 | 11.33   13.00
              2.417    6.00 |  5.417   13.00 |  8.417   13.00 | 11.42   13.00
              2.500    6.00 |  5.500   13.00 |  8.500   13.00 | 11.50   13.00
              2.583    6.00 |  5.583   13.00 |  8.583   13.00 | 11.58   13.00
              2.667    6.00 |  5.667   13.00 |  8.667   13.00 | 11.67   13.00
              2.750    6.00 |  5.750   13.00 |  8.750   13.00 | 11.75   13.00
              2.833    6.00 |  5.833   13.00 |  8.833   13.00 | 11.83   13.00
              2.917    6.00 |  5.917   13.00 |  8.917   13.00 | 11.92   13.00
              3.000    6.00 |  6.000   13.00 |  9.000   13.00 | 12.00   13.00

     Max.Eff.Inten.(mm/hr)=      53.00        64.72
               over (min)         5.00        20.00
     Storage Coeff.  (min)=      6.78 (ii)   15.18 (ii)
     Unit Hyd. Tpeak (min)=      5.00        20.00
     Unit Hyd. peak  (cms)=      0.18         0.07
                                                      *TOTALS*
     PEAK FLOW       (cms)=      1.48         0.90         2.382 (iii)
     TIME TO PEAK    (hrs)=     10.00        10.00         10.00
     RUNOFF VOLUME    (mm)=    211.00       177.79        197.88
     TOTAL RAINFALL   (mm)=    212.00       212.00        212.00
     RUNOFF COEFFICIENT   =      1.00         0.84          0.93


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  85.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0027)|   Area    (ha)=   0.71
|ID= 1 DT= 5.0 min |   Total Imp(%)=  78.00   Dir. Conn.(%)=  71.20
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.55         0.16
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      68.80        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
               0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
```

```
               0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
               0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
               0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
               0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
               0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
               0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
               0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
               0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
               0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
               1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
               1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
               1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
               1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
               1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
               1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
               1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
               1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
               1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
               1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
               1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
               1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
               2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
               2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
               2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
               2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
               2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
               2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
               2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
               2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
               2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
               2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
               2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
               2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
               3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

     Max.Eff.Inten.(mm/hr)=      53.00        67.05
               over (min)         5.00        15.00
     Storage Coeff.  (min)=      2.63 (ii)   10.91 (ii)
     Unit Hyd. Tpeak (min)=      5.00        15.00
     Unit Hyd. peak  (cms)=      0.29         0.09
                                                      *TOTALS*
     PEAK FLOW       (cms)=      0.07         0.03         0.103 (iii)
     TIME TO PEAK    (hrs)=      9.67        10.00         10.00
     RUNOFF VOLUME    (mm)=    211.00       178.78        201.71
     TOTAL RAINFALL   (mm)=    212.00       212.00        212.00
     RUNOFF COEFFICIENT   =      1.00         0.84          0.95

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
```

```
           CN*  =  85.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| DUHYD    (  0025)|
| Inlet Cap.= 0.162|
| #of Inlets=     1|
| Total(cms)=   0.2|      AREA     QPEAK     TPEAK     R.V.
--------------------      (ha)     (cms)     (hrs)     (mm)
     TOTAL HYD.(ID= 1):   0.71      0.10     10.00   201.71
     ==================================================
     MAJOR SYS.(ID= 2):   0.00      0.00      0.00     0.00
     MINOR SYS.(ID= 3):   0.71      0.10     10.00   201.71

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0024) |
  --------------------------

                          AREA     QPEAK    TPEAK     R.V.
                          (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 9(  0025)    0.71     0.10   10.00   201.71
  OUTFLOW: ID= 2(  0024)    0.71     0.10   10.00   201.71

  --------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0024):     0.71   0.103    10.00   201.71
     + ID2= 2 (  0355):     1.56   0.222    10.00   190.57
       ==================================================
       ID = 3 (  0357):     2.27   0.325    10.00   194.06

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0357)|
|   3 +  2 =  1    |        AREA    QPEAK    TPEAK     R.V.
--------------------        (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0357):     2.27   0.325    10.00   194.06
     + ID2= 2 (  0356):    16.63   2.382    10.00   197.88
```

```
       ================================================
       ID = 1 (  0357):    18.90   2.706    10.00   197.42

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0358)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000     0.0000   |   0.7410     0.8760
                          0.0430     0.1680   |   1.3270     1.1950
                          0.0650     0.3300   |   1.8380     1.4460
                          0.3870     0.6500   |   3.9290     1.7080

                               AREA     QPEAK     TPEAK       R.V.
                               (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0357)     18.900     2.706     10.00     197.42
   OUTFLOW: ID= 1 (  0358)     18.900     1.813     11.00     197.37

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 66.98
                  TIME SHIFT OF PEAK FLOW         (min)= 60.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  1.4362

