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CITY OF O'FALLON, MO

THE STERLING CO.

THORNBURY CROSSING

DETENTION REPORT

Prepared For:
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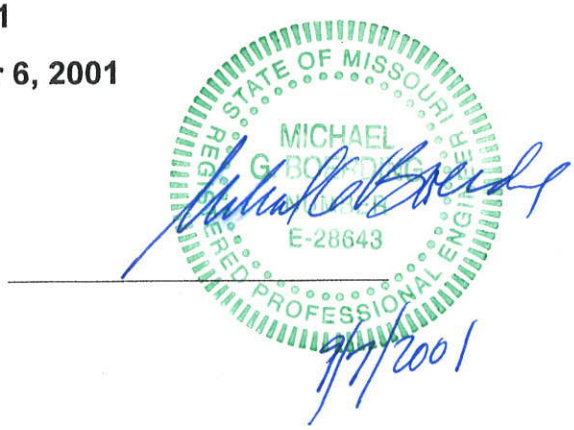
#1 Mcbride & Son Center Dr.
St. Louis, Missouri 63005
(636) 537-2000

Prepared By:
THE STERLING COMPANY
5055 New Baumgartner Road
St. Louis, Missouri 63129
(314) 487-0440

Sterling Project No.: 00-11-289

Date:
July 20, 2001
Revised September 6, 2001



THORNBURY CROSSING
DETENTION ANALYSIS
00-11-289

Site Acreage	= 112.90 Acres
Site Impervious	= 56.98 Acres (Residential)
Site Impervious	= 55.92 Acres (Commercial by others)
Design Storms	= 2, 15, 25, 100 Years
Design Period	= 20 Minutes

Return Frequency (Years)	Existing P.I. (5%)	Proposed P.I. (Residential)	Proposed P.I. (Commercial)	Differential Runoff (Res.)	Differential Runoff (Comm.)
2	1.15	2.06	2.39	0.91	1.24
15	1.87	3.30	3.85	1.43	1.98
25	2.31	4.07	4.75	1.76	2.44
100	2.95	5.21	6.08	2.26	3.13

3.13 X 10.4 = 32 cfs ✓

2.26 / 7.10 = 16. cfs ✓

NEED 48 cfs DETAINED ON 100 YR

Detention Basin #1 Analysis:

7.10 Acres (Residential) in Basin #1 Watershed

10.04 Acres (Commercial by others) in Basin #1 Watershed

16.99 Acres tributary to Basin #1

Detention required for Phase 1 (Residential)

Return Frequency		Total Required
2 Year = 7.10 Ac. (2.06 - 1.15)	=	6.46 cfs
15 Year = 7.10 Ac. (3.30 - 1.87)	=	10.15 cfs
25 Year = 7.10 Ac. (4.07 - 2.31)	=	12.50 cfs
100 Year = 7.10 Ac. (5.21 - 2.95)	=	16.05 cfs ✓

Detention required for Phase 2 (Commercial by others) Future

Return Frequency		Total Required	Total Combined
2 Year = 10.04 Ac. (2.39 - 1.15)	=	12.45 cfs	18.91 cfs
15 Year = 10.04 Ac. (3.85 - 1.87)	=	19.88 cfs	30.03 cfs
25 Year = 10.04 Ac. (4.75 - 2.31)	=	24.50 cfs	37.00 cfs
100 Year = 10.04 Ac. (6.08 - 2.95)	=	31.43 cfs ✓	47.48 cfs

Note: Total Combined Detention = Phase 1(Residential) + Phase 2(Commercial by others)

Direct runoff tributary to Basin #1 for Phase 1 (Residential)

Return Frequency		Total Tributary	Total Future Required Tributary
2 Year = 7.09 Ac. (2.06) + 9.90 Ac (1.15)	=	25.99 cfs	30.45 cfs
15 Year = 7.09 Ac. (3.30) + 9.90 Ac. (1.87)	=	41.91 cfs	49.04 cfs
25 Year = 7.09 Ac. (4.07) + 9.90 Ac. (2.31)	=	51.73 cfs	60.51 cfs
100 Year = 7.09 Ac. (5.21) + 9.90 Ac. (2.95)	=	66.14 cfs	77.41 cfs

Note: Future tributary includes 3.6 acres commercial runoff (no additional acreage)

Total Designed Detention for Basin #1:

Return Frequency (Inflow – Outflow)		Total Designed	Total Future Anticipated Detention
2 Year = (25.99 cfs – 1.05 cfs)	=	24.94 cfs	29.35 cfs
15 Year = (41.91 cfs – 1.20 cfs)	=	40.71 cfs	47.80 cfs
25 Year = (51.73 cfs – 1.30 cfs)	=	50.43 cfs	59.21 cfs
100 Year = (66.14 cfs – 1.35 cfs)	=	64.79 cfs	76.01 cfs

Note: Total Future Anticipated Detention is subject to change pending final design of Phase 2(Commercial by others). Required detention of differential storm water will be provided for Basin #1 Watershed.

64.79 - 47.48 =

17.31 CFS ADDITIONAL

Freeboard (Top of Dam elev. – 100 yr. 20 min. blocked low flow elev.)

Basin #1 = 586.00 – 584.74 = 1.26 ft.

Future Basin #1: Adequate freeboard will be provided for the future 100 yr. 20 min. blocked low flow elevation.

Detention Basin #2 Analysis:

2.90 Acres (Residential) in Basin #2 Watershed

13.75 Acres (Commercial by others) in Basin #2 Watershed

5.69 Acres tributary to Basin #2

Detention required for Phase 1 (Residential)

Return Frequency		Total Required
2 Year = 2.90 Ac. (2.06 - 1.15)	=	2.64 cfs
15 Year = 2.90 Ac. (3.30 - 1.87)	=	4.15 cfs
25 Year = 2.90 Ac. (4.07 - 2.31)	=	5.10 cfs
100 Year = 2.90 Ac. (5.21 - 2.95)	=	6.55 cfs

Detention required for Phase 2 (Commercial by others) Future

Return Frequency		Total Required	Total Combined
2 Year = 13.75 Ac. (2.39 - 1.15)	=	17.05 cfs	19.69 cfs
15 Year = 13.75 Ac. (3.85 - 1.87)	=	27.23 cfs	31.38 cfs
25 Year = 13.75 Ac. (4.75 - 2.31)	=	33.55 cfs	38.65 cfs
100 Year = 13.75Ac. (6.08 - 2.95)	=	43.04 cfs	49.59 cfs

Note: Total Combined Detention = Phase 1(Residential) + Phase 2(Commercial by others)

Direct runoff tributary to Basin #2 for Phase 1 (Residential)			Total Future
Return		Total	Required
Frequency		Tributary	Tributary
2 Year = 3.04 Ac. (2.06) + 2.65 Ac (1.15)	=	9.31 cfs	11.79 cfs
15 Year = 3.04 Ac. (3.30) + 2.65 Ac. (1.87)	=	14.99 cfs	18.95 cfs
25 Year = 3.04 Ac. (4.07) + 2.65 Ac. (2.31)	=	18.49 cfs	23.37 cfs
100 Year = 3.04 Ac. (5.21) + 2.65 Ac. (2.95)	=	23.66 cfs	29.92 cfs

Note: Future tributary includes 2.0 acres commercial runoff (no additional acreage)

Total Designed Detention for Basin #2:			Total Future
Return		Total	Anticipated
Frequency (Inflow – Outflow)		Designed	Detention
2 Year = (9.31 cfs – 0.92 cfs)	=	8.39 cfs	10.79 cfs
15 Year = (14.99 cfs – 1.08 cfs)	=	13.91 cfs	17.82 cfs
25 Year = (18.49 cfs – 1.13 cfs)	=	17.36 cfs	22.17 cfs
100 Year = (23.66 cfs – 3.21 cfs)	=	20.45 cfs	12.10 cfs

Note: Total Future Anticipated Detention is subject to change pending final design of Phase 2(Commercial by others). Required detention of differential storm water will be provided for Basin #2 Watershed.

Freeboard (Top of Dam elev. – 100 yr. 20 min. blocked low flow elev.)

Basin #2 = 610.00 – 608.91 = 1.09 ft.

Future Basin #2: Adequate freeboard will be provided for the future 100 yr. 20 min. blocked low flow elevation.

Detention Basin #3 Analysis:

46.98 Acres (Residential) in Basin #3 Watershed

32.13 Acres (Commercial by others) in Basin #3 Watershed

37.20 Acres tributary to Basin #3

Detention required for Phase 1 (Residential)

Return Frequency		Total Required
2 Year = 46.98 Ac. (2.06 - 1.15)	=	42.75 cfs
15 Year = 46.98 Ac. (3.30 - 1.87)	=	67.18 cfs
25 Year = 46.98 Ac. (4.07 - 2.31)	=	82.68 cfs
100 Year = 46.98 Ac. (5.21 - 2.95)	=	106.17 cfs

Detention required for Phase 2 (Commercial by others) Future

Return Frequency		Total Required	Total Combined
2 Year = 32.13 Ac. (2.39 - 1.15)	=	39.84 cfs	82.59 cfs
15 Year = 32.13 Ac. (3.85 - 1.87)	=	63.62 cfs	130.08 cfs
25 Year = 32.13 Ac. (4.75 - 2.31)	=	78.40 cfs	161.08 cfs
100 Year = 32.13Ac. (6.08 - 2.95)	=	100.57 cfs	206.74 cfs

Note: Total Combined Detention = Phase 1(Residential) + Phase 2(Commercial by others)

Direct runoff tributary to Basin #3 for Phase 1 (Residential)

Return Frequency	Total Tributary	Total Future Required Tributary
2 Year = 28.13 Ac. (2.06) + 30.29 Ac (1.15) =	92.78 cfs	89.02 cfs
15 Year = 28.13 Ac. (3.30) + 30.29 Ac. (1.87)=	149.47 cfs	142.88 cfs
25 Year = 28.13 Ac. (4.07) + 30.29 Ac. (2.31)=	184.46 cfs	176.23 cfs
100 Year = 28.13 Ac. (5.21) + 30.29 Ac. (2.95)=	235.91 cfs	225.60 cfs

Note: Future tributary includes 13.0 acres commercial runoff (3.93 additional acreage)

Total Designed Detention for Basin #3:

Return Frequency	(Inflow – Outflow)		Total Designed	Total Future Anticipated Detention
2 Year	= (92.78 cfs – 7.65 cfs)	=	85.13 cfs	81.50 cfs
15 Year	= (149.47 cfs – 8.84 cfs)	=	140.65 cfs	134.20 cfs
25 Year	= (184.46 cfs – 9.54 cfs)	=	174.92 cfs	166.89 cfs
100 Year	= (235.91 cfs – 16.28 cfs)	=	219.63 cfs	215.47 cfs

Note: Total Future Anticipated Detention is subject to change pending final design of Phase 2(Commercial by others). Required detention of differential storm water will be provided for Basin #3 Watershed.

Freeboard (Top of Dam elev. – 100 yr. 20 min. blocked low flow elev.)

Basin #3 = 599.00 – 597.92 = 1.08 ft.

Future Basin #3: Adequate freeboard will be provided for the future 100 yr. 20 min. blocked low flow elevation.

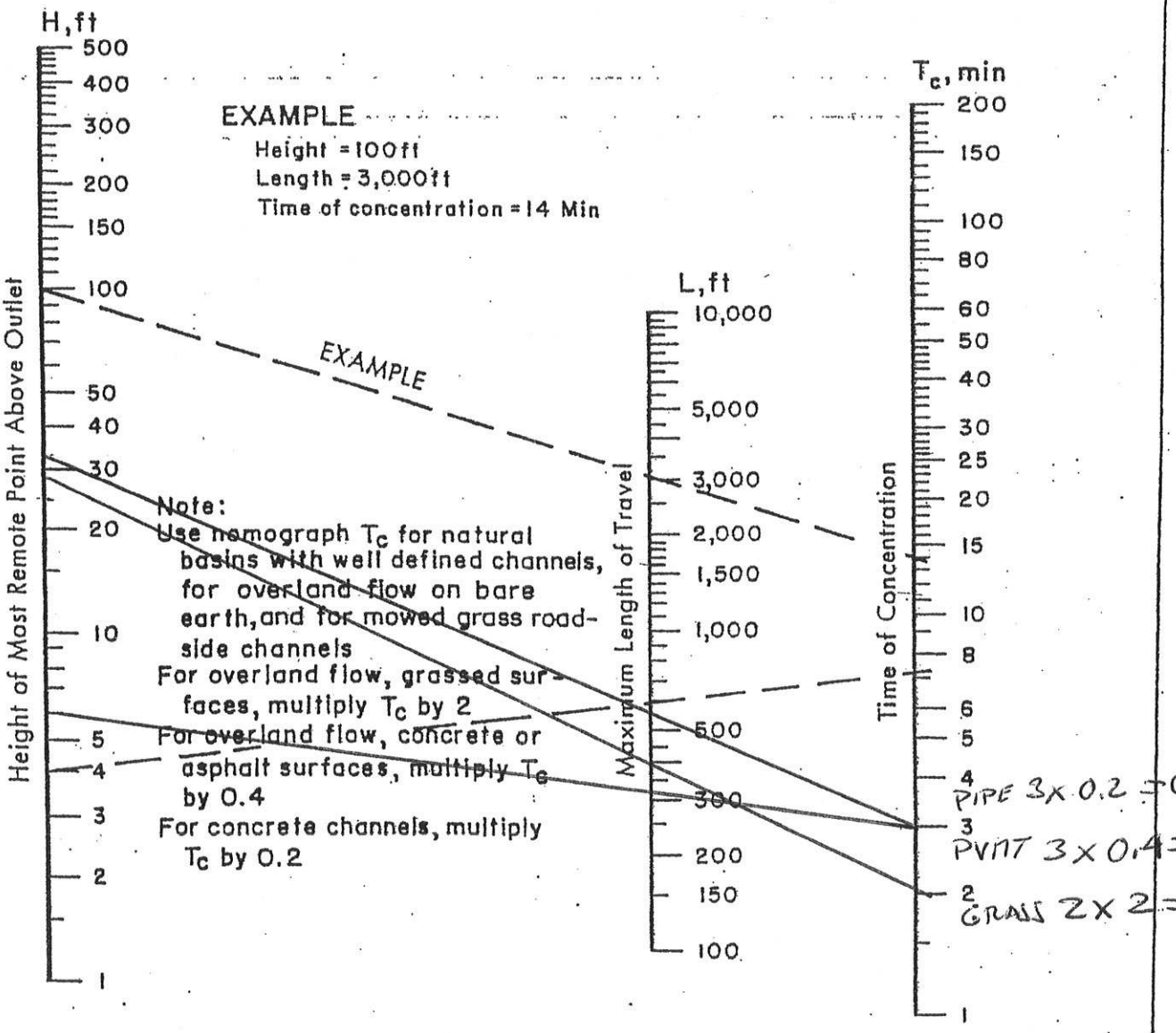
THORNBURY CROSSING DETENTION BASIN #1

THE STERLING COMPANY
5055 NEW BAUMGARTNER RD.
ST. LOUIS, MO 63129

(314) 487-0440
Fax (314) 487-8944

SHEET 1 of 3

Project: TIME OF CONCENTRATION
Date: 9-5-01 Project No: 00-11-284
Designed: D.M. Checked: _____



Based on study by P. Z. Kirpich,
Civil Engineering, Vol. 10, No. 6, June 1940, p. 362

OVERLAND FLOW: 50' GRASS, 1' DIFF. T_c = 0.00
OVERLAND FLOW: 310' PVMT., 6' DIFF T_c = 1.20
PIPE FLOW: 532' PIPE, 33' DIFF T_c = 0.60
OVERLAND FLOW: 390' GRASS, 28' DIFF T_c = 4.00

5.80 USE 6.0

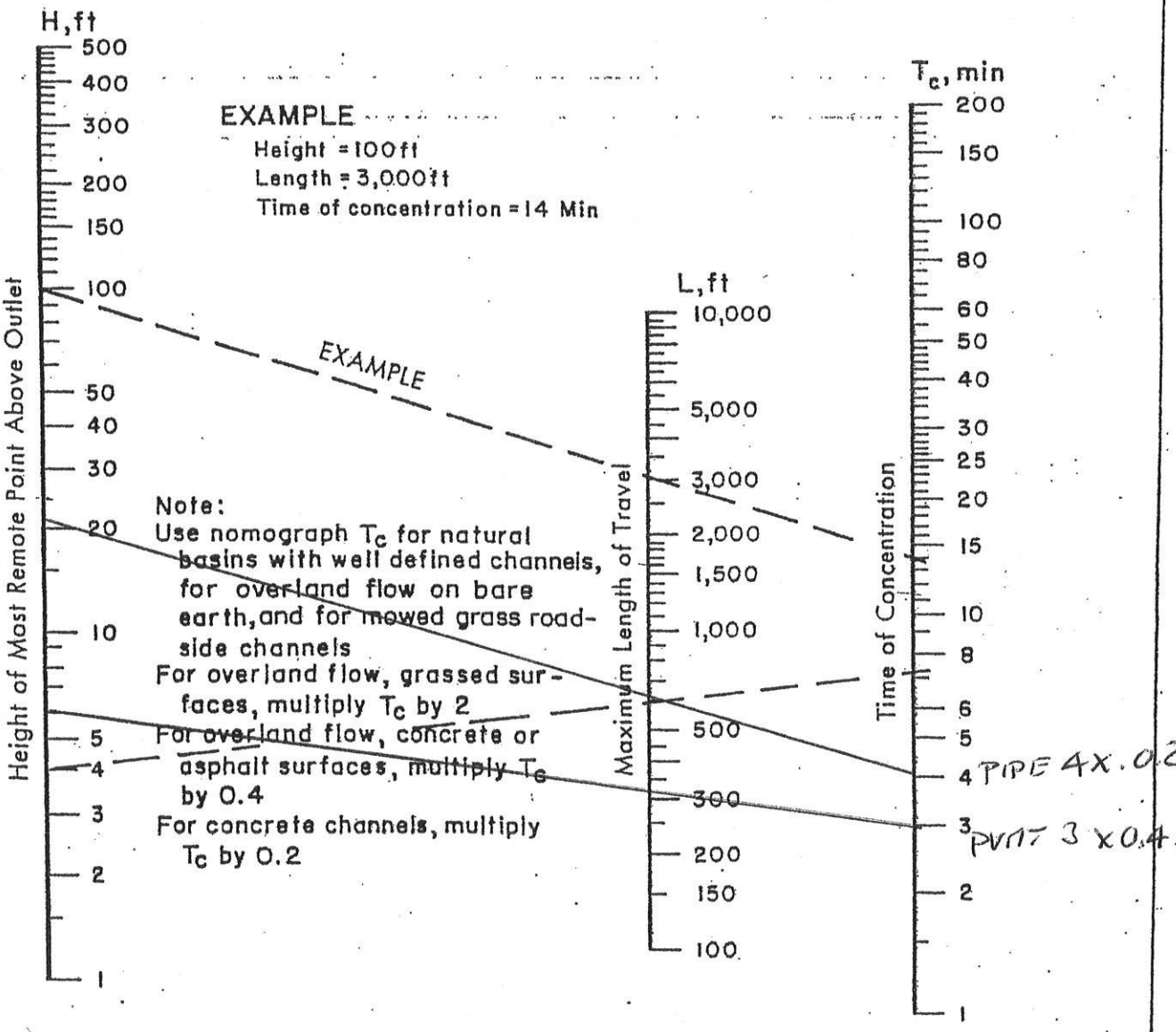
THORNBURY CROSSING DETENTION BASIN #2

THE STERLING COMPANY
5055 NEW BAUMGARTNER RD.
ST. LOUIS, MO 63129

(314) 487-0440
Fax (314) 487-8944

SHEET 2 of 3

Project: TIME OF CONCENTRATION
Date: 9-5-01 Project No: 00-11-284
Designed: D.M Checked:



Based on study by P. Z. Kirpich,
Civil Engineering, Vol. 10, No. 6, June 1940, p. 362

OVERLAND FLOW: 10' GRASS, 1' DIFF. Tc = 0.00
OVERLAND FLOW: 310' PVMT, 6' DIFF Tc = 1.20
PIPE FLOW: 606' PIPE, 22' DIFF Tc = 0.80
OVERLAND FLOW: 30' CONC. SWALE, 0.3' DIFF Tc = 0.00