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0359)|   Area    (ha)=   0.45
|ID= 1 DT= 5.0 min |   Total Imp(%)=  61.80   Dir. Conn.(%)=  53.50
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.28         0.17
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      54.77        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
               0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
               0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
               0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
               0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
               0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
               0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
```

0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	62.07	
over (min)	5.00	15.00	
Storage Coeff. (min)=	2.29 (ii)	10.84 (ii)	
Unit Hyd. Tpeak (min)=	5.00	15.00	
Unit Hyd. peak (cms)=	0.30	0.09	
			TOTALS
PEAK FLOW (cms)=	0.04	0.03	0.065 (iii)
TIME TO PEAK (hrs)=	9.58	10.00	10.00
RUNOFF VOLUME (mm)=	211.00	176.61	194.99
TOTAL RAINFALL (mm)=	212.00	212.00	212.00
RUNOFF COEFFICIENT =	1.00	0.83	0.92

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 85.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

ADD HYD (0370)		AREA	QPEAK	TPEAK	R.V.
1 + 2 = 3		(ha)	(cms)	(hrs)	(mm)
	ID1= 1 (0358):	18.90	1.813	11.00	197.37
	+ ID2= 2 (0359):	0.45	0.065	10.00	194.99
	ID = 3 (0370):	19.35	1.860	11.00	197.32

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

CALIB			
NASHYD (0360)	Area (ha)=	1.02	Curve Number (CN)= 85.0
ID= 1 DT= 5.0 min	Ia (mm)=	5.00	# of Linear Res.(N)= 3.00
	U.H. Tp(hrs)=	0.49	

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Unit Hyd Qpeak (cms)= 0.080

PEAK FLOW	(cms)=	0.125 (i)
TIME TO PEAK	(hrs)=	10.250
RUNOFF VOLUME	(mm)=	170.145
TOTAL RAINFALL	(mm)=	212.000
RUNOFF COEFFICIENT	=	0.803

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

CALIB			
STANDHYD (0018)	Area (ha)=	0.78	
ID= 1 DT= 5.0 min	Total Imp(%)=	20.00	Dir. Conn.(%)= 15.00

	IMPERVIOUS	PERVIOUS (i)
Surface Area (ha)=	0.16	0.62
Dep. Storage (mm)=	5.00	5.00
Average Slope (%)=	1.00	2.00
Length (m)=	72.11	40.00
Mannings n =	0.013	0.250

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr	TIME hrs	RAIN mm/hr
0.083	6.00	3.083	13.00	6.083	23.00	9.08	53.00
0.167	6.00	3.167	13.00	6.167	23.00	9.17	53.00
0.250	6.00	3.250	13.00	6.250	23.00	9.25	53.00
0.333	6.00	3.333	13.00	6.333	23.00	9.33	53.00
0.417	6.00	3.417	13.00	6.417	23.00	9.42	53.00
0.500	6.00	3.500	13.00	6.500	23.00	9.50	53.00
0.583	6.00	3.583	13.00	6.583	23.00	9.58	53.00
0.667	6.00	3.667	13.00	6.667	23.00	9.67	53.00
0.750	6.00	3.750	13.00	6.750	23.00	9.75	53.00
0.833	6.00	3.833	13.00	6.833	23.00	9.83	53.00
0.917	6.00	3.917	13.00	6.917	23.00	9.92	53.00
1.000	6.00	4.000	13.00	7.000	23.00	10.00	53.00
1.083	4.00	4.083	17.00	7.083	13.00	10.08	38.00
1.167	4.00	4.167	17.00	7.167	13.00	10.17	38.00
1.250	4.00	4.250	17.00	7.250	13.00	10.25	38.00
1.333	4.00	4.333	17.00	7.333	13.00	10.33	38.00
1.417	4.00	4.417	17.00	7.417	13.00	10.42	38.00
1.500	4.00	4.500	17.00	7.500	13.00	10.50	38.00
1.583	4.00	4.583	17.00	7.583	13.00	10.58	38.00
1.667	4.00	4.667	17.00	7.667	13.00	10.67	38.00
1.750	4.00	4.750	17.00	7.750	13.00	10.75	38.00
1.833	4.00	4.833	17.00	7.833	13.00	10.83	38.00
1.917	4.00	4.917	17.00	7.917	13.00	10.92	38.00
2.000	4.00	5.000	17.00	8.000	13.00	11.00	38.00
2.083	6.00	5.083	13.00	8.083	13.00	11.08	13.00
2.167	6.00	5.167	13.00	8.167	13.00	11.17	13.00
2.250	6.00	5.250	13.00	8.250	13.00	11.25	13.00
2.333	6.00	5.333	13.00	8.333	13.00	11.33	13.00
2.417	6.00	5.417	13.00	8.417	13.00	11.42	13.00
2.500	6.00	5.500	13.00	8.500	13.00	11.50	13.00
2.583	6.00	5.583	13.00	8.583	13.00	11.58	13.00
2.667	6.00	5.667	13.00	8.667	13.00	11.67	13.00
2.750	6.00	5.750	13.00	8.750	13.00	11.75	13.00
2.833	6.00	5.833	13.00	8.833	13.00	11.83	13.00
2.917	6.00	5.917	13.00	8.917	13.00	11.92	13.00
3.000	6.00	6.000	13.00	9.000	13.00	12.00	13.00

Max.Eff.Inten.(mm/hr)=	53.00	54.27		
over (min)	5.00	15.00		
Storage Coeff. (min)=	2.71 (ii)	11.72 (ii)		