2.00

THORNBURY CROSSING DETENTION BASIN #3

THE STERLING COMPANY
5055 NEW BAUMGARTNER RD.
ST. LOUIS, MO 63129

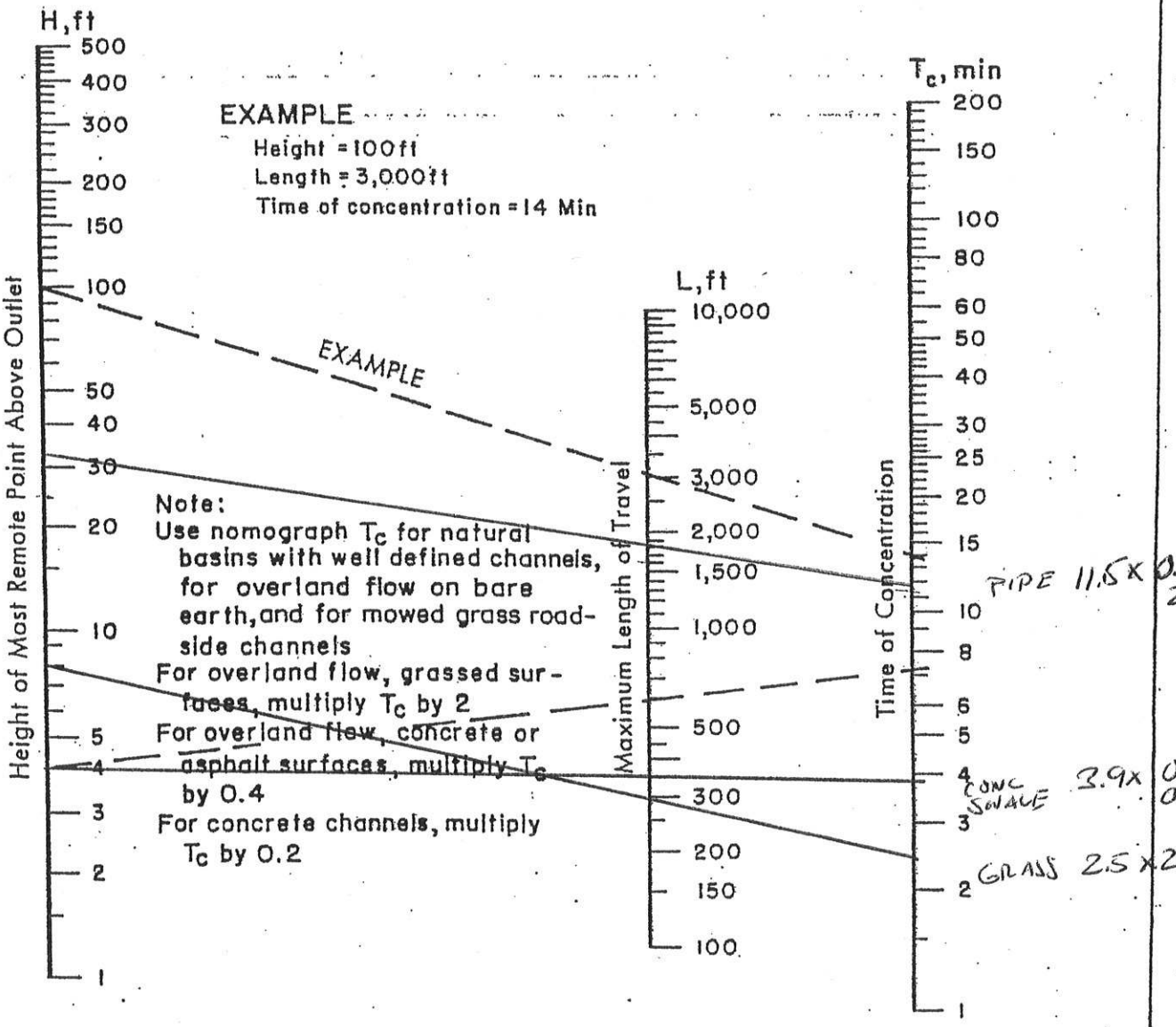
(314) 487-0440
Fax (314) 487-8944

SHEET 3 of 3

Project: TIME OF CONCENTRATION

Date: 9-5-01 Project No: 00-11-294

Designed: D.M. Checked: _____



PIPE 11.5 x 0.2 = 2.30

CONC SWALE 3.9 x 0.2 = 0.78

GRASS 2.5 x 2 = 5.0

Based on study by P. Z. Kirpich,
Civil Engineering, Vol. 10, No. 6, June 1940, p. 362

OVERLAND FLOW: 290' GRASS, 8' DIFF Tc = 5.00
PIPE FLOW : 1900' PIPE, 32' DIFF Tc = 2.30
OVERLAND FLOW : 350' CONC. SWALE 4' DIFF Tc = 0.78

8.08 USE 8.0

OND-2 Version: 5.17
/N: 1903000008

THORNBURY CROSSING
00-11-289, 7/12/01
BASIN 1,
DETENTION ANALYSIS

CALCULATED 09-06-2001 15:12:01
DISK FILE: j:\DATA\0011289\BASIN1 .VOL

Planimeter scale: 1 inch = 1 ft.

levation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
573.00	0.00	0	0	0	0
574.00	3,145.00	3,145	3,145	1,048	1,048
576.00	7,375.00	7,375	15,336	10,224	11,272
578.00	13,055.00	13,055	30,242	20,162	31,434
580.00	19,934.00	19,934	49,121	32,747	64,181
582.00	26,773.00	26,773	69,809	46,539	110,720
584.00	32,935.00	32,935	89,403	59,602	170,322
586.00	39,379.00	39,379	108,327	72,218	242,540

$$IA = (sq.rt(Area1) + ((Ei-E1)/(E2-E1))*(sq.rt(Area2)-sq.rt(Area1)))^2$$

where: E1, E2 = Closest two elevations with planimeter data
Ei = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

Outlet Structure File: BASIN1 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01

****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
573.00	0.0	1
573.40	0.2	1
573.80	0.4	1
574.20	0.5	1
574.60	0.6	1
575.00	0.6	1
575.40	0.7	1
575.80	0.8	1
576.20	0.8	1
576.60	0.9	1
577.00	1.0	1
577.40	1.0	1
577.80	1.0	1
578.20	1.1	1
578.60	1.1	1
579.00	1.2	1
579.40	1.2	1
579.80	1.3	1
580.20	1.3	1
580.60	1.3	1
581.00	1.4	1
581.40	1.4	1
581.80	1.4	1
582.20	1.5	1
582.60	1.5	1
583.00	1.5	1
583.40	1.6	1
583.80	7.9	1 +2
584.20	24.2	1 +2
584.60	46.1	1 +2
585.00	72.4	1 +2
585.40	102.6	1 +2
585.80	129.9	1 +3
586.00	139.4	1 +3

Outlet Structure File: BASIN1 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01

****

Outlet Structure File: j:\DATA\0011289\BASIN1 .STR
Planimeter Input File: j:\DATA\0011289\BASIN1 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN1 .PND

Min. Elev.(ft) = 573 Max. Elev.(ft) = 586 Incr.(ft) = .4

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
CULVERT-CR	1		->	1
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN1 .PND

Outlet Structure File: BASIN1 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01

****

>>>>>> Structure No. 1 <<<<<<
(Input Data)

CULVERT-CR
Circular Culvert (With Inlet Control)

E1 elev.(ft)?	573
E2 elev.(ft)?	586.001
Diam. (ft)?	.333
Inv. el.(ft)?	573
Slope (ft/ft)?	.01
T1 ratio?	
T2 ratio?	
K Coeff.?	.0045
M Coeff.?	2
c Coeff.?	.0317
Y Coeff.?	.69
Form 1 or 2?	1
Slope factor?	-.5

Outlet Structure File: BASIN1 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01

****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	583.5
E2 elev.(ft)?	585.5
Weir coefficient?	3.3
Weir elev.(ft)?	583.5
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN1 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	585.5
E2 elev.(ft)?	586.001
Orifice coeff.?	.6
Invert elev.(ft)?	583.5
Datum elev.(ft) ?	584.5
Orifice area (sq ft)?	23.34

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**************************
*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
**************************
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Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1 .POND

----INITIAL CONDITIONS----
Elevation = 573.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
573.00	0.0	0
573.40	0.2	67
573.80	0.4	537
574.20	0.5	1,711
574.60	0.6	3,252
575.00	0.6	5,103
575.40	0.7	7,292
575.80	0.8	9,848
576.20	0.8	12,797
576.60	0.9	16,150
577.00	1.0	19,933
577.40	1.0	24,170
577.80	1.0	28,887
578.20	1.1	34,107
578.60	1.1	39,833
579.00	1.2	46,088
579.40	1.2	52,892
579.80	1.3	60,270
580.20	1.3	68,232
580.60	1.3	76,720
581.00	1.4	85,741
581.40	1.4	95,309
581.80	1.4	105,439
582.20	1.5	116,134
582.60	1.5	127,315
583.00	1.5	138,981
583.40	1.6	151,139
583.80	7.9	163,799
584.20	24.2	176,971
584.60	46.1	190,642
585.00	72.4	204,820

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.2	2.4
17.9	18.3
57.0	57.5
108.4	109.0
170.1	170.7
243.1	243.8
328.3	329.1
426.6	427.4
538.3	539.2
664.4	665.4
805.7	806.7
962.9	963.9
1136.9	1138.0
1327.8	1328.9
1536.3	1537.5
1763.1	1764.3
2009.0	2010.3
2274.4	2275.7
2557.3	2558.6
2858.0	2859.4
3177.0	3178.4
3514.6	3516.0
3871.1	3872.6
4243.8	4245.3
4632.7	4634.2
5038.0	5039.6
5460.0	5467.9
5899.0	5923.2
6354.7	6400.8
6827.3	6899.7

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
585.40	102.6	219,515
585.80	129.9	234,731
586.00	139.4	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
7317.1	7419.7
7824.3	7954.2
8084.7	8224.1

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN102 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	573.00
1.0	2.60	2.6	2.2	2.6	0.20	573.40
2.0	7.80	10.4	11.9	12.6	0.33	573.66
3.0	12.99	20.8	31.9	32.7	0.44	573.95
4.0	18.19	31.2	62.0	63.0	0.51	574.24
5.0	23.39	41.6	102.4	103.6	0.59	574.56
6.0	25.99	49.4	150.6	151.8	0.60	574.88
7.0	25.99	52.0	201.3	202.6	0.64	575.17
8.0	25.99	52.0	251.8	253.3	0.71	575.44
9.0	25.99	52.0	302.3	303.8	0.77	575.68
10.0	25.99	52.0	352.7	354.3	0.80	575.90
11.0	25.99	52.0	403.0	404.6	0.80	576.11
12.0	25.99	52.0	453.4	455.0	0.82	576.30
13.0	25.99	52.0	503.6	505.4	0.87	576.48
14.0	25.99	52.0	553.8	555.6	0.91	576.65
15.0	25.99	52.0	603.8	605.8	0.95	576.81
16.0	25.99	52.0	653.8	655.8	0.99	576.97
17.0	25.99	52.0	703.8	705.8	1.00	577.11
18.0	25.99	52.0	753.8	755.8	1.00	577.26
19.0	25.99	52.0	803.8	805.8	1.00	577.40
20.0	25.99	52.0	853.8	855.8	1.00	577.52
21.0	25.99	52.0	903.7	905.7	1.00	577.65
22.0	23.39	49.4	951.1	953.1	1.00	577.77
23.0	18.19	41.6	990.7	992.7	1.02	577.87
24.0	12.99	31.2	1019.8	1021.8	1.03	577.93
25.0	7.80	20.8	1038.5	1040.6	1.04	577.98
26.0	2.60	10.4	1046.8	1048.9	1.05	578.00
27.0	0.00	2.6	1047.3	1049.4	1.05	578.00
28.0	0.00	0.0	1045.2	1047.3	1.05	577.99
29.0	0.00	0.0	1043.1	1045.2	1.05	577.99
30.0	0.00	0.0	1041.0	1043.1	1.05	577.98
31.0	0.00	0.0	1038.9	1041.0	1.04	577.98
32.0	0.00	0.0	1036.8	1038.9	1.04	577.97
33.0	0.00	0.0	1034.7	1036.8	1.04	577.97
34.0	0.00	0.0	1032.7	1034.7	1.04	577.96
35.0	0.00	0.0	1030.6	1032.7	1.04	577.96
36.0	0.00	0.0	1028.5	1030.6	1.04	577.95
37.0	0.00	0.0	1026.4	1028.5	1.04	577.95
38.0	0.00	0.0	1024.4	1026.4	1.04	577.94
39.0	0.00	0.0	1022.3	1024.4	1.03	577.94
40.0	0.00	0.0	1020.2	1022.3	1.03	577.93
41.0	0.00	0.0	1018.2	1020.2	1.03	577.93
42.0	0.00	0.0	1016.1	1018.2	1.03	577.92
43.0	0.00	0.0	1014.0	1016.1	1.03	577.92
44.0	0.00	0.0	1012.0	1014.0	1.03	577.92

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN102 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	1009.9	1012.0	1.03	577.91
0.0	1007.9	1009.9	1.03	577.91
0.0	1005.8	1007.9	1.03	577.90
0.0	1003.8	1005.8	1.02	577.90
0.0	1001.7	1003.8	1.02	577.89
0.0	999.7	1001.7	1.02	577.89
0.0	997.6	999.7	1.02	577.88
0.0	995.6	997.6	1.02	577.88
0.0	993.6	995.6	1.02	577.87
0.0	991.5	993.6	1.02	577.87
0.0	989.5	991.5	1.02	577.86
0.0	987.5	989.5	1.01	577.86
0.0	985.4	987.5	1.01	577.85
0.0	983.4	985.4	1.01	577.85
0.0	981.4	983.4	1.01	577.84
0.0	979.4	981.4	1.01	577.84

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN102 .HYD

Starting Pond W.S. Elevation = 573.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	25.99 cfs
Peak Outflow	=	1.05 cfs
Peak Elevation	=	578.00 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	31,450 cu-ft
Total Storage in Pond	=	31,450 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1 .POND

----INITIAL CONDITIONS----
Elevation = 573.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
573.00	0.0	0
573.40	0.2	67
573.80	0.4	537
574.20	0.5	1,711
574.60	0.6	3,252
575.00	0.6	5,103
575.40	0.7	7,292
575.80	0.8	9,848
576.20	0.8	12,797
576.60	0.9	16,150
577.00	1.0	19,933
577.40	1.0	24,170
577.80	1.0	28,887
578.20	1.1	34,107
578.60	1.1	39,833
579.00	1.2	46,088
579.40	1.2	52,892
579.80	1.3	60,270
580.20	1.3	68,232
580.60	1.3	76,720
581.00	1.4	85,741
581.40	1.4	95,309
581.80	1.4	105,439
582.20	1.5	116,134
582.60	1.5	127,315
583.00	1.5	138,981
583.40	1.6	151,139
583.80	7.9	163,799
584.20	24.2	176,971
584.60	46.1	190,642
585.00	72.4	204,820

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.2	2.4
17.9	18.3
57.0	57.5
108.4	109.0
170.1	170.7
243.1	243.8
328.3	329.1
426.6	427.4
538.3	539.2
664.4	665.4
805.7	806.7
962.9	963.9
1136.9	1138.0
1327.8	1328.9
1536.3	1537.5
1763.1	1764.3
2009.0	2010.3
2274.4	2275.7
2557.3	2558.6
2858.0	2859.4
3177.0	3178.4
3514.6	3516.0
3871.1	3872.6
4243.8	4245.3
4632.7	4634.2
5038.0	5039.6
5460.0	5467.9
5899.0	5923.2
6354.7	6400.8
6827.3	6899.7

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
585.40	102.6	219,515
585.80	129.9	234,731
586.00	139.4	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
7317.1	7419.7
7824.3	7954.2
8084.7	8224.1

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN115 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	573.00
1.0	4.19	4.2	3.7	4.2	0.22	573.44
2.0	12.57	16.8	19.7	20.5	0.41	573.82
3.0	20.95	33.5	52.2	53.2	0.49	574.16
4.0	29.34	50.3	101.4	102.5	0.59	574.55
5.0	37.72	67.1	167.2	168.4	0.60	574.99
6.0	41.91	79.6	245.4	246.8	0.70	575.41
7.0	41.91	83.8	327.7	329.3	0.80	575.80
8.0	41.91	83.8	409.9	411.5	0.80	576.14
9.0	41.91	83.8	492.0	493.7	0.86	576.44
10.0	41.91	83.8	573.9	575.8	0.93	576.72
11.0	41.91	83.8	655.8	657.8	0.99	576.98
12.0	41.91	83.8	737.6	739.6	1.00	577.21
13.0	41.91	83.8	819.4	821.4	1.00	577.44
14.0	41.91	83.8	901.2	903.2	1.00	577.65
15.0	41.91	83.8	983.0	985.1	1.01	577.85
16.0	41.91	83.8	1064.7	1066.8	1.06	578.04
17.0	41.91	83.8	1146.3	1148.5	1.10	578.22
18.0	41.91	83.8	1228.0	1230.2	1.10	578.39
19.0	41.91	83.8	1309.6	1311.8	1.10	578.56
20.0	41.91	83.8	1391.1	1393.4	1.13	578.72
21.0	41.91	83.8	1472.6	1475.0	1.17	578.88
22.0	37.72	79.6	1549.9	1552.3	1.20	579.03
23.0	29.34	67.1	1614.5	1616.9	1.20	579.14
24.0	20.95	50.3	1662.4	1664.8	1.20	579.22
25.0	12.57	33.5	1693.5	1695.9	1.20	579.28
26.0	4.19	16.8	1707.9	1710.3	1.20	579.30
27.0	0.00	4.2	1709.7	1712.1	1.20	579.31
28.0	0.00	0.0	1707.3	1709.7	1.20	579.30
29.0	0.00	0.0	1704.9	1707.3	1.20	579.30
30.0	0.00	0.0	1702.5	1704.9	1.20	579.30
31.0	0.00	0.0	1700.1	1702.5	1.20	579.29
32.0	0.00	0.0	1697.7	1700.1	1.20	579.29
33.0	0.00	0.0	1695.3	1697.7	1.20	579.28
34.0	0.00	0.0	1692.9	1695.3	1.20	579.28
35.0	0.00	0.0	1690.5	1692.9	1.20	579.27
36.0	0.00	0.0	1688.1	1690.5	1.20	579.27
37.0	0.00	0.0	1685.7	1688.1	1.20	579.27
38.0	0.00	0.0	1683.3	1685.7	1.20	579.26
39.0	0.00	0.0	1680.9	1683.3	1.20	579.26
40.0	0.00	0.0	1678.5	1680.9	1.20	579.25
41.0	0.00	0.0	1676.1	1678.5	1.20	579.25
42.0	0.00	0.0	1673.7	1676.1	1.20	579.24
43.0	0.00	0.0	1671.3	1673.7	1.20	579.24
44.0	0.00	0.0	1668.9	1671.3	1.20	579.24

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN115 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	1666.5	1668.9	1.20	579.23
0.0	1664.1	1666.5	1.20	579.23
0.0	1661.7	1664.1	1.20	579.22
0.0	1659.3	1661.7	1.20	579.22
0.0	1656.9	1659.3	1.20	579.21
0.0	1654.5	1656.9	1.20	579.21
0.0	1652.1	1654.5	1.20	579.21
0.0	1649.7	1652.1	1.20	579.20
0.0	1647.3	1649.7	1.20	579.20
0.0	1644.9	1647.3	1.20	579.19
0.0	1642.5	1644.9	1.20	579.19
0.0	1640.1	1642.5	1.20	579.19
0.0	1637.7	1640.1	1.20	579.18
0.0	1635.3	1637.7	1.20	579.18
0.0	1632.9	1635.3	1.20	579.17
0.0	1630.5	1632.9	1.20	579.17

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN115 .HYD

Starting Pond W.S. Elevation = 573.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	41.91 cfs
Peak Outflow	=	1.20 cfs
Peak Elevation	=	579.31 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	51,326 cu-ft
Total Storage in Pond	=	51,326 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1 .PND

----INITIAL CONDITIONS----
Elevation = 573.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
573.00	0.0	0
573.40	0.2	67
573.80	0.4	537
574.20	0.5	1,711
574.60	0.6	3,252
575.00	0.6	5,103
575.40	0.7	7,292
575.80	0.8	9,848
576.20	0.8	12,797
576.60	0.9	16,150
577.00	1.0	19,933
577.40	1.0	24,170
577.80	1.0	28,887
578.20	1.1	34,107
578.60	1.1	39,833
579.00	1.2	46,088
579.40	1.2	52,892
579.80	1.3	60,270
580.20	1.3	68,232
580.60	1.3	76,720
581.00	1.4	85,741
581.40	1.4	95,309
581.80	1.4	105,439
582.20	1.5	116,134
582.60	1.5	127,315
583.00	1.5	138,981
583.40	1.6	151,139
583.80	7.9	163,799
584.20	24.2	176,971
584.60	46.1	190,642
585.00	72.4	204,820

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.2	2.4
17.9	18.3
57.0	57.5
108.4	109.0
170.1	170.7
243.1	243.8
328.3	329.1
426.6	427.4
538.3	539.2
664.4	665.4
805.7	806.7
962.9	963.9
1136.9	1138.0
1327.8	1328.9
1536.3	1537.5
1763.1	1764.3
2009.0	2010.3
2274.4	2275.7
2557.3	2558.6
2858.0	2859.4
3177.0	3178.4
3514.6	3516.0
3871.1	3872.6
4243.8	4245.3
4632.7	4634.2
5038.0	5039.6
5460.0	5467.9
5899.0	5923.2
6354.7	6400.8
6827.3	6899.7

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
585.40	102.6	219,515
585.80	129.9	234,731
586.00	139.4	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
7317.1	7419.7
7824.3	7954.2
8084.7	8224.1

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN125 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	573.00
1.0	5.17	5.2	4.7	5.2	0.23	573.47
2.0	15.52	20.7	24.6	25.4	0.42	573.87
3.0	25.86	41.4	64.9	65.9	0.52	574.27
4.0	36.21	62.1	125.8	127.0	0.60	574.72
5.0	46.56	82.8	207.2	208.5	0.65	575.21
6.0	51.73	98.3	304.0	305.5	0.77	575.69
7.0	51.73	103.5	405.8	407.4	0.80	576.12
8.0	51.73	103.5	507.6	509.3	0.87	576.49
9.0	51.73	103.5	609.1	611.0	0.96	576.83
10.0	51.73	103.5	710.6	712.6	1.00	577.13
11.0	51.73	103.5	812.0	814.0	1.00	577.42
12.0	51.73	103.5	913.5	915.5	1.00	577.68
13.0	51.73	103.5	1014.9	1016.9	1.03	577.92
14.0	51.73	103.5	1116.2	1118.3	1.09	578.15
15.0	51.73	103.5	1217.4	1219.6	1.10	578.37
16.0	51.73	103.5	1318.7	1320.9	1.10	578.58
17.0	51.73	103.5	1419.9	1422.1	1.14	578.78
18.0	51.73	103.5	1520.9	1523.3	1.19	578.97
19.0	51.73	103.5	1622.0	1624.4	1.20	579.15
20.0	51.73	103.5	1723.0	1725.4	1.20	579.33
21.0	51.73	103.5	1824.1	1826.5	1.23	579.50
22.0	46.56	98.3	1919.8	1922.3	1.26	579.66
23.0	36.21	82.8	2000.0	2002.6	1.30	579.79
24.0	25.86	62.1	2059.5	2062.1	1.30	579.88
25.0	15.52	41.4	2098.2	2100.8	1.30	579.94
26.0	5.17	20.7	2116.3	2118.9	1.30	579.96
27.0	0.00	5.2	2118.9	2121.5	1.30	579.97
28.0	0.00	0.0	2116.3	2118.9	1.30	579.96
29.0	0.00	0.0	2113.7	2116.3	1.30	579.96
30.0	0.00	0.0	2111.1	2113.7	1.30	579.96
31.0	0.00	0.0	2108.5	2111.1	1.30	579.95
32.0	0.00	0.0	2105.9	2108.5	1.30	579.95
33.0	0.00	0.0	2103.3	2105.9	1.30	579.94
34.0	0.00	0.0	2100.7	2103.3	1.30	579.94
35.0	0.00	0.0	2098.1	2100.7	1.30	579.94
36.0	0.00	0.0	2095.5	2098.1	1.30	579.93
37.0	0.00	0.0	2092.9	2095.5	1.30	579.93
38.0	0.00	0.0	2090.3	2092.9	1.30	579.92
39.0	0.00	0.0	2087.7	2090.3	1.30	579.92
40.0	0.00	0.0	2085.1	2087.7	1.30	579.92
41.0	0.00	0.0	2082.5	2085.1	1.30	579.91
42.0	0.00	0.0	2079.9	2082.5	1.30	579.91
43.0	0.00	0.0	2077.3	2079.9	1.30	579.90
44.0	0.00	0.0	2074.7	2077.3	1.30	579.90

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN125 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	2072.1	2074.7	1.30	579.90
0.0	2069.5	2072.1	1.30	579.89
0.0	2066.9	2069.5	1.30	579.89
0.0	2064.3	2066.9	1.30	579.89
0.0	2061.7	2064.3	1.30	579.88
0.0	2059.1	2061.7	1.30	579.88
0.0	2056.5	2059.1	1.30	579.87
0.0	2053.9	2056.5	1.30	579.87
0.0	2051.3	2053.9	1.30	579.87
0.0	2048.7	2051.3	1.30	579.86
0.0	2046.1	2048.7	1.30	579.86
0.0	2043.5	2046.1	1.30	579.85
0.0	2040.9	2043.5	1.30	579.85
0.0	2038.3	2040.9	1.30	579.85
0.0	2035.7	2038.3	1.30	579.84
0.0	2033.1	2035.7	1.30	579.84

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN125 .HYD

Starting Pond W.S. Elevation = 573.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	51.73 cfs
Peak Outflow	=	1.30 cfs
Peak Elevation	=	579.97 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	63,607 cu-ft
Total Storage in Pond	=	63,607 cu-ft

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**************************
*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Rating Table file: j:\DATA\0011289\BASIN1 .PND

----INITIAL CONDITIONS----
Elevation = 573.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
573.00	0.0	0
573.40	0.2	67
573.80	0.4	537
574.20	0.5	1,711
574.60	0.6	3,252
575.00	0.6	5,103
575.40	0.7	7,292
575.80	0.8	9,848
576.20	0.8	12,797
576.60	0.9	16,150
577.00	1.0	19,933
577.40	1.0	24,170
577.80	1.0	28,887
578.20	1.1	34,107
578.60	1.1	39,833
579.00	1.2	46,088
579.40	1.2	52,892
579.80	1.3	60,270
580.20	1.3	68,232
580.60	1.3	76,720
581.00	1.4	85,741
581.40	1.4	95,309
581.80	1.4	105,439
582.20	1.5	116,134
582.60	1.5	127,315
583.00	1.5	138,981
583.40	1.6	151,139
583.80	7.9	163,799
584.20	24.2	176,971
584.60	46.1	190,642
585.00	72.4	204,820

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.2	2.4
17.9	18.3
57.0	57.5
108.4	109.0
170.1	170.7
243.1	243.8
328.3	329.1
426.6	427.4
538.3	539.2
664.4	665.4
805.7	806.7
962.9	963.9
1136.9	1138.0
1327.8	1328.9
1536.3	1537.5
1763.1	1764.3
2009.0	2010.3
2274.4	2275.7
2557.3	2558.6
2858.0	2859.4
3177.0	3178.4
3514.6	3516.0
3871.1	3872.6
4243.8	4245.3
4632.7	4634.2
5038.0	5039.6
5460.0	5467.9
5899.0	5923.2
6354.7	6400.8
6827.3	6899.7

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
585.40	102.6	219,515
585.80	129.9	234,731
586.00	139.4	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
7317.1	7419.7
7824.3	7954.2
8084.7	8224.1

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN1100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	6.61
2.0	19.84
3.0	33.07
4.0	46.30
5.0	59.53
6.0	66.14
7.0	66.14
8.0	66.14
9.0	66.14
10.0	66.14
11.0	66.14
12.0	66.14
13.0	66.14
14.0	66.14
15.0	66.14
16.0	66.14
17.0	66.14
18.0	66.14
19.0	66.14
20.0	66.14
21.0	66.14
22.0	59.53
23.0	46.30
24.0	33.07
25.0	19.84
26.0	6.61
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	573.00
6.6	6.1	6.6	0.25	573.51
26.5	31.7	32.6	0.44	573.95
52.9	83.5	84.6	0.55	574.41
79.4	161.7	162.9	0.60	574.95
105.8	266.0	267.5	0.73	575.51
125.7	390.1	391.7	0.80	576.05
132.3	520.6	522.4	0.88	576.54
132.3	650.9	652.9	0.99	576.96
132.3	781.2	783.2	1.00	577.33
132.3	911.5	913.5	1.00	577.67
132.3	1041.7	1043.8	1.05	577.98
132.3	1171.7	1173.9	1.10	578.28
132.3	1301.8	1304.0	1.10	578.55
132.3	1431.8	1434.1	1.15	578.80
132.3	1561.7	1564.1	1.20	579.05
132.3	1691.6	1694.0	1.20	579.28
132.3	1821.4	1823.8	1.22	579.50
132.3	1951.1	1953.7	1.28	579.71
132.3	2080.8	2083.4	1.30	579.91
132.3	2210.5	2213.1	1.30	580.11
132.3	2340.2	2342.8	1.30	580.29
125.7	2463.2	2465.8	1.30	580.47
105.8	2566.4	2569.1	1.30	580.61
79.4	2643.2	2645.8	1.33	580.72
52.9	2693.4	2696.1	1.35	580.78
26.5	2717.1	2719.8	1.35	580.81
6.6	2721.0	2723.7	1.35	580.82
0.0	2718.3	2721.0	1.35	580.82
0.0	2715.6	2718.3	1.35	580.81
0.0	2712.9	2715.6	1.35	580.81
0.0	2710.2	2712.9	1.35	580.81
0.0	2707.5	2710.2	1.35	580.80
0.0	2704.8	2707.5	1.35	580.80
0.0	2702.1	2704.8	1.35	580.79
0.0	2699.4	2702.1	1.35	580.79
0.0	2696.7	2699.4	1.35	580.79
0.0	2694.0	2696.7	1.35	580.78
0.0	2691.3	2694.0	1.35	580.78
0.0	2688.6	2691.3	1.34	580.78
0.0	2686.0	2688.6	1.34	580.77
0.0	2683.3	2686.0	1.34	580.77
0.0	2680.6	2683.3	1.34	580.77
0.0	2677.9	2680.6	1.34	580.76
0.0	2675.2	2677.9	1.34	580.76

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN1100.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	2672.6	2675.2	1.34	580.76
46.0	0.00	0.0	2669.9	2672.6	1.34	580.75
47.0	0.00	0.0	2667.2	2669.9	1.34	580.75
48.0	0.00	0.0	2664.5	2667.2	1.34	580.74
49.0	0.00	0.0	2661.9	2664.5	1.34	580.74
50.0	0.00	0.0	2659.2	2661.9	1.33	580.74
51.0	0.00	0.0	2656.5	2659.2	1.33	580.73
52.0	0.00	0.0	2653.9	2656.5	1.33	580.73
53.0	0.00	0.0	2651.2	2653.9	1.33	580.73
54.0	0.00	0.0	2648.5	2651.2	1.33	580.72
55.0	0.00	0.0	2645.9	2648.5	1.33	580.72
56.0	0.00	0.0	2643.2	2645.9	1.33	580.72
57.0	0.00	0.0	2640.6	2643.2	1.33	580.71
58.0	0.00	0.0	2637.9	2640.6	1.33	580.71
59.0	0.00	0.0	2635.3	2637.9	1.33	580.71
60.0	0.00	0.0	2632.6	2635.3	1.33	580.70

HOW LONG TIL BASIN DRAINED.

28 TO 60 MIN ONLY 580.82 − 580.70 = .12

.12 IN 32 MIN

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN1100.HYD

Starting Pond W.S. Elevation = 573.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	66.14 cfs
Peak Outflow	=	1.35 cfs
Peak Elevation	=	580.82 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	81,671 cu-ft
Total Storage in Pond	=	81,671 cu-ft

Outlet Structure File: BASIN1BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01
BLOCKED LOW FLOW
****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
583.50	0.0	2
583.70	3.4	2
583.90	9.7	2
584.10	17.9	2
584.30	27.6	2
584.50	38.5	2
584.70	50.6	2
584.90	63.8	2
585.10	77.9	2
585.30	93.0	2
585.50	112.4	3
585.70	123.1	3
585.90	133.0	3
586.00	137.6	3

Outlet Structure File: BASIN1BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01
BLOCKED LOW FLOW

****

Outlet Structure File: j:\DATA\0011289\BASIN1BL.STR
Planimeter Input File: j:\DATA\0011289\BASIN1 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN1BL.PND

Min. Elev.(ft) = 583.5 Max. Elev.(ft) = 586 Incr.(ft) = .2

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN1BL.PND

Outlet Structure File: BASIN1BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01
BLOCKED LOW FLOW
****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	583.5
E2 elev.(ft)?	585.5
Weir coefficient?	3.3
Weir elev.(ft)?	583.5
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN1BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #1
7/12/01
BLOCKED LOW FLOW

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	585.5
E2 elev.(ft)?	586.001
Orifice coeff.?	.6
Invert elev.(ft)?	583.5
Datum elev.(ft) ?	584.5
Orifice area (sq ft)?	23.34

****
* *
* DETENTION ANALYSIS *
* 6/19/01 *
* BASIN #1 *
* *
* *
****

Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1BL.PND

----INITIAL CONDITIONS----
Elevation = 583.50 ft
Outflow = 0.00 cfs
Storage = 154,256 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
583.50	0.0	154,256
583.70	3.4	160,587
583.90	9.7	167,046
584.10	17.9	173,630
584.30	27.6	180,341
584.50	38.5	187,177
584.70	50.6	194,140
584.90	63.8	201,228
585.10	77.9	208,444
585.30	93.0	215,791
585.50	112.4	223,269
585.70	123.1	230,878
585.90	133.0	238,620
586.00	137.6	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
5141.9	5141.9
5352.9	5356.3
5568.2	5577.9
5787.7	5805.6
6011.4	6039.0
6239.2	6277.7
6471.3	6521.9
6707.6	6771.4
6948.1	7026.0
7193.0	7286.0
7442.3	7554.7
7695.9	7819.0
7954.0	8087.0
8084.7	8222.3

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK02.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	5141.9	5141.9	0.00	583.50
1.0	2.60	2.6	5144.4	5144.5	0.04	583.50
2.0	7.80	10.4	5154.4	5154.8	0.20	583.51
3.0	12.99	20.8	5174.1	5175.2	0.53	583.53
4.0	18.19	31.2	5203.3	5205.3	1.01	583.56
5.0	23.39	41.6	5241.6	5244.9	1.63	583.60
6.0	25.99	49.4	5286.2	5291.0	2.36	583.64
7.0	25.99	52.0	5332.0	5338.2	3.11	583.68
8.0	25.99	52.0	5375.6	5384.0	4.19	583.72
9.0	25.99	52.0	5416.7	5427.6	5.43	583.76
10.0	25.99	52.0	5455.5	5468.7	6.60	583.80
11.0	25.99	52.0	5492.1	5507.5	7.70	583.84
12.0	25.99	52.0	5526.6	5544.1	8.74	583.87
13.0	25.99	52.0	5559.1	5578.6	9.73	583.90
14.0	25.99	52.0	5589.3	5611.1	10.90	583.93
15.0	25.99	52.0	5617.3	5641.3	11.98	583.96
16.0	25.99	52.0	5643.3	5669.3	12.99	583.98
17.0	25.99	52.0	5667.4	5695.3	13.93	584.00
18.0	25.99	52.0	5689.8	5719.4	14.80	584.02
19.0	25.99	52.0	5710.6	5741.8	15.60	584.04
20.0	25.99	52.0	5729.9	5762.6	16.35	584.06
21.0	25.99	52.0	5747.8	5781.9	17.05	584.08
22.0	23.39	49.4	5762.0	5797.1	17.60	584.09
23.0	18.19	41.6	5767.9	5803.5	17.83	584.10
24.0	12.99	31.2	5763.7	5799.1	17.67	584.09
25.0	7.80	20.8	5750.2	5784.5	17.14	584.08
26.0	2.60	10.4	5728.1	5760.6	16.28	584.06
27.0	0.00	2.6	5700.3	5730.7	15.20	584.03
28.0	0.00	0.0	5672.0	5700.3	14.11	584.01
29.0	0.00	0.0	5645.9	5672.0	13.09	583.98
30.0	0.00	0.0	5621.6	5645.9	12.15	583.96
31.0	0.00	0.0	5599.0	5621.6	11.27	583.94
32.0	0.00	0.0	5578.1	5599.0	10.46	583.92
33.0	0.00	0.0	5558.7	5578.1	9.71	583.90
34.0	0.00	0.0	5540.4	5558.7	9.15	583.88
35.0	0.00	0.0	5523.1	5540.4	8.63	583.87
36.0	0.00	0.0	5506.8	5523.1	8.14	583.85
37.0	0.00	0.0	5491.5	5506.8	7.68	583.84
38.0	0.00	0.0	5477.0	5491.5	7.24	583.82
39.0	0.00	0.0	5463.3	5477.0	6.83	583.81
40.0	0.00	0.0	5450.4	5463.3	6.44	583.80
41.0	0.00	0.0	5438.3	5450.4	6.08	583.78
42.0	0.00	0.0	5426.8	5438.3	5.73	583.77
43.0	0.00	0.0	5416.0	5426.8	5.41	583.76
44.0	0.00	0.0	5405.8	5416.0	5.10	583.75

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK02.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	5396.2	5405.8	4.81	583.74
0.0	5387.1	5396.2	4.53	583.74
0.0	5378.6	5387.1	4.28	583.73
0.0	5370.5	5378.6	4.03	583.72
0.0	5362.9	5370.5	3.80	583.71
0.0	5355.7	5362.9	3.59	583.71
0.0	5348.9	5355.7	3.39	583.70
0.0	5342.4	5348.9	3.28	583.69
0.0	5336.0	5342.4	3.18	583.69
0.0	5329.9	5336.0	3.08	583.68
0.0	5323.9	5329.9	2.98	583.68
0.0	5318.1	5323.9	2.89	583.67
0.0	5312.5	5318.1	2.79	583.66
0.0	5307.1	5312.5	2.71	583.66
0.0	5301.9	5307.1	2.62	583.65
0.0	5296.8	5301.9	2.54	583.65

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK02.HYD

Starting Pond W.S. Elevation = 583.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	25.99 cfs
Peak Outflow	=	17.83 cfs
Peak Elevation	=	584.10 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	154,256 cu-ft
Peak Storage From Storm	=	19,315 cu-ft
Total Storage in Pond	=	173,571 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1BL.PND

----INITIAL CONDITIONS----
Elevation = 583.50 ft
Outflow = 0.00 cfs
Storage = 154,256 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
583.50	0.0	154,256
583.70	3.4	160,587
583.90	9.7	167,046
584.10	17.9	173,630
584.30	27.6	180,341
584.50	38.5	187,177
584.70	50.6	194,140
584.90	63.8	201,228
585.10	77.9	208,444
585.30	93.0	215,791
585.50	112.4	223,269
585.70	123.1	230,878
585.90	133.0	238,620
586.00	137.6	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
5141.9	5141.9
5352.9	5356.3
5568.2	5577.9
5787.7	5805.6
6011.4	6039.0
6239.2	6277.7
6471.3	6521.9
6707.6	6771.4
6948.1	7026.0
7193.0	7286.0
7442.3	7554.7
7695.9	7819.0
7954.0	8087.0
8084.7	8222.3

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK15.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	5141.9	5141.9	0.00	583.50
1.0	4.19	4.2	5145.9	5146.1	0.07	583.50
2.0	12.57	16.8	5162.0	5162.7	0.33	583.52
3.0	20.95	33.5	5193.8	5195.5	0.85	583.55
4.0	29.34	50.3	5240.9	5244.1	1.62	583.60
5.0	37.72	67.1	5302.7	5308.0	2.63	583.65
6.0	41.91	79.6	5374.0	5382.3	4.14	583.72
7.0	41.91	83.8	5445.3	5457.9	6.29	583.79
8.0	41.91	83.8	5512.5	5529.1	8.31	583.86
9.0	41.91	83.8	5575.6	5596.3	10.36	583.92
10.0	41.91	83.8	5634.1	5659.4	12.64	583.97
11.0	41.91	83.8	5688.4	5717.9	14.74	584.02
12.0	41.91	83.8	5738.9	5772.3	16.70	584.07
13.0	41.91	83.8	5785.5	5822.7	18.61	584.11
14.0	41.91	83.8	5828.2	5869.3	20.55	584.15
15.0	41.91	83.8	5867.4	5912.0	22.32	584.19
16.0	41.91	83.8	5903.3	5951.2	23.95	584.22
17.0	41.91	83.8	5936.2	5987.1	25.44	584.26
18.0	41.91	83.8	5966.4	6020.0	26.81	584.28
19.0	41.91	83.8	5994.0	6050.2	28.11	584.31
20.0	41.91	83.8	6019.1	6077.8	29.37	584.33
21.0	41.91	83.8	6041.9	6102.9	30.52	584.35
22.0	37.72	79.6	6058.7	6121.5	31.37	584.37
23.0	29.34	67.1	6062.7	6125.8	31.56	584.37
24.0	20.95	50.3	6051.0	6113.0	30.98	584.36
25.0	12.57	33.5	6025.2	6084.5	29.68	584.34
26.0	4.19	16.8	5986.5	6041.9	27.74	584.30
27.0	0.00	4.2	5939.5	5990.7	25.59	584.26
28.0	0.00	0.0	5892.5	5939.5	23.46	584.21
29.0	0.00	0.0	5849.5	5892.5	21.51	584.17
30.0	0.00	0.0	5810.1	5849.5	19.73	584.14
31.0	0.00	0.0	5773.9	5810.1	18.09	584.10
32.0	0.00	0.0	5740.4	5773.9	16.76	584.07
33.0	0.00	0.0	5709.3	5740.4	15.55	584.04
34.0	0.00	0.0	5680.4	5709.3	14.43	584.02
35.0	0.00	0.0	5653.6	5680.4	13.39	583.99
36.0	0.00	0.0	5628.8	5653.6	12.43	583.97
37.0	0.00	0.0	5605.7	5628.8	11.53	583.94
38.0	0.00	0.0	5584.3	5605.7	10.70	583.92
39.0	0.00	0.0	5564.4	5584.3	9.93	583.91
40.0	0.00	0.0	5545.8	5564.4	9.32	583.89
41.0	0.00	0.0	5528.2	5545.8	8.79	583.87
42.0	0.00	0.0	5511.6	5528.2	8.29	583.86
43.0	0.00	0.0	5496.0	5511.6	7.82	583.84
44.0	0.00	0.0	5481.3	5496.0	7.37	583.83

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK15.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	5467.4	5481.3	6.95	583.81
0.0	5454.2	5467.4	6.56	583.80
0.0	5441.9	5454.2	6.18	583.79
0.0	5430.2	5441.9	5.83	583.78
0.0	5419.2	5430.2	5.50	583.77
0.0	5408.8	5419.2	5.19	583.76
0.0	5399.0	5408.8	4.89	583.75
0.0	5389.8	5399.0	4.62	583.74
0.0	5381.1	5389.8	4.35	583.73
0.0	5372.9	5381.1	4.11	583.72
0.0	5365.1	5372.9	3.87	583.71
0.0	5357.8	5365.1	3.65	583.71
0.0	5351.0	5357.8	3.44	583.70
0.0	5344.3	5351.0	3.32	583.70
0.0	5337.9	5344.3	3.21	583.69
0.0	5331.7	5337.9	3.11	583.68

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK15.HYD

Starting Pond W.S. Elevation = 583.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	41.91 cfs
Peak Outflow	=	31.56 cfs
Peak Elevation	=	584.37 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	154,256 cu-ft
Peak Storage From Storm	=	28,571 cu-ft
Total Storage in Pond	=	182,828 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Rating Table file: j:\DATA\0011289\BASIN1BL.PND