Unit Hyd. Tpeak (min)=	5.00	15.00		
Unit Hyd. peak (cms)=	0.29	0.09		
			TOTALS	
PEAK FLOW (cms)=	0.02	0.09	0.110 (iii)	
TIME TO PEAK (hrs)=	9.67	10.00	10.00	
RUNOFF VOLUME (mm)=	207.00	176.82	181.34	
TOTAL RAINFALL (mm)=	212.00	212.00	212.00	
RUNOFF COEFFICIENT =	0.98	0.83	0.86	

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
YOU SHOULD CONSIDER SPLITTING THE AREA.

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 87.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
--------------------------------------------------------------------------------

  --------------------------
  | Junction Command(0026) |
  --------------------------

                         AREA     QPEAK    TPEAK     R.V.
                         (ha)     (cms)    (hrs)     (mm)
  INFLOW : ID= 8(  0025)    0.00     0.00    0.00     0.00
  OUTFLOW: ID= 2(  0026)    0.00     0.00    0.00     0.00

  ------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
*** W A R N I N G :  HYDROGRAPH   0026 <ID= 2> IS DRY.
*** W A R N I N G :  HYDROGRAPH   0003 = HYDROGRAPH 0001
       ID1= 1 (  0018):     0.78   0.110    10.00   181.34
     + ID2= 2 (  0026):     0.00   0.000     0.00     0.00
       ================================================
       ID = 3 (  0361):     0.78   0.110    10.00   181.34

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0361)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0361):     0.78   0.110    10.00   181.34
     + ID2= 2 (  0360):     1.02   0.125    10.25   170.14
       ================================================
       ID = 1 (  0361):     1.80   0.228    10.00   175.00

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0007)|   Area    (ha)=   1.37
|ID= 1 DT= 5.0 min |   Total Imp(%)=  25.40   Dir. Conn.(%)=  23.80
-------------------
                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=      0.35         1.02
    Dep. Storage     (mm)=      1.00         5.00
    Average Slope     (%)=      1.00         2.00
    Length            (m)=     95.57        40.00
    Mannings n           =     0.013        0.250
```

```
    NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                                ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |   TIME    RAIN |'  TIME    RAIN |   TIME    RAIN
       hrs   mm/hr |    hrs   mm/hr |'   hrs   mm/hr |    hrs   mm/hr
     0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

  Max.Eff.Inten.(mm/hr)=      53.00        51.41
            over (min)        5.00        15.00
  Storage Coeff.  (min)=      3.20 (ii)   12.41 (ii)
  Unit Hyd. Tpeak (min)=      5.00        15.00
  Unit Hyd. peak  (cms)=      0.27         0.08
                                                  *TOTALS*
  PEAK FLOW       (cms)=      0.05         0.14          0.191 (iii)
```

```
    TIME TO PEAK    (hrs)=      9.75        10.00          10.00
    RUNOFF VOLUME    (mm)=    211.00       170.90         180.43
    TOTAL RAINFALL   (mm)=    212.00       212.00         212.00
    RUNOFF COEFFICIENT   =      1.00         0.81           0.85

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  85.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0017)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000     0.0000    |   0.1350     0.0340

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0007)    1.370     0.191     10.00     180.43
   OUTFLOW: ID= 1 (  0017)    1.370     0.151     10.42     180.39

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)= 78.70
                  TIME SHIFT OF PEAK FLOW          (min)= 25.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.0380

--------------------------------------------------------------------------------
-------------------
| CALIB            |
| STANDHYD (  0015)|   Area    (ha)=   0.39
|ID= 1 DT= 5.0 min |   Total Imp(%)=  66.10   Dir. Conn.(%)=  15.00
-------------------
                          IMPERVIOUS    PERVIOUS (i)
    Surface Area     (ha)=      0.26         0.13
    Dep. Storage     (mm)=      1.00         5.00
    Average Slope     (%)=      1.00         2.00