----INITIAL CONDITIONS----
Elevation = 583.50 ft
Outflow = 0.00 cfs
Storage = 154,256 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
583.50	0.0	154,256
583.70	3.4	160,587
583.90	9.7	167,046
584.10	17.9	173,630
584.30	27.6	180,341
584.50	38.5	187,177
584.70	50.6	194,140
584.90	63.8	201,228
585.10	77.9	208,444
585.30	93.0	215,791
585.50	112.4	223,269
585.70	123.1	230,878
585.90	133.0	238,620
586.00	137.6	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
5141.9	5141.9
5352.9	5356.3
5568.2	5577.9
5787.7	5805.6
6011.4	6039.0
6239.2	6277.7
6471.3	6521.9
6707.6	6771.4
6948.1	7026.0
7193.0	7286.0
7442.3	7554.7
7695.9	7819.0
7954.0	8087.0
8084.7	8222.3

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK25.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	5141.9	5141.9	0.00	583.50
1.0	5.17	5.2	5146.9	5147.0	0.08	583.50
2.0	15.52	20.7	5166.8	5167.6	0.41	583.52
3.0	25.86	41.4	5206.0	5208.1	1.05	583.56
4.0	36.21	62.1	5264.1	5268.1	2.00	583.62
5.0	46.56	82.8	5340.4	5346.9	3.25	583.69
6.0	51.73	98.3	5427.2	5438.7	5.74	583.77
7.0	51.73	103.5	5513.9	5530.6	8.36	583.86
8.0	51.73	103.5	5595.1	5617.4	11.12	583.93
9.0	51.73	103.5	5670.5	5698.6	14.05	584.01
10.0	51.73	103.5	5740.4	5774.0	16.76	584.07
11.0	51.73	103.5	5804.9	5843.9	19.49	584.13
12.0	51.73	103.5	5864.0	5908.4	22.17	584.19
13.0	51.73	103.5	5918.2	5967.5	24.63	584.24
14.0	51.73	103.5	5967.9	6021.7	26.88	584.29
15.0	51.73	103.5	6013.2	6071.4	29.08	584.33
16.0	51.73	103.5	6054.4	6116.7	31.15	584.37
17.0	51.73	103.5	6091.8	6157.8	33.03	584.40
18.0	51.73	103.5	6125.8	6195.3	34.73	584.43
19.0	51.73	103.5	6156.7	6229.2	36.29	584.46
20.0	51.73	103.5	6184.7	6260.1	37.70	584.49
21.0	51.73	103.5	6210.2	6288.2	39.02	584.51
22.0	46.56	98.3	6228.4	6308.5	40.02	584.53
23.0	36.21	82.8	6230.9	6311.2	40.16	584.53
24.0	25.86	62.1	6214.4	6292.9	39.25	584.51
25.0	15.52	41.4	6180.8	6255.8	37.50	584.48
26.0	5.17	20.7	6131.5	6201.5	35.02	584.44
27.0	0.00	5.2	6072.5	6136.6	32.06	584.38
28.0	0.00	0.0	6014.2	6072.5	29.13	584.33
29.0	0.00	0.0	5961.1	6014.2	26.57	584.28
30.0	0.00	0.0	5912.4	5961.1	24.36	584.23
31.0	0.00	0.0	5867.7	5912.4	22.34	584.19
32.0	0.00	0.0	5826.7	5867.7	20.48	584.15
33.0	0.00	0.0	5789.2	5826.7	18.78	584.12
34.0	0.00	0.0	5754.6	5789.2	17.31	584.09
35.0	0.00	0.0	5722.4	5754.6	16.06	584.06
36.0	0.00	0.0	5692.6	5722.4	14.91	584.03
37.0	0.00	0.0	5665.0	5692.6	13.83	584.00
38.0	0.00	0.0	5639.3	5665.0	12.84	583.98
39.0	0.00	0.0	5615.5	5639.3	11.91	583.95
40.0	0.00	0.0	5593.3	5615.5	11.05	583.93
41.0	0.00	0.0	5572.8	5593.3	10.26	583.91
42.0	0.00	0.0	5553.7	5572.8	9.56	583.90
43.0	0.00	0.0	5535.7	5553.7	9.01	583.88
44.0	0.00	0.0	5518.7	5535.7	8.50	583.86

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK25.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	5502.7	5518.7	8.02	583.85
0.0	5487.5	5502.7	7.56	583.83
0.0	5473.3	5487.5	7.13	583.82
0.0	5459.8	5473.3	6.73	583.81
0.0	5447.1	5459.8	6.34	583.79
0.0	5435.2	5447.1	5.98	583.78
0.0	5423.9	5435.2	5.64	583.77
0.0	5413.2	5423.9	5.32	583.76
0.0	5403.2	5413.2	5.02	583.75
0.0	5393.7	5403.2	4.73	583.74
0.0	5384.8	5393.7	4.46	583.73
0.0	5376.4	5384.8	4.21	583.73
0.0	5368.4	5376.4	3.97	583.72
0.0	5360.9	5368.4	3.75	583.71
0.0	5353.9	5360.9	3.53	583.70
0.0	5347.2	5353.9	3.36	583.70

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN1 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA1BLK25.HYD

Starting Pond W.S. Elevation = 583.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	51.73 cfs
Peak Outflow	=	40.16 cfs
Peak Elevation	=	584.53 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	154,256 cu-ft
Peak Storage From Storm	=	33,875 cu-ft
Total Storage in Pond	=	188,131 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       6/19/01          *
*       BASIN #1         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Rating Table file: j:\DATA\0011289\BASIN1BL.PND

----INITIAL CONDITIONS----
Elevation = 583.50 ft
Outflow = 0.00 cfs
Storage = 154,256 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
583.50	0.0	154,256
583.70	3.4	160,587
583.90	9.7	167,046
584.10	17.9	173,630
584.30	27.6	180,341
584.50	38.5	187,177
584.70	50.6	194,140
584.90	63.8	201,228
585.10	77.9	208,444
585.30	93.0	215,791
585.50	112.4	223,269
585.70	123.1	230,878
585.90	133.0	238,620
586.00	137.6	242,540

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
5141.9	5141.9
5352.9	5356.3
5568.2	5577.9
5787.7	5805.6
6011.4	6039.0
6239.2	6277.7
6471.3	6521.9
6707.6	6771.4
6948.1	7026.0
7193.0	7286.0
7442.3	7554.7
7695.9	7819.0
7954.0	8087.0
8084.7	8222.3

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Outflow Hydrograph: j:\DATA\0011289\B1BLK100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	6.61
2.0	19.84
3.0	33.07
4.0	46.30
5.0	59.53
6.0	66.14
7.0	66.14
8.0	66.14
9.0	66.14
10.0	66.14
11.0	66.14
12.0	66.14
13.0	66.14
14.0	66.14
15.0	66.14
16.0	66.14
17.0	66.14
18.0	66.14
19.0	66.14
20.0	66.14
21.0	66.14
22.0	59.53
23.0	46.30
24.0	33.07
25.0	19.84
26.0	6.61
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	5141.9	5141.9	0.00	583.50
6.6	5148.3	5148.5	0.10	583.51
26.5	5173.7	5174.7	0.52	583.53
52.9	5223.9	5226.6	1.34	583.58
79.4	5298.2	5303.3	2.56	583.65
105.8	5394.5	5404.0	4.76	583.74
125.7	5504.0	5520.1	8.06	583.85
132.3	5612.7	5636.3	11.80	583.95
132.3	5713.5	5745.0	15.72	584.05
132.3	5806.7	5845.8	19.57	584.13
132.3	5892.1	5939.0	23.44	584.21
132.3	5970.4	6024.3	26.99	584.29
132.3	6041.6	6102.6	30.51	584.35
132.3	6106.4	6173.9	33.76	584.41
132.3	6165.2	6238.7	36.72	584.47
132.3	6218.6	6297.5	39.48	584.52
132.3	6266.6	6350.8	42.12	584.56
132.3	6309.9	6398.9	44.50	584.60
132.3	6348.8	6442.1	46.65	584.63
132.3	6384.0	6481.1	48.58	584.67
132.3	6415.6	6516.2	50.32	584.70
132.3	6443.9	6547.9	51.97	584.72
125.7	6463.4	6569.6	53.12	584.74
105.8	6463.0	6569.2	53.10	584.74
79.4	6439.0	6542.4	51.68	584.72
52.9	6393.7	6491.9	49.11	584.68
26.5	6329.0	6420.1	45.56	584.62
6.6	6252.9	6335.6	41.37	584.55
0.0	6178.2	6252.9	37.37	584.48
0.0	6110.2	6178.2	33.95	584.42
0.0	6048.5	6110.2	30.85	584.36
0.0	5992.5	6048.5	28.04	584.31
0.0	5941.1	5992.5	25.67	584.26
0.0	5894.1	5941.1	23.53	584.22
0.0	5850.9	5894.1	21.58	584.18
0.0	5811.3	5850.9	19.78	584.14
0.0	5775.1	5811.3	18.14	584.10
0.0	5741.5	5775.1	16.80	584.07
0.0	5710.3	5741.5	15.59	584.04
0.0	5681.3	5710.3	14.47	584.02
0.0	5654.5	5681.3	13.43	583.99
0.0	5629.6	5654.5	12.46	583.97
0.0	5606.4	5629.6	11.56	583.95
0.0	5585.0	5606.4	10.73	583.93
0.0	5565.1	5585.0	9.96	583.91

Pond File: j:\DATA\0011289\BASIN1BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN1.HYD
Outflow Hydrograph: j:\DATA\0011289\B1BLK100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	5546.4	5565.1	9.34	583.89
0.0	5528.8	5546.4	8.81	583.87
0.0	5512.2	5528.8	8.30	583.86
0.0	5496.5	5512.2	7.83	583.84
0.0	5481.7	5496.5	7.39	583.83
0.0	5467.8	5481.7	6.97	583.81
0.0	5454.7	5467.8	6.57	583.80
0.0	5442.3	5454.7	6.20	583.79
0.0	5430.6	5442.3	5.84	583.78
0.0	5419.6	5430.6	5.51	583.77
0.0	5409.2	5419.6	5.20	583.76
0.0	5399.4	5409.2	4.90	583.75
0.0	5390.1	5399.4	4.62	583.74
0.0	5381.4	5390.1	4.36	583.73
0.0	5373.2	5381.4	4.11	583.72
0.0	5365.4	5373.2	3.88	583.72

POND-2 Version: 5.17
S/N: 1903000008

THORNBURY CROSSING
00-11-289, 7/12/01
BASIN 2
DETENTION ANALYSIS

CALCULATED 09-06-2001 15:17:21
DISK FILE: j:\DATA\0011289\BASIN2 .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
603.00	0.00	0	0	0	0
604.00	3,954.00	3,954	3,954	1,318	1,318
606.00	5,830.00	5,830	14,585	9,723	11,041
608.00	7,932.00	7,932	20,562	13,708	24,750
610.00	10,260.00	10,260	27,213	18,142	42,892

$$IA = (sq.rt(Area1) + ((Ei-E1)/(E2-E1))*(sq.rt(Area2)-sq.rt(Area1)))^2$$

where: E1, E2 = Closest two elevations with planimeter data
Ei = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

Basin #2 Detention

Outlet Structure File: BASIN2 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01

****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
603.00	0.0	1
603.40	0.2	1
603.80	0.4	1
604.20	0.5	1
604.60	0.6	1
605.00	0.7	1
605.40	0.8	1
605.80	0.9	1
606.20	1.0	1
606.60	1.0	1
607.00	1.1	1
607.40	1.1	1
607.80	1.2	1
608.20	1.2	1 +2
608.60	11.0	1 +2
609.00	28.9	1 +2
609.40	48.4	1 +3
609.80	60.4	1 +3
610.00	65.5	1 +3

Outlet Structure File: BASIN2 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01

****

Outlet Structure File: j:\DATA\0011289\BASIN2 .STR
Planimeter Input File: j:\DATA\0011289\BASIN2 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN2 .PND

Min. Elev.(ft) = 603 Max. Elev.(ft) = 610 Incr.(ft) = .4

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
CULVERT-CR	1		->	1
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN2 .PND

Outlet Structure File: BASIN2 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01

****

>>>>>> Structure No. 1 <<<<<<
(Input Data)

CULVERT-CR
Circular Culvert (With Inlet Control)

E1 elev.(ft)?	603
E2 elev.(ft)?	610.001
Diam. (ft)?	.3333
Inv. el.(ft)?	603
Slope (ft/ft)?	.01
T1 ratio?	
T2 ratio?	
K Coeff.?	.0018
M Coeff.?	2.5
c Coeff.?	.0243
Y Coeff.?	.83
Form 1 or 2?	1
Slope factor?	-.5

Outlet Structure File: BASIN2 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01

****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	608.2
E2 elev.(ft)?	609.2
Weir coefficient?	3.3
Weir elev.(ft)?	608.2
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN2 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	609.2
E2 elev.(ft)?	610.001
Orifice coeff.?	.6
Invert elev.(ft)?	608.2
Datum elev.(ft) ?	608.7
Orifice area (sq ft)?	11.67

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**************************
*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2 .PND

----INITIAL CONDITIONS----
Elevation = 603.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
603.00	0.0	0
603.40	0.2	85
603.80	0.4	675
604.20	0.5	2,126
604.60	0.6	3,846
605.00	0.7	5,711
605.40	0.8	7,725
605.80	0.9	9,896
606.20	1.0	12,227
606.60	1.0	14,717
607.00	1.1	17,370
607.40	1.1	20,191
607.80	1.2	23,186
608.20	1.2	26,358
608.60	11.0	29,707
609.00	28.9	33,239
609.40	48.4	36,956
609.80	60.4	40,865
610.00	65.5	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.8	3.0
22.5	22.9
70.9	71.4
128.2	128.8
190.4	191.1
257.5	258.3
329.9	330.8
407.6	408.6
490.6	491.6
579.0	580.1
673.0	674.1
772.9	774.1
878.6	879.8
990.2	1001.2
1108.0	1136.9
1231.9	1280.3
1362.1	1422.5
1429.7	1495.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN202 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	4.66
2.0	9.31
3.0	9.31
4.0	9.31
5.0	9.31
6.0	9.31
7.0	9.31
8.0	9.31
9.0	9.31
10.0	9.31
11.0	9.31
12.0	9.31
13.0	9.31
14.0	9.31
15.0	9.31
16.0	9.31
17.0	9.31
18.0	9.31
19.0	9.31
20.0	9.31
21.0	4.66
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	603.00
4.7	4.2	4.7	0.22	603.43
14.0	17.5	18.2	0.35	603.71
18.6	35.3	36.1	0.43	603.91
18.6	52.9	53.9	0.46	604.06
18.6	70.6	71.6	0.50	604.20
18.6	88.1	89.2	0.53	604.32
18.6	105.6	106.7	0.56	604.45
18.6	123.1	124.2	0.59	604.57
18.6	140.4	141.7	0.62	604.68
18.6	157.8	159.1	0.65	604.79
18.6	175.0	176.4	0.68	604.91
18.6	192.2	193.6	0.70	605.02
18.6	209.4	210.9	0.73	605.12
18.6	226.5	228.0	0.75	605.22
18.6	243.6	245.1	0.78	605.32
18.6	260.6	262.2	0.81	605.42
18.6	277.5	279.2	0.83	605.52
18.6	294.5	296.2	0.85	605.61
18.6	311.3	313.1	0.88	605.70
18.6	328.1	329.9	0.90	605.80
14.0	340.3	342.1	0.91	605.86
4.7	343.1	344.9	0.92	605.87
0.0	341.3	343.1	0.92	605.86
0.0	339.5	341.3	0.91	605.85
0.0	337.6	339.5	0.91	605.84
0.0	335.8	337.6	0.91	605.84
0.0	334.0	335.8	0.91	605.83
0.0	332.2	334.0	0.90	605.82
0.0	330.4	332.2	0.90	605.81
0.0	328.6	330.4	0.90	605.80
0.0	326.8	328.6	0.90	605.79
0.0	325.0	326.8	0.89	605.78
0.0	323.2	325.0	0.89	605.77
0.0	321.4	323.2	0.89	605.76
0.0	319.7	321.4	0.89	605.75
0.0	317.9	319.7	0.88	605.74
0.0	316.1	317.9	0.88	605.73
0.0	314.4	316.1	0.88	605.72
0.0	312.6	314.4	0.88	605.71
0.0	310.9	312.6	0.87	605.70
0.0	309.1	310.9	0.87	605.69
0.0	307.4	309.1	0.87	605.68
0.0	305.7	307.4	0.87	605.67
0.0	303.9	305.7	0.87	605.66

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN202 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	302.2	303.9	0.86	605.65
0.0	300.5	302.2	0.86	605.64
0.0	298.8	300.5	0.86	605.63
0.0	297.0	298.8	0.86	605.62
0.0	295.3	297.0	0.85	605.61
0.0	293.6	295.3	0.85	605.60
0.0	291.9	293.6	0.85	605.60
0.0	290.2	291.9	0.85	605.59
0.0	288.6	290.2	0.84	605.58
0.0	286.9	288.6	0.84	605.57
0.0	285.2	286.9	0.84	605.56
0.0	283.5	285.2	0.84	605.55
0.0	281.9	283.5	0.83	605.54
0.0	280.2	281.9	0.83	605.53
0.0	278.5	280.2	0.83	605.52
0.0	276.9	278.5	0.83	605.51

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN202 .HYD

Starting Pond W.S. Elevation = 603.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	9.31 cfs
Peak Outflow	=	0.92 cfs
Peak Elevation	=	605.87 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	10,321 cu-ft
Total Storage in Pond	=	10,321 cu-ft

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*                       *
*  DETENTION ANALYSIS   *
*       7/12/01         *
*       BASIN #2        *
*                       *
*                       *
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Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2 .PND

----INITIAL CONDITIONS----
Elevation = 603.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
603.00	0.0	0
603.40	0.2	85
603.80	0.4	675
604.20	0.5	2,126
604.60	0.6	3,846
605.00	0.7	5,711
605.40	0.8	7,725
605.80	0.9	9,896
606.20	1.0	12,227
606.60	1.0	14,717
607.00	1.1	17,370
607.40	1.1	20,191
607.80	1.2	23,186
608.20	1.2	26,358
608.60	11.0	29,707
609.00	28.9	33,239
609.40	48.4	36,956
609.80	60.4	40,865
610.00	65.5	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.8	3.0
22.5	22.9
70.9	71.4
128.2	128.8
190.4	191.1
257.5	258.3
329.9	330.8
407.6	408.6
490.6	491.6
579.0	580.1
673.0	674.1
772.9	774.1
878.6	879.8
990.2	1001.2
1108.0	1136.9
1231.9	1280.3
1362.1	1422.5
1429.7	1495.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN215 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	7.49
2.0	14.99
3.0	14.99
4.0	14.99
5.0	14.99
6.0	14.99
7.0	14.99
8.0	14.99
9.0	14.99
10.0	14.99
11.0	14.99
12.0	14.99
13.0	14.99
14.0	14.99
15.0	14.99
16.0	14.99
17.0	14.99
18.0	14.99
19.0	14.99
20.0	14.99
21.0	7.49
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	603.00
7.5	7.0	7.5	0.25	603.49
22.5	28.7	29.5	0.41	603.85
30.0	57.7	58.6	0.47	604.09
30.0	86.6	87.7	0.53	604.31
30.0	115.4	116.6	0.58	604.51
30.0	144.2	145.4	0.63	604.71
30.0	172.8	174.1	0.67	604.89
30.0	201.3	202.8	0.72	605.07
30.0	229.8	231.3	0.76	605.24
30.0	258.2	259.8	0.80	605.41
30.0	286.5	288.2	0.84	605.56
30.0	314.7	316.5	0.88	605.72
30.0	342.8	344.7	0.92	605.87
30.0	370.9	372.8	0.95	606.02
30.0	398.9	400.9	0.99	606.16
30.0	426.9	428.9	1.00	606.30
30.0	454.9	456.9	1.00	606.43
30.0	482.8	484.8	1.00	606.57
30.0	510.8	512.8	1.02	606.70
30.0	538.6	540.8	1.06	606.82
22.5	559.0	561.1	1.08	606.91
7.5	564.3	566.5	1.08	606.94
0.0	562.1	564.3	1.08	606.93
0.0	560.0	562.1	1.08	606.92
0.0	557.8	560.0	1.08	606.91
0.0	555.7	557.8	1.07	606.90
0.0	553.5	555.7	1.07	606.89
0.0	551.4	553.5	1.07	606.88
0.0	549.2	551.4	1.07	606.87
0.0	547.1	549.2	1.07	606.86
0.0	545.0	547.1	1.06	606.85
0.0	542.9	545.0	1.06	606.84
0.0	540.8	542.9	1.06	606.83
0.0	538.6	540.8	1.06	606.82
0.0	536.5	538.6	1.05	606.81
0.0	534.4	536.5	1.05	606.80
0.0	532.3	534.4	1.05	606.79
0.0	530.2	532.3	1.05	606.78
0.0	528.2	530.2	1.04	606.77
0.0	526.1	528.2	1.04	606.77
0.0	524.0	526.1	1.04	606.76
0.0	521.9	524.0	1.04	606.75
0.0	519.9	521.9	1.03	606.74
0.0	517.8	519.9	1.03	606.73

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN215 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	515.7	517.8	1.03	606.72
0.0	513.7	515.7	1.03	606.71
0.0	511.6	513.7	1.02	606.70
0.0	509.6	511.6	1.02	606.69
0.0	507.5	509.6	1.02	606.68
0.0	505.5	507.5	1.02	606.67
0.0	503.5	505.5	1.02	606.66
0.0	501.4	503.5	1.01	606.65
0.0	499.4	501.4	1.01	606.64
0.0	497.4	499.4	1.01	606.64
0.0	495.4	497.4	1.01	606.63
0.0	493.4	495.4	1.00	606.62
0.0	491.4	493.4	1.00	606.61
0.0	489.4	491.4	1.00	606.60
0.0	487.4	489.4	1.00	606.59
0.0	485.4	487.4	1.00	606.58

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN215 .HYD

Starting Pond W.S. Elevation = 603.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	14.99 cfs
Peak Outflow	=	1.08 cfs
Peak Elevation	=	606.94 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	16,961 cu-ft
Total Storage in Pond	=	16,961 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2 .PND

----INITIAL CONDITIONS----
Elevation = 603.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
603.00	0.0	0
603.40	0.2	85
603.80	0.4	675
604.20	0.5	2,126
604.60	0.6	3,846
605.00	0.7	5,711
605.40	0.8	7,725
605.80	0.9	9,896
606.20	1.0	12,227
606.60	1.0	14,717
607.00	1.1	17,370
607.40	1.1	20,191
607.80	1.2	23,186
608.20	1.2	26,358
608.60	11.0	29,707
609.00	28.9	33,239
609.40	48.4	36,956
609.80	60.4	40,865
610.00	65.5	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
2.8	3.0
22.5	22.9
70.9	71.4
128.2	128.8
190.4	191.1
257.5	258.3
329.9	330.8
407.6	408.6
490.6	491.6
579.0	580.1
673.0	674.1
772.9	774.1
878.6	879.8
990.2	1001.2
1108.0	1136.9
1231.9	1280.3
1362.1	1422.5
1429.7	1495.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN225 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	9.24
2.0	18.49
3.0	18.49
4.0	18.49
5.0	18.49
6.0	18.49
7.0	18.49
8.0	18.49
9.0	18.49
10.0	18.49
11.0	18.49
12.0	18.49
13.0	18.49
14.0	18.49
15.0	18.49
16.0	18.49
17.0	18.49
18.0	18.49
19.0	18.49
20.0	18.49
21.0	9.24
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	603.00
9.2	8.7	9.2	0.26	603.53
27.7	35.6	36.4	0.43	603.91
37.0	71.6	72.6	0.50	604.21
37.0	107.4	108.5	0.56	604.46
37.0	143.1	144.4	0.63	604.70
37.0	178.8	180.1	0.68	604.93
37.0	214.3	215.7	0.74	605.15
37.0	249.7	251.2	0.79	605.36
37.0	285.0	286.6	0.84	605.56
37.0	320.2	321.9	0.89	605.75
37.0	355.3	357.2	0.93	605.94
37.0	390.3	392.3	0.98	606.12
37.0	425.3	427.3	1.00	606.29
37.0	460.3	462.3	1.00	606.46
37.0	495.2	497.2	1.01	606.63
37.0	530.1	532.2	1.05	606.78
37.0	564.9	567.1	1.09	606.94
37.0	599.7	601.9	1.10	607.09
37.0	634.5	636.7	1.10	607.24
37.0	669.3	671.5	1.10	607.39
27.7	694.8	697.0	1.12	607.49
9.2	701.7	704.0	1.13	607.52
0.0	699.5	701.7	1.13	607.51
0.0	697.2	699.5	1.13	607.50
0.0	695.0	697.2	1.12	607.49
0.0	692.7	695.0	1.12	607.48
0.0	690.5	692.7	1.12	607.47
0.0	688.3	690.5	1.12	607.47
0.0	686.0	688.3	1.11	607.46
0.0	683.8	686.0	1.11	607.45
0.0	681.6	683.8	1.11	607.44
0.0	679.4	681.6	1.11	607.43
0.0	677.2	679.4	1.11	607.42
0.0	675.0	677.2	1.10	607.41
0.0	672.8	675.0	1.10	607.40
0.0	670.6	672.8	1.10	607.39
0.0	668.4	670.6	1.10	607.38
0.0	666.2	668.4	1.10	607.38
0.0	664.0	666.2	1.10	607.37
0.0	661.8	664.0	1.10	607.36
0.0	659.6	661.8	1.10	607.35
0.0	657.4	659.6	1.10	607.34
0.0	655.2	657.4	1.10	607.33
0.0	653.0	655.2	1.10	607.32

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN225 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	650.8	653.0	1.10	607.31
0.0	648.6	650.8	1.10	607.30
0.0	646.4	648.6	1.10	607.29
0.0	644.2	646.4	1.10	607.28
0.0	642.0	644.2	1.10	607.27
0.0	639.8	642.0	1.10	607.26
0.0	637.6	639.8	1.10	607.25
0.0	635.4	637.6	1.10	607.24
0.0	633.2	635.4	1.10	607.24
0.0	631.0	633.2	1.10	607.23
0.0	628.8	631.0	1.10	607.22
0.0	626.6	628.8	1.10	607.21
0.0	624.4	626.6	1.10	607.20
0.0	622.2	624.4	1.10	607.19
0.0	620.0	622.2	1.10	607.18
0.0	617.8	620.0	1.10	607.17

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN225 .HYD

Starting Pond W.S. Elevation = 603.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	18.49 cfs
Peak Outflow	=	1.13 cfs
Peak Elevation	=	607.52 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	21,086 cu-ft
Total Storage in Pond	=	21,086 cu-ft

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*                      *
*  DETENTION ANALYSIS  *
*       7/12/01        *
*       BASIN #2       *
*                      *
*                      *
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Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Rating Table file: j:\DATA\0011289\BASIN2 .PND

----INITIAL CONDITIONS----
Elevation = 603.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
603.00	0.0	0
603.40	0.2	85
603.80	0.4	675
604.20	0.5	2,126
604.60	0.6	3,846
605.00	0.7	5,711
605.40	0.8	7,725
605.80	0.9	9,896
606.20	1.0	12,227
606.60	1.0	14,717
607.00	1.1	17,370
607.40	1.1	20,191
607.80	1.2	23,186
608.20	1.2	26,358
608.60	11.0	29,707
609.00	28.9	33,239
609.40	48.4	36,956
609.80	60.4	40,865
610.00	65.5	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.8	3.0
22.5	22.9
70.9	71.4
128.2	128.8
190.4	191.1
257.5	258.3
329.9	330.8
407.6	408.6
490.6	491.6
579.0	580.1
673.0	674.1
772.9	774.1
878.6	879.8
990.2	1001.2
1108.0	1136.9
1231.9	1280.3
1362.1	1422.5
1429.7	1495.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN2100.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	603.00
1.0	11.83	11.8	11.3	11.8	0.29	603.58
2.0	23.66	35.5	45.8	46.7	0.45	604.00
3.0	23.66	47.3	92.1	93.2	0.54	604.35
4.0	23.66	47.3	138.2	139.4	0.62	604.67
5.0	23.66	47.3	184.1	185.5	0.69	604.96
6.0	23.66	47.3	229.9	231.4	0.76	605.24
7.0	23.66	47.3	275.6	277.2	0.83	605.50
8.0	23.66	47.3	321.1	322.9	0.89	605.76
9.0	23.66	47.3	366.5	368.4	0.95	605.99
10.0	23.66	47.3	411.9	413.9	1.00	606.23
11.0	23.66	47.3	457.2	459.2	1.00	606.44
12.0	23.66	47.3	502.5	504.5	1.01	606.66
13.0	23.66	47.3	547.7	549.8	1.07	606.86
14.0	23.66	47.3	592.8	595.0	1.10	607.06
15.0	23.66	47.3	637.9	640.1	1.10	607.26
16.0	23.66	47.3	683.0	685.2	1.11	607.44
17.0	23.66	47.3	728.0	730.3	1.16	607.62
18.0	23.66	47.3	772.9	775.3	1.20	607.80
19.0	23.66	47.3	817.8	820.2	1.20	607.97
20.0	23.66	47.3	862.8	865.2	1.20	608.14
21.0	11.83	35.5	892.9	898.3	2.69	608.26
22.0	0.00	11.8	898.3	904.7	3.21	608.28
23.0	0.00	0.0	892.9	898.3	2.69	608.26
24.0	0.00	0.0	888.4	892.9	2.26	608.24
25.0	0.00	0.0	884.6	888.4	1.89	608.23
26.0	0.00	0.0	881.4	884.6	1.59	608.22
27.0	0.00	0.0	878.8	881.4	1.33	608.21
28.0	0.00	0.0	876.4	878.8	1.20	608.20
29.0	0.00	0.0	874.0	876.4	1.20	608.19
30.0	0.00	0.0	871.6	874.0	1.20	608.18
31.0	0.00	0.0	869.2	871.6	1.20	608.17
32.0	0.00	0.0	866.8	869.2	1.20	608.16
33.0	0.00	0.0	864.4	866.8	1.20	608.15
34.0	0.00	0.0	862.0	864.4	1.20	608.14
35.0	0.00	0.0	859.6	862.0	1.20	608.13
36.0	0.00	0.0	857.2	859.6	1.20	608.12
37.0	0.00	0.0	854.8	857.2	1.20	608.11
38.0	0.00	0.0	852.4	854.8	1.20	608.11
39.0	0.00	0.0	850.0	852.4	1.20	608.10
40.0	0.00	0.0	847.6	850.0	1.20	608.09
41.0	0.00	0.0	845.2	847.6	1.20	608.08
42.0	0.00	0.0	842.8	845.2	1.20	608.07
43.0	0.00	0.0	840.4	842.8	1.20	608.06
44.0	0.00	0.0	838.0	840.4	1.20	608.05

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN2100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	835.6	838.0	1.20	608.04
0.0	833.2	835.6	1.20	608.03
0.0	830.8	833.2	1.20	608.02
0.0	828.4	830.8	1.20	608.01
0.0	826.0	828.4	1.20	608.01
0.0	823.6	826.0	1.20	608.00
0.0	821.2	823.6	1.20	607.99
0.0	818.8	821.2	1.20	607.98
0.0	816.4	818.8	1.20	607.97
0.0	814.0	816.4	1.20	607.96
0.0	811.6	814.0	1.20	607.95
0.0	809.2	811.6	1.20	607.94
0.0	806.8	809.2	1.20	607.93
0.0	804.4	806.8	1.20	607.92
0.0	802.0	804.4	1.20	607.91
0.0	799.6	802.0	1.20	607.91

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN2100.HYD

Starting Pond W.S. Elevation = 603.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	23.66 cfs
Peak Outflow	=	3.21 cfs
Peak Elevation	=	608.28 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	27,045 cu-ft
Total Storage in Pond	=	27,045 cu-ft

Outlet Structure File: BASIN2BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01
BLOCKED LOW FLOW
****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
608.20	0.0	2
608.60	9.7	2
609.00	27.6	2
609.40	47.0	3
609.80	58.9	3
610.00	64.1	3

Outlet Structure File: BASIN2BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01
BLOCKED LOW FLOW
****

Outlet Structure File: j:\DATA\0011289\BASIN2BL.STR
Planimeter Input File: j:\DATA\0011289\BASIN2 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN2BL.PND

Min. Elev.(ft) = 608.2 Max. Elev.(ft) = 610 Incr.(ft) = .4

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN2BL.PND

Outlet Structure File: BASIN2BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01
BLOCKED LOW FLOW

****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	608.2
E2 elev.(ft)?	609.2
Weir coefficient?	3.3
Weir elev.(ft)?	608.2
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN2BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #2
7/12/01
BLOCKED LOW FLOW

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	609.2
E2 elev.(ft)?	610.001
Orifice coeff.?	.6
Invert elev.(ft)?	608.2
Datum elev.(ft) ?	608.7
Orifice area (sq ft)?	11.67

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2BL.PND

----INITIAL CONDITIONS----
Elevation = 608.20 ft
Outflow = 0.00 cfs
Storage = 26,358 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
608.20	0.0	26,358
608.60	9.7	29,708
609.00	27.6	33,239
609.40	47.0	36,956
609.80	58.9	40,865
610.00	64.1	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
878.6	878.6
990.3	1000.0
1108.0	1135.6
1231.9	1278.9
1362.1	1421.0
1429.7	1493.8

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK02.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	4.66
2.0	9.31
3.0	9.31
4.0	9.31
5.0	9.31
6.0	9.31
7.0	9.31
8.0	9.31
9.0	9.31
10.0	9.31
11.0	9.31
12.0	9.31
13.0	9.31
14.0	9.31
15.0	9.31
16.0	9.31
17.0	9.31
18.0	9.31
19.0	9.31
20.0	9.31
21.0	4.66
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	878.6	878.6	0.00	608.20
4.7	882.5	883.3	0.37	608.22
14.0	893.6	896.5	1.43	608.26
18.6	906.9	912.3	2.69	608.31
18.6	918.0	925.5	3.75	608.35
18.6	927.3	936.6	4.64	608.39
18.6	935.2	946.0	5.38	608.42
18.6	941.8	953.8	6.01	608.45
18.6	947.3	960.4	6.54	608.47
18.6	952.0	966.0	6.98	608.49
18.6	955.9	970.6	7.35	608.50
18.6	959.2	974.5	7.67	608.52
18.6	962.0	977.8	7.93	608.53
18.6	964.3	980.6	8.15	608.54
18.6	966.2	982.9	8.34	608.54
18.6	967.9	984.8	8.49	608.55
18.6	969.2	986.5	8.62	608.56
18.6	970.4	987.9	8.73	608.56
18.6	971.4	989.0	8.82	608.56
18.6	972.2	990.0	8.90	608.57
18.6	972.9	990.8	8.97	608.57
14.0	969.5	986.8	8.65	608.56
4.7	958.9	974.2	7.64	608.52
0.0	946.1	958.9	6.42	608.46
0.0	935.3	946.1	5.39	608.42
0.0	926.2	935.3	4.53	608.39
0.0	918.6	926.2	3.81	608.36
0.0	912.2	918.6	3.20	608.33
0.0	906.8	912.2	2.69	608.31
0.0	902.3	906.8	2.26	608.29
0.0	898.5	902.3	1.90	608.28
0.0	895.4	898.5	1.59	608.27
0.0	892.7	895.4	1.34	608.26
0.0	890.4	892.7	1.12	608.25
0.0	888.5	890.4	0.94	608.24
0.0	886.9	888.5	0.79	608.23
0.0	885.6	886.9	0.67	608.23
0.0	884.5	885.6	0.56	608.22
0.0	883.6	884.5	0.47	608.22
0.0	882.8	883.6	0.40	608.22
0.0	882.1	882.8	0.33	608.21
0.0	881.5	882.1	0.28	608.21
0.0	881.1	881.5	0.23	608.21
0.0	880.7	881.1	0.20	608.21
0.0	880.3	880.7	0.17	608.21

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK02.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	880.1	880.3	0.14	608.21
0.0	879.8	880.1	0.12	608.20
0.0	879.6	879.8	0.10	608.20
0.0	879.5	879.6	0.08	608.20
0.0	879.3	879.5	0.07	608.20
0.0	879.2	879.3	0.06	608.20
0.0	879.1	879.2	0.05	608.20
0.0	879.0	879.1	0.04	608.20
0.0	879.0	879.0	0.03	608.20
0.0	878.9	879.0	0.03	608.20
0.0	878.9	878.9	0.02	608.20
0.0	878.8	878.9	0.02	608.20
0.0	878.8	878.8	0.02	608.20
0.0	878.8	878.8	0.01	608.20
0.0	878.7	878.8	0.01	608.20
0.0	878.7	878.7	0.01	608.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK02.HYD

Starting Pond W.S. Elevation = 608.20 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	9.31 cfs
Peak Outflow	=	8.97 cfs
Peak Elevation	=	608.57 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	26,358 cu-ft
Peak Storage From Storm	=	3,096 cu-ft
Total Storage in Pond	=	29,455 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2BL.PND

----INITIAL CONDITIONS----
Elevation = 608.20 ft
Outflow = 0.00 cfs
Storage = 26,358 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
608.20	0.0	26,358
608.60	9.7	29,708
609.00	27.6	33,239
609.40	47.0	36,956
609.80	58.9	40,865
610.00	64.1	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
878.6	878.6
990.3	1000.0
1108.0	1135.6
1231.9	1278.9
1362.1	1421.0
1429.7	1493.8

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK15.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	7.49
2.0	14.99
3.0	14.99
4.0	14.99
5.0	14.99
6.0	14.99
7.0	14.99
8.0	14.99
9.0	14.99
10.0	14.99
11.0	14.99
12.0	14.99
13.0	14.99
14.0	14.99
15.0	14.99
16.0	14.99
17.0	14.99
18.0	14.99
19.0	14.99
20.0	14.99
21.0	7.49
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	878.6	878.6	0.00	608.20
7.5	884.9	886.1	0.60	608.22
22.5	902.8	907.4	2.30	608.29
30.0	924.1	932.8	4.33	608.38
30.0	942.0	954.1	6.03	608.45
30.0	957.1	972.0	7.46	608.51
30.0	969.7	987.0	8.67	608.56
30.0	980.3	999.7	9.68	608.60
30.0	988.2	1010.3	11.07	608.63
30.0	994.0	1018.2	12.10	608.65
30.0	998.2	1023.9	12.86	608.67
30.0	1001.3	1028.2	13.43	608.68
30.0	1003.6	1031.3	13.84	608.69
30.0	1005.3	1033.6	14.14	608.70
30.0	1006.6	1035.3	14.37	608.70
30.0	1007.5	1036.6	14.53	608.71
30.0	1008.2	1037.5	14.65	608.71
30.0	1008.7	1038.2	14.74	608.71
30.0	1009.0	1038.6	14.81	608.71
30.0	1009.3	1039.0	14.86	608.72
30.0	1009.5	1039.3	14.89	608.72
22.5	1004.1	1032.0	13.93	608.69
7.5	989.1	1011.6	11.24	608.63
0.0	971.5	989.1	8.84	608.56
0.0	956.6	971.5	7.42	608.51
0.0	944.2	956.6	6.24	608.46
0.0	933.7	944.2	5.24	608.42
0.0	924.9	933.7	4.40	608.38
0.0	917.5	924.9	3.70	608.35
0.0	911.3	917.5	3.11	608.33
0.0	906.0	911.3	2.61	608.31
0.0	901.7	906.0	2.19	608.29
0.0	898.0	901.7	1.84	608.28
0.0	894.9	898.0	1.55	608.26
0.0	892.3	894.9	1.30	608.25
0.0	890.1	892.3	1.09	608.25
0.0	888.3	890.1	0.92	608.24
0.0	886.7	888.3	0.77	608.23
0.0	885.4	886.7	0.65	608.23
0.0	884.3	885.4	0.54	608.22
0.0	883.4	884.3	0.46	608.22
0.0	882.6	883.4	0.38	608.22
0.0	882.0	882.6	0.32	608.21
0.0	881.5	882.0	0.27	608.21
0.0	881.0	881.5	0.23	608.21

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK15.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	880.6	881.0	0.19	608.21
0.0	880.3	880.6	0.16	608.21
0.0	880.0	880.3	0.14	608.21
0.0	879.8	880.0	0.11	608.20
0.0	879.6	879.8	0.10	608.20
0.0	879.4	879.6	0.08	608.20
0.0	879.3	879.4	0.07	608.20
0.0	879.2	879.3	0.06	608.20
0.0	879.1	879.2	0.05	608.20
0.0	879.0	879.1	0.04	608.20
0.0	879.0	879.0	0.03	608.20
0.0	878.9	879.0	0.03	608.20
0.0	878.9	878.9	0.02	608.20
0.0	878.8	878.9	0.02	608.20
0.0	878.8	878.8	0.02	608.20
0.0	878.8	878.8	0.01	608.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK15.HYD

Starting Pond W.S. Elevation = 608.20 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	14.99 cfs
Peak Outflow	=	14.89 cfs
Peak Elevation	=	608.72 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	26,358 cu-ft
Peak Storage From Storm	=	4,374 cu-ft
Total Storage in Pond	=	30,732 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Rating Table file: j:\DATA\0011289\BASIN2BL.POND

----INITIAL CONDITIONS----
Elevation = 608.20 ft
Outflow = 0.00 cfs
Storage = 26,358 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
608.20	0.0	26,358
608.60	9.7	29,708
609.00	27.6	33,239
609.40	47.0	36,956
609.80	58.9	40,865
610.00	64.1	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
878.6	878.6
990.3	1000.0
1108.0	1135.6
1231.9	1278.9
1362.1	1421.0
1429.7	1493.8

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK25.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	9.24
2.0	18.49
3.0	18.49
4.0	18.49
5.0	18.49
6.0	18.49
7.0	18.49
8.0	18.49
9.0	18.49
10.0	18.49
11.0	18.49
12.0	18.49
13.0	18.49
14.0	18.49
15.0	18.49
16.0	18.49
17.0	18.49
18.0	18.49
19.0	18.49
20.0	18.49
21.0	9.24
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	878.6	878.6	0.00	608.20
9.2	886.4	887.8	0.74	608.23
27.7	908.4	914.1	2.84	608.32
37.0	934.7	945.4	5.34	608.42
37.0	956.8	971.7	7.44	608.51
37.0	975.4	993.8	9.21	608.58
37.0	989.7	1012.4	11.34	608.64
37.0	1000.2	1026.7	13.23	608.68
37.0	1008.0	1037.2	14.62	608.71
37.0	1013.7	1044.9	15.64	608.73
37.0	1017.9	1050.7	16.39	608.75
37.0	1021.0	1054.8	16.95	608.76
37.0	1023.2	1057.9	17.35	608.77
37.0	1024.9	1060.2	17.65	608.78
37.0	1026.1	1061.9	17.87	608.78
37.0	1027.0	1063.1	18.04	608.79
37.0	1027.7	1064.0	18.16	608.79
37.0	1028.2	1064.7	18.24	608.79
37.0	1028.6	1065.2	18.31	608.79
37.0	1028.8	1065.5	18.36	608.79
37.0	1029.0	1065.8	18.39	608.79
27.7	1022.4	1056.8	17.20	608.77
9.2	1003.8	1031.6	13.88	608.69
0.0	983.4	1003.8	10.21	608.61
0.0	966.7	983.4	8.38	608.55
0.0	952.6	966.7	7.04	608.49
0.0	940.8	952.6	5.91	608.44
0.0	930.8	940.8	4.97	608.40
0.0	922.5	930.8	4.17	608.37
0.0	915.5	922.5	3.51	608.34
0.0	909.6	915.5	2.95	608.32
0.0	904.6	909.6	2.48	608.30
0.0	900.5	904.6	2.08	608.29
0.0	897.0	900.5	1.75	608.27
0.0	894.0	897.0	1.47	608.26
0.0	891.6	894.0	1.23	608.25
0.0	889.5	891.6	1.04	608.24
0.0	887.8	889.5	0.87	608.24
0.0	886.3	887.8	0.73	608.23
0.0	885.1	886.3	0.61	608.23
0.0	884.0	885.1	0.52	608.22
0.0	883.2	884.0	0.43	608.22
0.0	882.4	883.2	0.36	608.22
0.0	881.8	882.4	0.31	608.21
0.0	881.3	881.8	0.26	608.21