    Length            (m)=     50.99        40.00
    Mannings n           =     0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                                ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |   TIME    RAIN |'  TIME    RAIN |   TIME    RAIN
       hrs   mm/hr |    hrs   mm/hr |'   hrs   mm/hr |    hrs   mm/hr
     0.083    6.00 | 3.083   13.00 | 6.083   23.00 |  9.08   53.00
     0.167    6.00 | 3.167   13.00 | 6.167   23.00 |  9.17   53.00
     0.250    6.00 | 3.250   13.00 | 6.250   23.00 |  9.25   53.00
     0.333    6.00 | 3.333   13.00 | 6.333   23.00 |  9.33   53.00
     0.417    6.00 | 3.417   13.00 | 6.417   23.00 |  9.42   53.00
     0.500    6.00 | 3.500   13.00 | 6.500   23.00 |  9.50   53.00
     0.583    6.00 | 3.583   13.00 | 6.583   23.00 |  9.58   53.00
     0.667    6.00 | 3.667   13.00 | 6.667   23.00 |  9.67   53.00
     0.750    6.00 | 3.750   13.00 | 6.750   23.00 |  9.75   53.00
     0.833    6.00 | 3.833   13.00 | 6.833   23.00 |  9.83   53.00
     0.917    6.00 | 3.917   13.00 | 6.917   23.00 |  9.92   53.00
     1.000    6.00 | 4.000   13.00 | 7.000   23.00 | 10.00   53.00
     1.083    4.00 | 4.083   17.00 | 7.083   13.00 | 10.08   38.00
     1.167    4.00 | 4.167   17.00 | 7.167   13.00 | 10.17   38.00
     1.250    4.00 | 4.250   17.00 | 7.250   13.00 | 10.25   38.00
     1.333    4.00 | 4.333   17.00 | 7.333   13.00 | 10.33   38.00
     1.417    4.00 | 4.417   17.00 | 7.417   13.00 | 10.42   38.00
     1.500    4.00 | 4.500   17.00 | 7.500   13.00 | 10.50   38.00
     1.583    4.00 | 4.583   17.00 | 7.583   13.00 | 10.58   38.00
     1.667    4.00 | 4.667   17.00 | 7.667   13.00 | 10.67   38.00
     1.750    4.00 | 4.750   17.00 | 7.750   13.00 | 10.75   38.00
     1.833    4.00 | 4.833   17.00 | 7.833   13.00 | 10.83   38.00
     1.917    4.00 | 4.917   17.00 | 7.917   13.00 | 10.92   38.00
     2.000    4.00 | 5.000   17.00 | 8.000   13.00 | 11.00   38.00
     2.083    6.00 | 5.083   13.00 | 8.083   13.00 | 11.08   13.00
     2.167    6.00 | 5.167   13.00 | 8.167   13.00 | 11.17   13.00
     2.250    6.00 | 5.250   13.00 | 8.250   13.00 | 11.25   13.00
     2.333    6.00 | 5.333   13.00 | 8.333   13.00 | 11.33   13.00
     2.417    6.00 | 5.417   13.00 | 8.417   13.00 | 11.42   13.00
     2.500    6.00 | 5.500   13.00 | 8.500   13.00 | 11.50   13.00
     2.583    6.00 | 5.583   13.00 | 8.583   13.00 | 11.58   13.00
     2.667    6.00 | 5.667   13.00 | 8.667   13.00 | 11.67   13.00
     2.750    6.00 | 5.750   13.00 | 8.750   13.00 | 11.75   13.00
     2.833    6.00 | 5.833   13.00 | 8.833   13.00 | 11.83   13.00
     2.917    6.00 | 5.917   13.00 | 8.917   13.00 | 11.92   13.00
     3.000    6.00 | 6.000   13.00 | 9.000   13.00 | 12.00   13.00

  Max.Eff.Inten.(mm/hr)=      53.00       131.46
            over (min)        5.00        10.00
  Storage Coeff.  (min)=      2.20 (ii)    8.52 (ii)
  Unit Hyd. Tpeak (min)=      5.00        10.00
  Unit Hyd. peak  (cms)=      0.30         0.12
                                                  *TOTALS*
  PEAK FLOW       (cms)=      0.01         0.05          0.057 (iii)
  TIME TO PEAK    (hrs)=      9.50        10.00          10.00
  RUNOFF VOLUME    (mm)=    211.00       193.53         196.14
  TOTAL RAINFALL   (mm)=    212.00       212.00         212.00
  RUNOFF COEFFICIENT   =      1.00         0.91           0.93

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
```

```
              YOU SHOULD CONSIDER SPLITTING THE AREA.

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  85.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0016)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0015):     0.39   0.057    10.00   196.14
      + ID2= 2 (  0017):     1.37   0.151    10.42   180.39
        ====================================================
        ID = 3 (  0016):     1.76   0.197    10.08   183.88

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

 FINISH
================================================================================
========================
```