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK25.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	880.9	881.3	0.22	608.21
0.0	880.5	880.9	0.18	608.21
0.0	880.2	880.5	0.15	608.21
0.0	880.0	880.2	0.13	608.21
0.0	879.7	880.0	0.11	608.20
0.0	879.6	879.7	0.09	608.20
0.0	879.4	879.6	0.08	608.20
0.0	879.3	879.4	0.06	608.20
0.0	879.2	879.3	0.05	608.20
0.0	879.1	879.2	0.05	608.20
0.0	879.0	879.1	0.04	608.20
0.0	878.9	879.0	0.03	608.20
0.0	878.9	878.9	0.03	608.20
0.0	878.8	878.9	0.02	608.20
0.0	878.8	878.8	0.02	608.20
0.0	878.8	878.8	0.02	608.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN2 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA2BLK25.HYD

Starting Pond W.S. Elevation = 608.20 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	18.49 cfs
Peak Outflow	=	18.39 cfs
Peak Elevation	=	608.79 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	26,358 cu-ft
Peak Storage From Storm	=	5,064 cu-ft
Total Storage in Pond	=	31,423 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #2         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Rating Table file: j:\DATA\0011289\BASIN2BL.PND

----INITIAL CONDITIONS----
Elevation = 608.20 ft
Outflow = 0.00 cfs
Storage = 26,358 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
608.20	0.0	26,358
608.60	9.7	29,708
609.00	27.6	33,239
609.40	47.0	36,956
609.80	58.9	40,865
610.00	64.1	42,892

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
878.6	878.6
990.3	1000.0
1108.0	1135.6
1231.9	1278.9
1362.1	1421.0
1429.7	1493.8

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\B2BLK100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	11.83
2.0	23.66
3.0	23.66
4.0	23.66
5.0	23.66
6.0	23.66
7.0	23.66
8.0	23.66
9.0	23.66
10.0	23.66
11.0	23.66
12.0	23.66
13.0	23.66
14.0	23.66
15.0	23.66
16.0	23.66
17.0	23.66
18.0	23.66
19.0	23.66
20.0	23.66
21.0	11.83
22.0	0.00
23.0	0.00
24.0	0.00
25.0	0.00
26.0	0.00
27.0	0.00
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	878.6	878.6	0.00	608.20
11.8	888.5	890.4	0.95	608.24
35.5	916.8	924.0	3.63	608.35
47.3	950.4	964.1	6.83	608.48
47.3	978.7	997.7	9.52	608.59
47.3	999.7	1026.0	13.14	608.68
47.3	1015.2	1047.1	15.92	608.74
47.3	1026.6	1062.5	17.96	608.78
47.3	1035.0	1073.9	19.47	608.82
47.3	1041.2	1082.3	20.57	608.84
47.3	1045.7	1088.5	21.39	608.86
47.3	1049.1	1093.0	21.99	608.87
47.3	1051.5	1096.4	22.43	608.88
47.3	1053.3	1098.9	22.75	608.89
47.3	1054.7	1100.7	22.99	608.90
47.3	1055.7	1102.0	23.17	608.90
47.3	1056.4	1103.0	23.30	608.90
47.3	1056.9	1103.7	23.39	608.91
47.3	1057.3	1104.2	23.46	608.91
47.3	1057.6	1104.6	23.52	608.91
47.3	1057.8	1104.9	23.55	608.91
35.5	1049.3	1093.3	22.02	608.88
11.8	1025.5	1061.1	17.77	608.78
0.0	999.4	1025.5	13.08	608.68
0.0	980.1	999.4	9.65	608.60
0.0	963.9	980.1	8.11	608.53
0.0	950.2	963.9	6.81	608.48
0.0	938.8	950.2	5.73	608.44
0.0	929.2	938.8	4.81	608.40
0.0	921.1	929.2	4.04	608.37
0.0	914.3	921.1	3.40	608.34
0.0	908.6	914.3	2.85	608.32
0.0	903.8	908.6	2.40	608.30
0.0	899.8	903.8	2.01	608.28
0.0	896.4	899.8	1.69	608.27
0.0	893.5	896.4	1.42	608.26
0.0	891.2	893.5	1.19	608.25
0.0	889.1	891.2	1.00	608.24
0.0	887.5	889.1	0.84	608.23
0.0	886.0	887.5	0.71	608.23
0.0	884.9	886.0	0.59	608.22
0.0	883.9	884.9	0.50	608.22
0.0	883.0	883.9	0.42	608.22
0.0	882.3	883.0	0.35	608.21
0.0	881.7	882.3	0.30	608.21

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\B2BLK100.HYD

INFLOW HYDROGRAPH / ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	881.2	881.7	0.25	608.21
46.0	0.00	0.0	880.8	881.2	0.21	608.21
47.0	0.00	0.0	880.5	880.8	0.18	608.21
48.0	0.00	0.0	880.2	880.5	0.15	608.21
49.0	0.00	0.0	879.9	880.2	0.12	608.21
50.0	0.00	0.0	879.7	879.9	0.10	608.20
51.0	0.00	0.0	879.5	879.7	0.09	608.20
52.0	0.00	0.0	879.4	879.5	0.07	608.20
53.0	0.00	0.0	879.3	879.4	0.06	608.20
54.0	0.00	0.0	879.1	879.3	0.05	608.20
55.0	0.00	0.0	879.1	879.1	0.04	608.20
56.0	0.00	0.0	879.0	879.1	0.04	608.20
57.0	0.00	0.0	878.9	879.0	0.03	608.20
58.0	0.00	0.0	878.9	878.9	0.03	608.20
59.0	0.00	0.0	878.8	878.9	0.02	608.20
60.0	0.00	0.0	878.8	878.8	0.02	608.20

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN2BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN2.HYD
Outflow Hydrograph: j:\DATA\0011289\B2BLK100.HYD

Starting Pond W.S. Elevation = 608.20 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	23.66 cfs
Peak Outflow	=	23.55 cfs
Peak Elevation	=	608.91 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	26,358 cu-ft
Peak Storage From Storm	=	6,083 cu-ft
Total Storage in Pond	=	32,441 cu-ft

POND-2 Version: 5.17
S/N: 1903000008

THORNBURY CROSSING
00-11-289, 7/12/01
BASIN 3
DETENTION ANALYSIS

CALCULATED 09-06-2001 15:30:45
DISK FILE: j:\DATA\0011289\BASIN3 .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sqr(A1*A2) (sq.ft)	Volume * (cubic-ft)	Volume Sum (cubic-ft)
590.00	0.00	0	0	0	0
592.00	34,547.00	34,547	34,547	23,031	23,031
594.00	64,825.00	64,825	146,695	97,797	120,828
596.00	74,133.00	74,133	208,281	138,854	259,682
598.00	83,704.00	83,704	236,610	157,740	417,423
599.00	88,589.00	88,589	258,405	86,135	503,557

$$IA = (sq.rt(Area1) + ((Ei-E1)/(E2-E1))*(sq.rt(Area2)-sq.rt(Area1)))^2$$

where: E1, E2 = Closest two elevations with planimeter data
Ei = Elevation at which to interpolate area
Area1,Area2 = Areas computed for E1, E2, respectively
IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))

where: EL1, EL2 = Lower and upper elevations of the increment
Area1,Area2 = Areas computed for EL1, EL2, respectively
Volume = Incremental volume between EL1 and EL2

Basin #3
Detention

Outlet Structure File: BASIN3 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01

****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
590.00	0.0	1
590.30	0.3	1
590.60	1.0	1
590.90	2.1	1
591.20	3.1	1
591.50	4.0	1
591.80	4.7	1
592.10	5.2	1
592.40	5.8	1
592.70	6.2	1
593.00	6.7	1
593.30	7.1	1
593.60	7.5	1
593.90	7.9	1
594.20	8.3	1
594.50	8.6	1
594.80	8.9	1
595.10	9.3	1
595.40	9.6	1
595.70	9.9	1
596.00	10.2	1 +2
596.30	20.9	1 +2
596.60	40.4	1 +2
596.90	65.5	1 +2
597.20	95.1	1 +2
597.50	128.7	1 +2
597.80	165.8	1 +2
598.10	207.2	1 +3
598.40	232.5	1 +3
598.70	255.2	1 +3
599.00	276.0	1 +3

Outlet Structure File: BASIN3 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01

****

Outlet Structure File: j:\DATA\0011289\BASIN3 .STR
Planimeter Input File: j:\DATA\0011289\BASIN3 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN3 .PND

Min. Elev.(ft) = 590 Max. Elev.(ft) = 599 Incr.(ft) = .3

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
CULVERT-CR	1		->	1
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN3 .PND

Outlet Structure File: BASIN3 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01

****

>>>>>> Structure No. 1 <<<<<<
(Input Data)

CULVERT-CR
Circular Culvert (With Inlet Control)

E1 elev.(ft)?	590
E2 elev.(ft)?	599.001
Diam. (ft)?	1
Inv. el.(ft)?	590
Slope (ft/ft)?	.01
T1 ratio?	
T2 ratio?	
K Coeff.?	.0045
M Coeff.?	2
c Coeff.?	.0317
Y Coeff.?	.69
Form 1 or 2?	1
Slope factor?	-.5

Outlet Structure File: BASIN3 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01

****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	596
E2 elev.(ft)?	598
Weir coefficient?	3.3
Weir elev.(ft)?	596
Length (ft)?	19.33
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN3 .STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	598
E2 elev.(ft)?	599.001
Orifice coeff.?	.6
Invert elev.(ft)?	596
Datum elev.(ft) ?	597
Orifice area (sq ft)?	38.66

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3 .PND

----INITIAL CONDITIONS----
Elevation = 590.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
590.00	0.0	0
590.30	0.3	78
590.60	1.0	622
590.90	2.1	2,099
591.20	3.1	4,975
591.50	4.0	9,716
591.80	4.7	16,789
592.10	5.2	26,549
592.40	5.8	37,899
592.70	6.2	50,480
593.00	6.7	64,360
593.30	7.1	79,603
593.60	7.5	96,272
593.90	7.9	114,434
594.20	8.3	133,884
594.50	8.6	153,806
594.80	8.9	174,140
595.10	9.3	194,890
595.40	9.6	216,065
595.70	9.9	237,659
596.00	10.2	259,682
596.30	20.9	282,131
596.60	40.4	305,001
596.90	65.5	328,301
597.20	95.1	352,026
597.50	128.7	376,184
597.80	165.8	400,779
598.10	207.2	425,815
598.40	232.5	451,293
598.70	255.2	477,204
599.00	276.0	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.6	2.9
20.7	21.7
70.0	72.1
165.8	168.9
323.9	327.9
559.6	564.3
885.0	890.2
1263.3	1269.1
1682.7	1688.9
2145.3	2152.0
2653.4	2660.5
3209.1	3216.6
3814.5	3822.4
4462.8	4471.1
5126.9	5135.5
5804.7	5813.6
6496.3	6505.6
7202.1	7211.7
7922.0	7931.9
8656.1	8666.3
9404.3	9425.2
10166.7	10207.1
10943.3	11008.8
11734.2	11829.3
12539.4	12668.1
13359.3	13525.1
14193.8	14401.0
15043.1	15275.6
15906.8	16162.0
16785.2	17061.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN302 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	9.28
2.0	27.83
3.0	37.11
4.0	46.39
5.0	55.67
6.0	74.22
7.0	83.50
8.0	92.78
9.0	92.78
10.0	92.78
11.0	92.78
12.0	92.78
13.0	92.78
14.0	92.78
15.0	92.78
16.0	92.78
17.0	92.78
18.0	92.78
19.0	92.78
20.0	92.78
21.0	83.50
22.0	74.22
23.0	55.67
24.0	46.39
25.0	37.11
26.0	27.83
27.0	9.28
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	590.00
9.3	8.2	9.3	0.54	590.40
37.1	42.3	45.3	1.52	590.74
64.9	102.3	107.2	2.46	591.01
83.5	179.4	185.8	3.20	591.23
102.1	274.0	281.5	3.74	591.41
129.9	395.4	403.9	4.22	591.60
157.7	543.8	553.2	4.67	591.79
176.3	710.2	720.1	4.94	591.94
185.6	885.4	895.8	5.21	592.10
185.6	1060.0	1070.9	5.49	592.24
185.6	1234.0	1245.5	5.76	592.38
185.6	1407.7	1419.5	5.94	592.51
185.6	1581.0	1593.2	6.11	592.63
185.6	1754.0	1766.6	6.28	592.75
185.6	1926.6	1939.6	6.47	592.86
185.6	2098.9	2112.2	6.66	592.97
185.6	2270.8	2284.4	6.80	593.08
185.6	2442.5	2456.4	6.94	593.18
185.6	2613.9	2628.1	7.07	593.28
185.6	2785.1	2799.5	7.20	593.37
176.3	2946.7	2961.3	7.32	593.46
157.7	3089.6	3104.4	7.42	593.54
129.9	3204.5	3219.5	7.50	593.60
102.1	3291.4	3306.5	7.56	593.64
83.5	3359.7	3374.9	7.60	593.68
64.9	3409.4	3424.6	7.64	593.70
37.1	3431.2	3446.5	7.65	593.71
9.3	3425.2	3440.5	7.65	593.71
0.0	3409.9	3425.2	7.64	593.70
0.0	3394.6	3409.9	7.63	593.70
0.0	3379.4	3394.6	7.62	593.69
0.0	3364.2	3379.4	7.61	593.68
0.0	3349.0	3364.2	7.60	593.67
0.0	3333.8	3349.0	7.59	593.67
0.0	3318.7	3333.8	7.58	593.66
0.0	3303.5	3318.7	7.57	593.65
0.0	3288.4	3303.5	7.56	593.64
0.0	3273.3	3288.4	7.55	593.64
0.0	3258.2	3273.3	7.54	593.63
0.0	3243.2	3258.2	7.53	593.62
0.0	3228.1	3243.2	7.52	593.61
0.0	3213.1	3228.1	7.51	593.61
0.0	3198.1	3213.1	7.50	593.60
0.0	3183.2	3198.1	7.49	593.59

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN302 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	3168.2	3183.2	7.48	593.58
0.0	3153.3	3168.2	7.47	593.57
0.0	3138.4	3153.3	7.45	593.57
0.0	3123.5	3138.4	7.44	593.56
0.0	3108.6	3123.5	7.43	593.55
0.0	3093.8	3108.6	7.42	593.54
0.0	3079.0	3093.8	7.41	593.53
0.0	3064.1	3079.0	7.40	593.53
0.0	3049.4	3064.1	7.39	593.52
0.0	3034.6	3049.4	7.38	593.51
0.0	3019.9	3034.6	7.37	593.50
0.0	3005.2	3019.9	7.36	593.49
0.0	2990.5	3005.2	7.35	593.49
0.0	2975.8	2990.5	7.34	593.48
0.0	2961.1	2975.8	7.33	593.47
0.0	2946.5	2961.1	7.32	593.46

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN302 .HYD

Starting Pond W.S. Elevation = 590.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	92.78 cfs
Peak Outflow	=	7.65 cfs
Peak Elevation	=	593.71 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	103,166 cu-ft
Total Storage in Pond	=	103,166 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3 .POND

----INITIAL CONDITIONS----
Elevation = 590.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
590.00	0.0	0
590.30	0.3	78
590.60	1.0	622
590.90	2.1	2,099
591.20	3.1	4,975
591.50	4.0	9,716
591.80	4.7	16,789
592.10	5.2	26,549
592.40	5.8	37,899
592.70	6.2	50,480
593.00	6.7	64,360
593.30	7.1	79,603
593.60	7.5	96,272
593.90	7.9	114,434
594.20	8.3	133,884
594.50	8.6	153,806
594.80	8.9	174,140
595.10	9.3	194,890
595.40	9.6	216,065
595.70	9.9	237,659
596.00	10.2	259,682
596.30	20.9	282,131
596.60	40.4	305,001
596.90	65.5	328,301
597.20	95.1	352,026
597.50	128.7	376,184
597.80	165.8	400,779
598.10	207.2	425,815
598.40	232.5	451,293
598.70	255.2	477,204
599.00	276.0	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.6	2.9
20.7	21.7
70.0	72.1
165.8	168.9
323.9	327.9
559.6	564.3
885.0	890.2
1263.3	1269.1
1682.7	1688.9
2145.3	2152.0
2653.4	2660.5
3209.1	3216.6
3814.5	3822.4
4462.8	4471.1
5126.9	5135.5
5804.7	5813.6
6496.3	6505.6
7202.1	7211.7
7922.0	7931.9
8656.1	8666.3
9404.3	9425.2
10166.7	10207.1
10943.3	11008.8
11734.2	11829.3
12539.4	12668.1
13359.3	13525.1
14193.8	14401.0
15043.1	15275.6
15906.8	16162.0
16785.2	17061.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN315 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	14.95
2.0	44.84
3.0	59.79
4.0	74.74
5.0	89.68
6.0	119.58
7.0	134.52
8.0	149.47
9.0	149.47
10.0	149.47
11.0	149.47
12.0	149.47
13.0	149.47
14.0	149.47
15.0	149.47
16.0	149.47
17.0	149.47
18.0	149.47
19.0	149.47
20.0	149.47
21.0	134.52
22.0	119.58
23.0	89.68
24.0	74.74
25.0	59.79
26.0	44.84
27.0	14.95
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	590.00
15.0	13.5	15.0	0.75	590.49
59.8	69.0	73.2	2.11	590.90
104.6	167.4	173.6	3.13	591.21
134.5	294.2	301.9	3.85	591.45
164.4	449.9	458.6	4.39	591.67
209.3	649.4	659.1	4.85	591.89
254.1	893.1	903.5	5.22	592.11
284.0	1165.8	1177.1	5.65	592.33
298.9	1452.7	1464.7	5.99	592.54
298.9	1739.1	1751.7	6.27	592.74
298.9	2024.9	2038.1	6.58	592.93
298.9	2310.2	2323.9	6.84	593.10
298.9	2595.0	2609.1	7.06	593.27
298.9	2879.4	2894.0	7.27	593.43
298.9	3163.4	3178.4	7.47	593.58
298.9	3447.0	3462.4	7.66	593.72
298.9	3730.3	3746.0	7.85	593.86
298.9	4013.2	4029.2	8.03	594.00
298.9	4295.7	4312.1	8.20	594.13
298.9	4577.9	4594.6	8.36	594.26
284.0	4845.0	4861.9	8.48	594.38
254.1	5081.9	5099.1	8.58	594.48
209.3	5273.8	5291.2	8.67	594.57
164.4	5420.8	5438.2	8.73	594.63
134.5	5537.7	5555.3	8.79	594.69
104.6	5624.7	5642.4	8.82	594.72
59.8	5666.8	5684.5	8.84	594.74
15.0	5664.1	5681.8	8.84	594.74
0.0	5646.4	5664.1	8.83	594.73
0.0	5628.8	5646.4	8.83	594.73
0.0	5611.1	5628.8	8.82	594.72
0.0	5593.5	5611.1	8.81	594.71
0.0	5575.9	5593.5	8.80	594.70
0.0	5558.3	5575.9	8.79	594.69
0.0	5540.7	5558.3	8.79	594.69
0.0	5523.2	5540.7	8.78	594.68
0.0	5505.6	5523.2	8.77	594.67
0.0	5488.1	5505.6	8.76	594.66
0.0	5470.6	5488.1	8.76	594.66
0.0	5453.1	5470.6	8.75	594.65
0.0	5435.6	5453.1	8.74	594.64
0.0	5418.2	5435.6	8.73	594.63
0.0	5400.7	5418.2	8.73	594.63
0.0	5383.3	5400.7	8.72	594.62

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN315 .HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	5365.8	5383.3	8.71	594.61
0.0	5348.4	5365.8	8.70	594.60
0.0	5331.1	5348.4	8.69	594.59
0.0	5313.7	5331.1	8.69	594.59
0.0	5296.3	5313.7	8.68	594.58
0.0	5279.0	5296.3	8.67	594.57
0.0	5261.7	5279.0	8.66	594.56
0.0	5244.3	5261.7	8.66	594.56
0.0	5227.0	5244.3	8.65	594.55
0.0	5209.8	5227.0	8.64	594.54
0.0	5192.5	5209.8	8.63	594.53
0.0	5175.2	5192.5	8.63	594.53
0.0	5158.0	5175.2	8.62	594.52
0.0	5140.8	5158.0	8.61	594.51
0.0	5123.6	5140.8	8.60	594.50
0.0	5106.4	5123.6	8.59	594.49

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN315 .HYD

Starting Pond W.S. Elevation = 590.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	149.47 cfs
Peak Outflow	=	8.84 cfs
Peak Elevation	=	594.74 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	170,271 cu-ft
Total Storage in Pond	=	170,271 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3 .PND

----INITIAL CONDITIONS----
Elevation = 590.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
590.00	0.0	0
590.30	0.3	78
590.60	1.0	622
590.90	2.1	2,099
591.20	3.1	4,975
591.50	4.0	9,716
591.80	4.7	16,789
592.10	5.2	26,549
592.40	5.8	37,899
592.70	6.2	50,480
593.00	6.7	64,360
593.30	7.1	79,603
593.60	7.5	96,272
593.90	7.9	114,434
594.20	8.3	133,884
594.50	8.6	153,806
594.80	8.9	174,140
595.10	9.3	194,890
595.40	9.6	216,065
595.70	9.9	237,659
596.00	10.2	259,682
596.30	20.9	282,131
596.60	40.4	305,001
596.90	65.5	328,301
597.20	95.1	352,026
597.50	128.7	376,184
597.80	165.8	400,779
598.10	207.2	425,815
598.40	232.5	451,293
598.70	255.2	477,204
599.00	276.0	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.6	2.9
20.7	21.7
70.0	72.1
165.8	168.9
323.9	327.9
559.6	564.3
885.0	890.2
1263.3	1269.1
1682.7	1688.9
2145.3	2152.0
2653.4	2660.5
3209.1	3216.6
3814.5	3822.4
4462.8	4471.1
5126.9	5135.5
5804.7	5813.6
6496.3	6505.6
7202.1	7211.7
7922.0	7931.9
8656.1	8666.3
9404.3	9425.2
10166.7	10207.1
10943.3	11008.8
11734.2	11829.3
12539.4	12668.1
13359.3	13525.1
14193.8	14401.0
15043.1	15275.6
15906.8	16162.0
16785.2	17061.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN325 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	590.00
1.0	18.45	18.5	16.7	18.5	0.88	590.55
2.0	55.34	73.8	85.9	90.5	2.29	590.96
3.0	73.78	129.1	208.3	215.0	3.36	591.29
4.0	92.23	166.0	366.0	374.3	4.14	591.56
5.0	110.68	202.9	559.5	568.9	4.71	591.80
6.0	147.57	258.3	807.6	817.8	5.09	592.03
7.0	166.01	313.6	1110.1	1121.2	5.57	592.28
8.0	184.46	350.5	1448.6	1460.5	5.98	592.54
9.0	184.46	368.9	1804.8	1817.5	6.34	592.78
10.0	184.46	368.9	2160.3	2173.7	6.72	593.01
11.0	184.46	368.9	2515.2	2529.2	7.00	593.22
12.0	184.46	368.9	2869.6	2884.1	7.26	593.42
13.0	184.46	368.9	3223.5	3238.5	7.51	593.61
14.0	184.46	368.9	3576.9	3592.4	7.75	593.79
15.0	184.46	368.9	3929.9	3945.8	7.98	593.96
16.0	184.46	368.9	4282.4	4298.8	8.19	594.12
17.0	184.46	368.9	4634.6	4651.3	8.38	594.28
18.0	184.46	368.9	4986.4	5003.5	8.54	594.44
19.0	184.46	368.9	5337.9	5355.3	8.70	594.60
20.0	184.46	368.9	5689.2	5706.9	8.85	594.75
21.0	166.01	350.5	6021.6	6039.6	9.03	594.90
22.0	147.57	313.6	6316.7	6335.2	9.20	595.03
23.0	110.68	258.3	6556.3	6575.0	9.33	595.13
24.0	92.23	202.9	6740.4	6759.2	9.41	595.21
25.0	73.78	166.0	6887.5	6906.4	9.47	595.27
26.0	55.34	129.1	6997.6	7016.6	9.52	595.32
27.0	18.45	73.8	7052.3	7071.4	9.54	595.34
28.0	0.00	18.5	7051.7	7070.7	9.54	595.34
29.0	0.00	0.0	7032.6	7051.7	9.53	595.33
30.0	0.00	0.0	7013.6	7032.6	9.52	595.32
31.0	0.00	0.0	6994.5	7013.6	9.52	595.32
32.0	0.00	0.0	6975.5	6994.5	9.51	595.31
33.0	0.00	0.0	6956.5	6975.5	9.50	595.30
34.0	0.00	0.0	6937.5	6956.5	9.49	595.29
35.0	0.00	0.0	6918.6	6937.5	9.48	595.28
36.0	0.00	0.0	6899.6	6918.6	9.48	595.28
37.0	0.00	0.0	6880.7	6899.6	9.47	595.27
38.0	0.00	0.0	6861.8	6880.7	9.46	595.26
39.0	0.00	0.0	6842.9	6861.8	9.45	595.25
40.0	0.00	0.0	6824.0	6842.9	9.44	595.24
41.0	0.00	0.0	6805.1	6824.0	9.44	595.24
42.0	0.00	0.0	6786.2	6805.1	9.43	595.23
43.0	0.00	0.0	6767.4	6786.2	9.42	595.22
44.0	0.00	0.0	6748.6	6767.4	9.41	595.21

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN325 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	6729.8	6748.6	9.40	595.20
46.0	0.00	0.0	6711.0	6729.8	9.40	595.20
47.0	0.00	0.0	6692.2	6711.0	9.39	595.19
48.0	0.00	0.0	6673.4	6692.2	9.38	595.18
49.0	0.00	0.0	6654.7	6673.4	9.37	595.17
50.0	0.00	0.0	6636.0	6654.7	9.36	595.16
51.0	0.00	0.0	6617.3	6636.0	9.36	595.16
52.0	0.00	0.0	6598.6	6617.3	9.35	595.15
53.0	0.00	0.0	6579.9	6598.6	9.34	595.14
54.0	0.00	0.0	6561.2	6579.9	9.33	595.13
55.0	0.00	0.0	6542.6	6561.2	9.32	595.12
56.0	0.00	0.0	6524.0	6542.6	9.32	595.12
57.0	0.00	0.0	6505.3	6524.0	9.31	595.11
58.0	0.00	0.0	6486.7	6505.3	9.30	595.10
59.0	0.00	0.0	6468.2	6486.7	9.29	595.09
60.0	0.00	0.0	6449.6	6468.2	9.28	595.08

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BASN325 .HYD

Starting Pond W.S. Elevation = 590.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	184.46 cfs
Peak Outflow	=	9.54 cfs
Peak Elevation	=	595.34 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	211,857 cu-ft
Total Storage in Pond	=	211,857 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Rating Table file: j:\DATA\0011289\BASIN3 .PND

----INITIAL CONDITIONS----
Elevation = 590.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
590.00	0.0	0
590.30	0.3	78
590.60	1.0	622
590.90	2.1	2,099
591.20	3.1	4,975
591.50	4.0	9,716
591.80	4.7	16,789
592.10	5.2	26,549
592.40	5.8	37,899
592.70	6.2	50,480
593.00	6.7	64,360
593.30	7.1	79,603
593.60	7.5	96,272
593.90	7.9	114,434
594.20	8.3	133,884
594.50	8.6	153,806
594.80	8.9	174,140
595.10	9.3	194,890
595.40	9.6	216,065
595.70	9.9	237,659
596.00	10.2	259,682
596.30	20.9	282,131
596.60	40.4	305,001
596.90	65.5	328,301
597.20	95.1	352,026
597.50	128.7	376,184
597.80	165.8	400,779
598.10	207.2	425,815
598.40	232.5	451,293
598.70	255.2	477,204
599.00	276.0	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
2.6	2.9
20.7	21.7
70.0	72.1
165.8	168.9
323.9	327.9
559.6	564.3
885.0	890.2
1263.3	1269.1
1682.7	1688.9
2145.3	2152.0
2653.4	2660.5
3209.1	3216.6
3814.5	3822.4
4462.8	4471.1
5126.9	5135.5
5804.7	5813.6
6496.3	6505.6
7202.1	7211.7
7922.0	7931.9
8656.1	8666.3
9404.3	9425.2
10166.7	10207.1
10943.3	11008.8
11734.2	11829.3
12539.4	12668.1
13359.3	13525.1
14193.8	14401.0
15043.1	15275.6
15906.8	16162.0
16785.2	17061.2

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN3100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	23.59
2.0	70.77
3.0	94.36
4.0	117.96
5.0	141.55
6.0	188.73
7.0	212.32
8.0	235.91
9.0	235.91
10.0	235.91
11.0	235.91
12.0	235.91
13.0	235.91
14.0	235.91
15.0	235.91
16.0	235.91
17.0	235.91
18.0	235.91
19.0	235.91
20.0	235.91
21.0	212.32
22.0	188.73
23.0	141.55
24.0	117.96
25.0	94.36
26.0	70.77
27.0	23.59
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	0.0	0.0	0.00	590.00
23.6	21.5	23.6	1.04	590.61
94.4	110.8	115.9	2.55	591.04
165.1	268.5	275.9	3.71	591.40
212.3	471.9	480.8	4.45	591.69
259.5	721.5	731.4	4.96	591.95
330.3	1040.9	1051.8	5.46	592.23
401.1	1430.0	1441.9	5.96	592.52
448.2	1865.4	1878.2	6.40	592.82
471.8	2323.5	2337.2	6.85	593.11
471.8	2781.0	2795.4	7.20	593.37
471.8	3237.7	3252.8	7.52	593.62
471.8	3693.9	3709.6	7.83	593.84
471.8	4149.5	4165.7	8.11	594.06
471.8	4604.6	4621.3	8.37	594.27
471.8	5059.3	5076.4	8.57	594.47
471.8	5513.5	5531.1	8.78	594.68
471.8	5967.3	5985.3	9.00	594.87
471.8	6420.6	6439.2	9.26	595.07
471.8	6873.5	6892.5	9.46	595.26
471.8	7326.0	7345.4	9.66	595.46
448.2	7754.6	7774.3	9.83	595.63
401.1	8135.7	8155.7	9.99	595.79
330.3	8445.7	8466.0	10.12	595.92
259.5	8683.7	8705.2	10.75	596.02
212.3	8869.2	8896.0	13.44	596.09
165.1	9003.5	9034.3	15.39	596.15
94.4	9065.3	9097.9	16.28	596.17
23.6	9056.6	9088.9	16.16	596.17
0.0	9025.2	9056.6	15.70	596.15
0.0	8994.7	9025.2	15.26	596.14
0.0	8965.0	8994.7	14.83	596.13
0.0	8936.2	8965.0	14.41	596.12
0.0	8908.2	8936.2	14.01	596.11
0.0	8880.9	8908.2	13.61	596.10
0.0	8854.5	8880.9	13.23	596.08
0.0	8828.8	8854.5	12.85	596.07
0.0	8803.8	8828.8	12.49	596.06
0.0	8779.5	8803.8	12.14	596.05
0.0	8755.9	8779.5	11.80	596.04
0.0	8733.0	8755.9	11.46	596.04
0.0	8710.7	8733.0	11.14	596.03
0.0	8689.1	8710.7	10.83	596.02
0.0	8668.0	8689.1	10.52	596.01
0.0	8647.6	8668.0	10.22	596.00

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN3100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	8627.2	8647.6	10.19	595.99
0.0	8606.8	8627.2	10.18	595.98
0.0	8586.5	8606.8	10.18	595.98
0.0	8566.1	8586.5	10.17	595.97
0.0	8545.8	8566.1	10.16	595.96
0.0	8525.5	8545.8	10.15	595.95
0.0	8505.2	8525.5	10.14	595.94
0.0	8485.0	8505.2	10.13	595.93
0.0	8464.7	8485.0	10.13	595.93
0.0	8444.5	8464.7	10.12	595.92
0.0	8424.3	8444.5	10.11	595.91
0.0	8404.0	8424.3	10.10	595.90
0.0	8383.9	8404.0	10.09	595.89
0.0	8363.7	8383.9	10.08	595.88
0.0	8343.5	8363.7	10.08	595.88
0.0	8323.4	8343.5	10.07	595.87

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3 .PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\BASN3100.HYD

Starting Pond W.S. Elevation = 590.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	235.91 cfs
Peak Outflow	=	16.28 cfs
Peak Elevation	=	596.17 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	272,447 cu-ft
Total Storage in Pond	=	272,447 cu-ft

Outlet Structure File: BASIN3BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01
BLOCKED LOW FLOW

****

***** COMPOSITE OUTFLOW SUMMARY ****

Elevation (ft)	Q (cfs)	Contributing Structures
596.00	0.0	2
596.20	5.7	2
596.40	16.1	2
596.60	29.6	2
596.80	45.6	2
597.00	63.8	2
597.20	83.9	2
597.40	105.7	2
597.60	129.1	2
597.80	154.0	2
598.00	186.1	3
598.20	203.9	3
598.40	220.3	3
598.60	235.5	3
598.80	249.7	3
599.00	263.3	3

Outlet Structure File: BASIN3BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01
BLOCKED LOW FLOW
****

Outlet Structure File: j:\DATA\0011289\BASIN3BL.STR
Planimeter Input File: j:\DATA\0011289\BASIN3 .VOL
Rating Table Output File: j:\DATA\0011289\BASIN3BL.PND

Min. Elev.(ft) = 596 Max. Elev.(ft) = 599 Incr.(ft) = .2

Additional elevations (ft) to be included in table:
* *

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
WEIR-VR	2		->	2
ORIFICE	3		->	3

Outflow rating table summary was stored in file:
j:\DATA\0011289\BASIN3BL.PND

Outlet Structure File: BASIN3BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01
BLOCKED LOW FLOW
****

>>>>>> Structure No. 2 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	596
E2 elev.(ft)?	598
Weir coefficient?	3.3
Weir elev.(ft)?	596
Length (ft)?	19.33
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASIN3BL.STR

POND-2 Version: 5.17 S/N: 1903000008
Date Executed: Time Executed:

****
DETENTION BASIN #3
7/12/01
BLOCKED LOW FLOW

****

>>>>>> Structure No. 3 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	598
E2 elev.(ft)?	599.001
Orifice coeff.?	.6
Invert elev.(ft)?	596
Datum elev.(ft) ?	597
Orifice area (sq ft)?	38.66

****
* *
* DETENTION ANALYSIS *
* 7/12/01 *
* BASIN #3 *
* *
* *
****

Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3BL.PND

----INITIAL CONDITIONS----
Elevation = 596.00 ft
Outflow = 0.00 cfs
Storage = 259,682 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
596.00	0.0	259,682
596.20	5.7	274,603
596.40	16.1	289,710
596.60	29.6	305,001
596.80	45.6	320,485
597.00	63.8	336,159
597.20	83.9	352,026
597.40	105.7	368,084
597.60	129.1	384,332
597.80	154.0	400,779
598.00	186.1	417,422
598.20	203.9	434,261
598.40	220.3	451,293
598.60	235.5	468,514
598.80	249.7	485,938
599.00	263.3	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
8656.1	8656.1
9153.4	9159.1
9657.0	9673.1
10166.7	10196.3
10682.8	10728.4
11205.3	11269.1
11734.2	11818.1
12269.4	12375.1
12811.0	12940.1
13359.3	13513.3
13914.1	14100.2
14475.3	14679.2
15043.1	15263.4
15617.1	15852.6
16197.9	16447.6
16785.2	17048.5

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK02.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	9.28
2.0	27.83
3.0	37.11
4.0	46.39
5.0	55.67
6.0	74.22
7.0	83.50
8.0	92.78
9.0	92.78
10.0	92.78
11.0	92.78
12.0	92.78
13.0	92.78
14.0	92.78
15.0	92.78
16.0	92.78
17.0	92.78
18.0	92.78
19.0	92.78
20.0	92.78
21.0	83.50
22.0	74.22
23.0	55.67
24.0	46.39
25.0	37.11
26.0	27.83
27.0	9.28
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	8656.1	8656.1	0.00	596.00
9.3	8665.1	8665.3	0.11	596.00
37.1	8701.2	8702.2	0.52	596.02
64.9	8763.6	8766.1	1.25	596.04
83.5	8842.8	8847.1	2.17	596.08
102.1	8938.3	8944.9	3.27	596.11
129.9	9058.9	9068.2	4.67	596.16
157.7	9202.9	9216.6	6.86	596.22
176.3	9358.8	9379.1	10.15	596.29
185.6	9517.4	9544.4	13.50	596.35
185.6	9669.2	9703.0	16.87	596.41
185.6	9813.2	9854.8	20.79	596.47
185.6	9949.8	9998.8	24.50	596.52
185.6	10079.3	10135.3	28.03	596.58
185.6	10201.5	10264.8	31.66	596.63
185.6	10316.4	10387.1	35.34	596.67
185.6	10424.4	10501.9	38.79	596.71
185.6	10525.8	10609.9	42.04	596.76
185.6	10621.2	10711.4	45.09	596.79
185.6	10710.3	10806.8	48.24	596.83
185.6	10793.4	10895.9	51.24	596.86
176.3	10862.2	10969.7	53.72	596.89
157.7	10909.1	11020.0	55.41	596.91
129.9	10926.9	11039.0	56.06	596.91
102.1	10917.5	11029.0	55.72	596.91
83.5	10891.5	11001.0	54.78	596.90
64.9	10849.9	10956.4	53.28	596.88
37.1	10785.1	10887.0	50.94	596.86
9.3	10698.7	10794.4	47.82	596.82
0.0	10609.3	10698.7	44.71	596.79
0.0	10525.3	10609.3	42.02	596.76
0.0	10446.3	10525.3	39.49	596.72
0.0	10372.1	10446.3	37.12	596.69
0.0	10302.3	10372.1	34.89	596.67
0.0	10236.7	10302.3	32.79	596.64
0.0	10175.1	10236.7	30.82	596.62
0.0	10117.0	10175.1	29.05	596.59
0.0	10061.9	10117.0	27.55	596.57
0.0	10009.6	10061.9	26.13	596.55
0.0	9960.0	10009.6	24.78	596.53
0.0	9913.0	9960.0	23.50	596.51
0.0	9868.4	9913.0	22.29	596.49
0.0	9826.2	9868.4	21.14	596.47
0.0	9786.1	9826.2	20.05	596.46
0.0	9748.0	9786.1	19.02	596.44

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK02.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	9712.0	9748.0	18.03	596.43
0.0	9677.8	9712.0	17.10	596.41
0.0	9645.3	9677.8	16.22	596.40
0.0	9614.2	9645.3	15.54	596.39
0.0	9584.4	9614.2	14.91	596.38
0.0	9555.8	9584.4	14.31	596.37
0.0	9528.4	9555.8	13.73	596.35
0.0	9502.0	9528.4	13.17	596.34
0.0	9476.7	9502.0	12.64	596.33
0.0	9452.5	9476.7	12.13	596.32
0.0	9429.2	9452.5	11.64	596.31
0.0	9406.9	9429.2	11.17	596.31
0.0	9385.5	9406.9	10.71	596.30
0.0	9364.9	9385.5	10.28	596.29
0.0	9345.2	9364.9	9.86	596.28
0.0	9326.2	9345.2	9.46	596.27

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\02BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK02.HYD

Starting Pond W.S. Elevation = 596.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	92.78 cfs
Peak Outflow	=	56.06 cfs
Peak Elevation	=	596.91 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	259,682 cu-ft
Peak Storage From Storm	=	69,809 cu-ft
Total Storage in Pond	=	329,491 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3BL.PND

----INITIAL CONDITIONS----
Elevation = 596.00 ft
Outflow = 0.00 cfs
Storage = 259,682 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
596.00	0.0	259,682
596.20	5.7	274,603
596.40	16.1	289,710
596.60	29.6	305,001
596.80	45.6	320,485
597.00	63.8	336,159
597.20	83.9	352,026
597.40	105.7	368,084
597.60	129.1	384,332
597.80	154.0	400,779
598.00	186.1	417,422
598.20	203.9	434,261
598.40	220.3	451,293
598.60	235.5	468,514
598.80	249.7	485,938
599.00	263.3	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
8656.1	8656.1
9153.4	9159.1
9657.0	9673.1
10166.7	10196.3
10682.8	10728.4
11205.3	11269.1
11734.2	11818.1
12269.4	12375.1
12811.0	12940.1
13359.3	13513.3
13914.1	14100.2
14475.3	14679.2
15043.1	15263.4
15617.1	15852.6
16197.9	16447.6
16785.2	17048.5

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK15.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	14.95
2.0	44.84
3.0	59.79
4.0	74.74
5.0	89.68
6.0	119.58
7.0	134.52
8.0	149.47
9.0	149.47
10.0	149.47
11.0	149.47
12.0	149.47
13.0	149.47
14.0	149.47
15.0	149.47
16.0	149.47
17.0	149.47
18.0	149.47
19.0	149.47
20.0	149.47
21.0	134.52
22.0	119.58
23.0	89.68
24.0	74.74
25.0	59.79
26.0	44.84
27.0	14.95
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	8656.1	8656.1	0.00	596.00
15.0	8670.7	8671.0	0.17	596.01
59.8	8728.8	8730.5	0.84	596.03
104.6	8829.4	8833.4	2.01	596.07
134.5	8956.9	8963.9	3.49	596.12
164.4	9110.8	9121.4	5.27	596.18
209.3	9302.2	9320.1	8.96	596.26
254.1	9528.8	9556.3	13.74	596.35
284.0	9773.4	9812.8	19.70	596.45
298.9	10019.5	10072.3	26.40	596.55
298.9	10251.9	10318.4	33.27	596.65
298.9	10470.3	10550.8	40.26	596.73
298.9	10675.3	10769.3	46.97	596.82
298.9	10866.5	10974.2	53.88	596.89
298.9	11044.8	11165.4	60.31	596.96
298.9	11210.7	11343.8	66.53	597.03
298.9	11364.4	11509.6	72.61	597.09
298.9	11506.9	11663.4	78.24	597.14
298.9	11638.9	11805.8	83.45	597.20
298.9	11760.7	11937.9	88.59	597.24
298.9	11872.9	12059.6	93.35	597.29
284.0	11962.6	12156.9	97.16	597.32
254.1	12017.7	12216.7	99.50	597.34
209.3	12027.1	12226.9	99.90	597.35
164.4	11994.5	12191.6	98.52	597.33
134.5	11936.9	12129.1	96.07	597.31
104.6	11856.3	12041.6	92.65	597.28
59.8	11740.6	11916.1	87.73	597.24
15.0	11592.3	11755.5	81.61	597.18
0.0	11441.0	11592.3	75.63	597.12
0.0	11300.9	11441.0	70.10	597.06
0.0	11170.9	11300.9	64.96	597.01
0.0	11049.9	11170.9	60.50	596.96
0.0	10937.1	11049.9	56.42	596.92
0.0	10831.8	10937.1	52.62	596.88
0.0	10733.7	10831.8	49.08	596.84
0.0	10642.1	10733.7	45.78	596.80
0.0	10556.1	10642.1	43.01	596.77
0.0	10475.3	10556.1	40.42	596.74
0.0	10399.3	10475.3	37.99	596.70
0.0	10327.9	10399.3	35.70	596.68
0.0	10260.8	10327.9	33.56	596.65
0.0	10197.7	10260.8	31.54	596.62
0.0	10138.4	10197.7	29.64	596.60
0.0	10082.2	10138.4	28.11	596.58

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK15.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	10028.9	10082.2	26.66	596.56
0.0	9978.3	10028.9	25.28	596.54
0.0	9930.4	9978.3	23.98	596.52
0.0	9884.9	9930.4	22.74	596.50
0.0	9841.8	9884.9	21.57	596.48
0.0	9800.9	9841.8	20.45	596.46
0.0	9762.1	9800.9	19.40	596.45
0.0	9725.3	9762.1	18.40	596.43
0.0	9690.4	9725.3	17.45	596.42
0.0	9657.3	9690.4	16.55	596.41
0.0	9625.7	9657.3	15.78	596.39
0.0	9595.4	9625.7	15.14	596.38
0.0	9566.4	9595.4	14.53	596.37
0.0	9538.5	9566.4	13.94	596.36
0.0	9511.7	9538.5	13.38	596.35
0.0	9486.1	9511.7	12.84	596.34

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\15BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK15.HYD

Starting Pond W.S. Elevation = 596.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	149.47 cfs
Peak Outflow	=	99.90 cfs
Peak Elevation	=	597.35 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	259,682 cu-ft
Peak Storage From Storm	=	104,131 cu-ft
Total Storage in Pond	=	363,813 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Rating Table file: j:\DATA\0011289\BASIN3BL.PND

----INITIAL CONDITIONS----
Elevation = 596.00 ft
Outflow = 0.00 cfs
Storage = 259,682 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
596.00	0.0	259,682
596.20	5.7	274,603
596.40	16.1	289,710
596.60	29.6	305,001
596.80	45.6	320,485
597.00	63.8	336,159
597.20	83.9	352,026
597.40	105.7	368,084
597.60	129.1	384,332
597.80	154.0	400,779
598.00	186.1	417,422
598.20	203.9	434,261
598.40	220.3	451,293
598.60	235.5	468,514
598.80	249.7	485,938
599.00	263.3	503,558

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
8656.1	8656.1
9153.4	9159.1
9657.0	9673.1
10166.7	10196.3
10682.8	10728.4
11205.3	11269.1
11734.2	11818.1
12269.4	12375.1
12811.0	12940.1
13359.3	13513.3
13914.1	14100.2
14475.3	14679.2
15043.1	15263.4
15617.1	15852.6
16197.9	16447.6
16785.2	17048.5

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK25.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
0.0	0.00
1.0	18.45
2.0	55.34
3.0	73.78
4.0	92.23
5.0	110.68
6.0	147.57
7.0	166.01
8.0	184.46
9.0	184.46
10.0	184.46
11.0	184.46
12.0	184.46
13.0	184.46
14.0	184.46
15.0	184.46
16.0	184.46
17.0	184.46
18.0	184.46
19.0	184.46
20.0	184.46
21.0	166.01
22.0	147.57
23.0	110.68
24.0	92.23
25.0	73.78
26.0	55.34
27.0	18.45
28.0	0.00
29.0	0.00
30.0	0.00
31.0	0.00
32.0	0.00
33.0	0.00
34.0	0.00
35.0	0.00
36.0	0.00
37.0	0.00
38.0	0.00
39.0	0.00
40.0	0.00
41.0	0.00
42.0	0.00
43.0	0.00
44.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
-----	8656.1	8656.1	0.00	596.00
18.5	8674.1	8674.5	0.21	596.01
73.8	8745.8	8747.9	1.04	596.04
129.1	8870.0	8874.9	2.48	596.09
166.0	9027.4	9036.0	4.30	596.15
202.9	9216.0	9230.3	7.14	596.23
258.3	9450.1	9474.2	12.08	596.32
313.6	9726.8	9763.7	18.44	596.43
350.5	10024.2	10077.3	26.53	596.55
368.9	10322.1	10393.1	35.52	596.67
368.9	10602.1	10691.0	44.48	596.79
368.9	10863.4	10971.0	53.76	596.89
368.9	11107.2	11232.4	62.56	596.99
368.9	11333.4	11476.2	71.38	597.08
368.9	11543.0	11702.3	79.66	597.16
368.9	11736.8	11911.9	87.57	597.23
368.9	11915.4	12105.7	95.16	597.30
368.9	12080.0	12284.3	102.14	597.37
368.9	12231.4	12448.9	108.76	597.43
368.9	12370.3	12600.3	115.03	597.48
368.9	12497.6	12739.2	120.78	597.53
350.5	12597.5	12848.1	125.29	597.57
313.6	12655.3	12911.1	127.90	597.59
258.3	12657.6	12913.6	128.00	597.59
202.9	12608.9	12860.5	125.80	597.57
166.0	12530.4	12774.9	122.26	597.54
129.1	12424.5	12659.5	117.48	597.50
73.8	12276.7	12498.3	110.80	597.44
18.5	12090.0	12295.2	102.57	597.37
0.0	11901.0	12090.0	94.54	597.30
0.0	11726.7	11901.0	87.14	597.23
0.0	11565.6	11726.7	80.55	597.17
0.0	11416.2	11565.6	74.65	597.11
0.0	11277.9	11416.2	69.19	597.05
0.0	11149.6	11277.9	64.12	597.00
0.0	11030.1	11149.6	59.78	596.96
0.0	10918.6	11030.1	55.75	596.91
0.0	10814.6	10918.6	52.00	596.87
0.0	10717.6	10814.6	48.50	596.83
0.0	10627.0	10717.6	45.27	596.80
0.0	10541.9	10627.0	42.55	596.76
0.0	10461.9	10541.9	39.99	596.73
0.0	10386.8	10461.9	37.59	596.70
0.0	10316.1	10386.8	35.33	596.67
0.0	10249.7	10316.1	33.20	596.65

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK25.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	10187.3	10249.7	31.21	596.62
0.0	10128.5	10187.3	29.37	596.60
0.0	10072.8	10128.5	27.85	596.57
0.0	10020.0	10072.8	26.42	596.55
0.0	9969.9	10020.0	25.05	596.53
0.0	9922.4	9969.9	23.76	596.51
0.0	9877.3	9922.4	22.53	596.50
0.0	9834.6	9877.3	21.37	596.48
0.0	9794.0	9834.6	20.27	596.46
0.0	9755.6	9794.0	19.22	596.45
0.0	9719.1	9755.6	18.23	596.43
0.0	9684.6	9719.1	17.29	596.42
0.0	9651.8	9684.6	16.40	596.40
0.0	9620.4	9651.8	15.67	596.39
0.0	9590.4	9620.4	15.03	596.38
0.0	9561.5	9590.4	14.43	596.37

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\25BASN3 .HYD
Outflow Hydrograph: j:\DATA\0011289\BA3BLK25.HYD

Starting Pond W.S. Elevation = 596.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	184.46 cfs
Peak Outflow	=	128.00 cfs
Peak Elevation	=	597.59 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	259,682 cu-ft
Peak Storage From Storm	=	123,884 cu-ft
Total Storage in Pond	=	383,566 cu-ft

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*                        *
*  DETENTION ANALYSIS    *
*       7/12/01          *
*       BASIN #3         *
*                        *
*                        *
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Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Rating Table file: j:\DATA\0011289\BASIN3BL.PND

----INITIAL CONDITIONS----
Elevation = 596.00 ft
Outflow = 0.00 cfs
Storage = 259,682 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
596.00	0.0	259,682	8656.1	8656.1
596.20	5.7	274,603	9153.4	9159.1
596.40	16.1	289,710	9657.0	9673.1
596.60	29.6	305,001	10166.7	10196.3
596.80	45.6	320,485	10682.8	10728.4
597.00	63.8	336,159	11205.3	11269.1
597.20	83.9	352,026	11734.2	11818.1
597.40	105.7	368,084	12269.4	12375.1
597.60	129.1	384,332	12811.0	12940.1
597.80	154.0	400,779	13359.3	13513.3
598.00	186.1	417,422	13914.1	14100.2
598.20	203.9	434,261	14475.3	14679.2
598.40	220.3	451,293	15043.1	15263.4
598.60	235.5	468,514	15617.1	15852.6
598.80	249.7	485,938	16197.9	16447.6
599.00	263.3	503,558	16785.2	17048.5

Time increment (t) = 1.0 min.

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\B3BLK100.HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	8656.1	8656.1	0.00	596.00
1.0	23.59	23.6	8679.1	8679.6	0.27	596.01
2.0	70.77	94.4	8770.8	8773.5	1.33	596.05
3.0	94.36	165.1	8929.6	8935.9	3.17	596.11
4.0	117.96	212.3	9130.9	9141.9	5.51	596.19
5.0	141.55	259.5	9369.7	9390.4	10.38	596.29
6.0	188.73	330.3	9666.3	9699.9	16.79	596.41
7.0	212.32	401.1	10014.8	10067.4	26.27	596.55
8.0	235.91	448.2	10387.8	10463.1	37.62	596.70
9.0	235.91	471.8	10759.6	10859.7	50.02	596.85
10.0	235.91	471.8	11106.4	11231.4	62.53	596.99
11.0	235.91	471.8	11428.0	11578.2	75.12	597.11
12.0	235.91	471.8	11725.6	11899.8	87.10	597.23
13.0	235.91	471.8	11999.9	12197.4	98.74	597.34
14.0	235.91	471.8	12252.3	12471.7	109.70	597.43
15.0	235.91	471.8	12483.8	12724.2	120.15	597.52
16.0	235.91	471.8	12696.1	12955.7	129.77	597.61
17.0	235.91	471.8	12889.9	13167.9	139.00	597.68
18.0	235.91	471.8	13066.9	13361.8	147.42	597.75
19.0	235.91	471.8	13228.0	13538.7	155.39	597.81
20.0	235.91	471.8	13371.4	13699.8	164.20	597.86
21.0	212.32	448.2	13478.1	13819.6	170.76	597.90
22.0	188.73	401.1	13531.1	13879.1	174.01	597.92
23.0	141.55	330.3	13515.3	13861.4	173.04	597.92
24.0	117.96	259.5	13438.2	13774.8	168.31	597.89
25.0	94.36	212.3	13327.5	13650.5	161.51	597.85
26.0	70.77	165.1	13186.4	13492.7	153.10	597.79
27.0	23.59	94.4	12993.0	13280.8	143.90	597.72
28.0	0.00	23.6	12751.7	13016.6	132.42	597.63
29.0	0.00	0.0	12509.2	12751.7	121.30	597.53
30.0	0.00	0.0	12286.7	12509.2	111.25	597.45
31.0	0.00	0.0	12082.2	12286.7	102.24	597.37
32.0	0.00	0.0	11893.7	12082.2	94.24	597.29
33.0	0.00	0.0	11720.0	11893.7	86.86	597.23
34.0	0.00	0.0	11559.4	11720.0	80.31	597.16
35.0	0.00	0.0	11410.5	11559.4	74.43	597.11
36.0	0.00	0.0	11272.6	11410.5	68.98	597.05
37.0	0.00	0.0	11144.7	11272.6	63.93	597.00
38.0	0.00	0.0	11025.5	11144.7	59.61	596.95
39.0	0.00	0.0	10914.3	11025.5	55.60	596.91
40.0	0.00	0.0	10810.6	10914.3	51.86	596.87
41.0	0.00	0.0	10713.8	10810.6	48.37	596.83
42.0	0.00	0.0	10623.5	10713.8	45.16	596.79
43.0	0.00	0.0	10538.6	10623.5	42.45	596.76
44.0	0.00	0.0	10458.8	10538.6	39.89	596.73

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\B3BLK100.HYD

INFLOW HYDROGRAPH

TIME (min)	INFLOW (cfs)
45.0	0.00
46.0	0.00
47.0	0.00
48.0	0.00
49.0	0.00
50.0	0.00
51.0	0.00
52.0	0.00
53.0	0.00
54.0	0.00
55.0	0.00
56.0	0.00
57.0	0.00
58.0	0.00
59.0	0.00
60.0	0.00

ROUTING COMPUTATIONS

I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	10383.8	10458.8	37.49	596.70
0.0	10313.4	10383.8	35.24	596.67
0.0	10247.1	10313.4	33.12	596.64
0.0	10184.9	10247.1	31.13	596.62
0.0	10126.3	10184.9	29.31	596.60
0.0	10070.7	10126.3	27.79	596.57
0.0	10017.9	10070.7	26.36	596.55
0.0	9968.0	10017.9	25.00	596.53
0.0	9920.5	9968.0	23.71	596.51
0.0	9875.6	9920.5	22.49	596.49
0.0	9832.9	9875.6	21.32	596.48
0.0	9792.5	9832.9	20.22	596.46
0.0	9754.1	9792.5	19.18	596.45
0.0	9717.7	9754.1	18.19	596.43
0.0	9683.2	9717.7	17.25	596.42
0.0	9650.5	9683.2	16.36	596.40

********** SUMMARY OF ROUTING COMPUTATIONS **********

Pond File: j:\DATA\0011289\BASIN3BL.PND
Inflow Hydrograph: j:\DATA\0011289\100BASN3.HYD
Outflow Hydrograph: j:\DATA\0011289\B3BLK100.HYD

Starting Pond W.S. Elevation = 596.00 ft

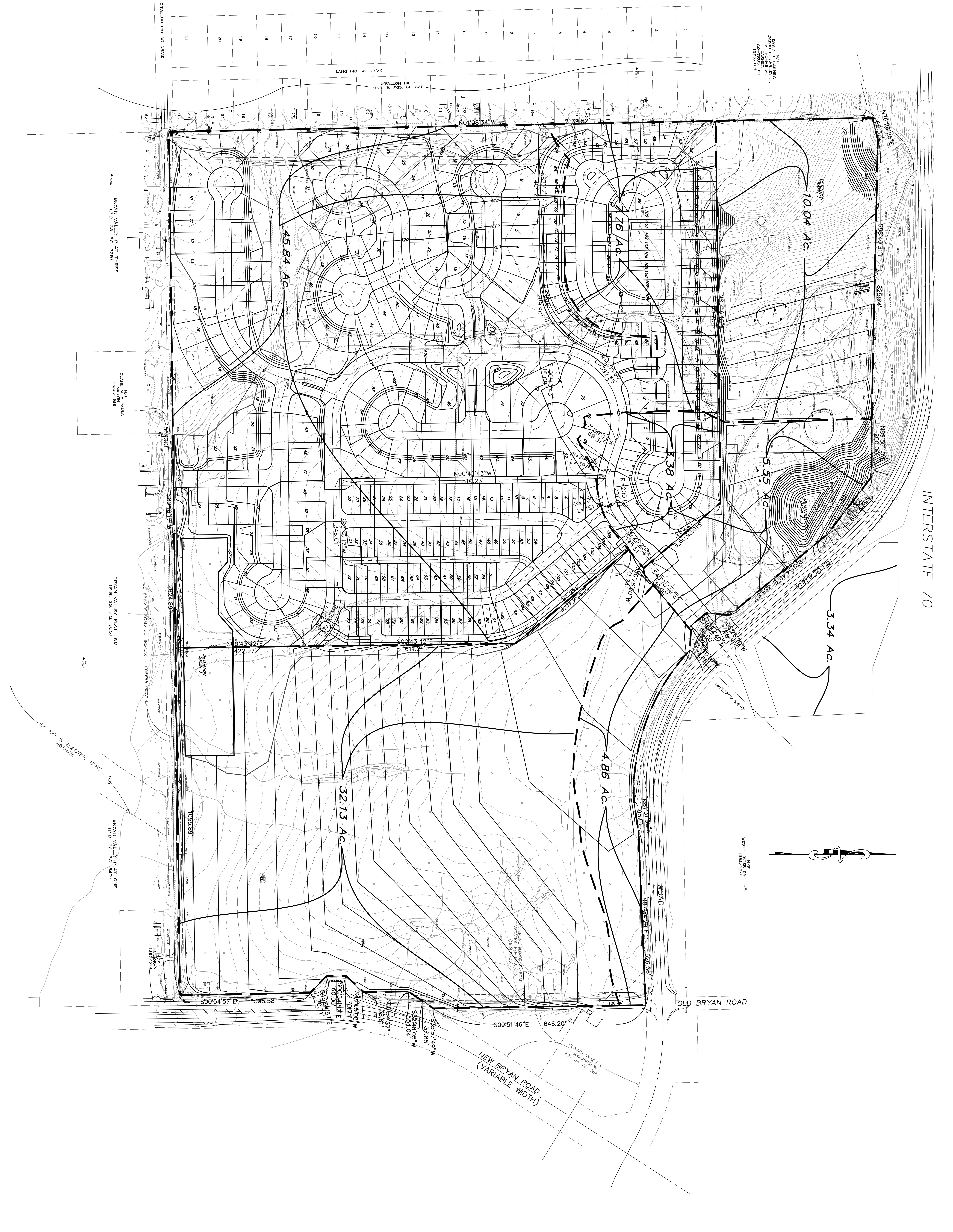
***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow	=	235.91 cfs
Peak Outflow	=	174.01 cfs
Peak Elevation	=	597.92 ft

***** Summary of Approximate Peak Storage *****

Initial Storage	=	259,682 cu-ft
Peak Storage From Storm	=	151,473 cu-ft
Total Storage in Pond	=	411,155 cu-ft

K:\D\0011289 BRYAN ROAD\IMPROVEMENTS\1289EXHIBIT.dwg 04/26/01 01:20:51 PM PM CDT
4/26/01



INTERSTATE 70
RELOCATED
NEW BRYAN ROAD
(VARIABLE WIDTH)
OLD BRYAN ROAD
ROAD
45.84 Ac.
32.13 Ac.
10.04 Ac.
7.76 Ac.
5.55 Ac.
4.86 Ac.
3.38 Ac.
3.34 Ac.
DETENTION BASIN 1
DETENTION BASIN 2
DETENTION BASIN 3
BRYAN VALLEY PLAT ONE (P.B. 32, PG. 340)
BRYAN VALLEY PLAT TWO (P.B. 33, PG. 109)
BRYAN VALLEY PLAT THREE (P.B. 33, PG. 225)
30' PRIVATE ROAD 30' INGRESS + EGRESS (1527/1431)
EX 100' W ELECTRIC ESMT 488/676
O'FALLON HILLS (P.B. 6, PGS. 82-83)
LANG (40' W) DRIVE
O'FALLON (50' W) DRIVE
N/F WESTCHESTER DGR. L.P. 1882/1670
N/F DUANE M & PAULA MARTIN 1682/1698
N/F DAVID N. CARNEY, DAVID D. CARNEY III, & THOMAS M. CARNEY, CO-TRUSTEES 1365/135
N01°08'34"W 2139.52'
N76°26'25"E 68.37'
S88°40'31"E 825.24'
N89°58'10"E 200.00'
S00°43'42"E 422.27'
S00°43'42"E 611.21'
N00°43'43"W 810.23'
S89°16'17"W 346.01'
S89°16'17"W 1569.00'
S89°16'17"W 2624.89'
1055.89'
S00°54'57"E 395.58'
S00°51'46"E 646.20'
N81°31'58"E 95.01'
N87°04'29"E 526.66'
S45°57'49"W 37.85'
S00°54'57"E 158.61'

NO.	00	11	289
M.S.D.	P#		SHEET 1 OF 1

DIGITAL FILE LOCATION

PROJECT:

THORNBURY CROSSING

SHEET TITLE:
PRELIMINARY DETENTION CACULATIONS

DRAWN:
DESIGNED:
CHECKED:

PREPARED BY:
THE STERLING CO.
ENGINEERS & SURVEYORS
5055 NEW BAUMGARTNER ROAD
ST. LOUIS, MISSOURI 63129
(314)-487-0440 FAX 487-8944
E-Mail: Sterling@sterling-eng-sur.com

PREPARED FOR:
WENTZWAY CORPORATION &
STEGMANN FARMS V, L.L.C.
317 CLARKSON ROAD
ELLISVILLE, MISSOURI 63011
(636) 227-1964

ISSUE	REMARKS/DATE

THE UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM AVAILABLE INFORMATION AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, NUMBER OR LOCATION OF THESE OR OTHER UTILITIES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN, AND SAID UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMo

BASE MAP