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ENGINEERING DEPARTMENT

STORM WATER DETENTION ANALYSIS
PREPARED BY: BAX ENGINEERING CO., INC.
THE MEADOWS OF PARKWOOD ESTATES- CITY OF O'FALLON, MO
BAX PROJECT NO. **02-12003**
April 1, 2003

INTRODUCTION:

This presently undeveloped site is located in the City of O'Fallon, Missouri. It is proposed that the 10.28-acre tract be developed into a residential subdivision. Two dry storm water detention basins shall be constructed, one being located in the Southwestern corner of the site and the other in the Southeastern corner of the site. These two detention basins will provide detention for the improvements associated with the project. The storage volume and outflow rates shall be proportioned to insure that the peak rate of runoff leaving the tract under post-developed conditions is less than or equal to the peak rate of runoff under pre-developed conditions for the 2, 15, 25 and 100 year - 20 minutes design storms and also analyzed for safe passage of the 100-year frequency – 20 minute duration design storms under an emergency situation.

GENERAL SITE DATA AND RUNOFF CALCULATIONS:

The pre-developed P.I. factors to be used for the analysis are:

2 year	0-5%	Impervious	1.15	cfs/ac
15 year	0-5%	Impervious	1.87	cfs/ac
25 year	0-5%	Impervious	2.31	cfs/ac
100 year	0-5%	Impervious	2.95	cfs/ac

The post-developed P.I. factors to be used for the analysis are:

2 year	40%	Impervious	1.61	cfs/ac
15 year	40%	Impervious	2.64	cfs/ac
25 year	40%	Impervious	3.26	cfs/ac
100 year	40%	Impervious	4.17	cfs/ac

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TIME OF CONCENTRATION:

BASIN A

Of the inflows to the basin, the hydraulically most remote point lies to the North of the site approximately 260 feet at the intersection of Fort Zumwalt Drive and West Park Drive, in Parkview Subdivision. Flows will travel approximately 320 feet overland to CI 10 and then 715 feet via storm sewer pipe to the detention basin. Time of concentration is estimated as follows:

T(overland): L = 260 feet
Elevation difference = 598 – 587 = 11.0 feet
T(overland) = 0.76 minutes: See figure 1

T(stormpipe) : L = 715 feet
Estimated velocity = 7 feet/second
T(stormpipe) = 715 feet / 7 feet/sec.
= 1.70 minutes.

Total time = 2.46 min use 2 **minutes**.

BASIN B

Of the inflows to the basin, the hydraulically most remote point lies in the Northern section of the site, at the intersection of West Park Drive and the northern site boundary. Flows will travel approximately 520 feet overland to AI 29 and then 465 feet via storm sewer pipe to the detention basin. Time of concentration is estimated as follows:

T(overland): L = 520 feet
Elevation difference = 590 – 572 = 18.0 feet
T(overland) = 3.50 minutes: See figure 1

T(stormpipe) : L = 465 feet
Estimated velocity = 7 feet/second
T(stormpipe) = 465 feet / 7 feet/sec.
= 1.11 minutes.

Total time = 4.61 min use 4 **minutes**

DIFFERENTIAL RUNOFF:

Sub-basin A (15 year)
Existing Flows
5.77 acres @ 1.87 cfs/ac
Q = 10.79 cfs
Proposed Flows
6.70 acres @ 2.64 cfs/ac
Q = 17.69 cfs
Differential Runoff
Proposed – Existing
17.69 cfs – 10.79 cfs
Q = 6.90 cfs (Detention Required)
2 year = 4.15 cfs
15 year = 6.90 cfs
25 year = 8.51 cfs
100 year = 10.92 cfs

Sub-basin B (15 year)
Existing Flows
2.09 acres @ 1.87 cfs/ac
Q = 3.91 cfs
Proposed Flows
3.73 acres @ 2.64 cfs/ac
Q = 9.85 cfs
Differential Runoff
Proposed – Existing
9.85 cfs – 3.91 cfs
Q = 5.94 cfs (Detention Required)
2 year = 3.61 cfs
15 year = 5.94 cfs
25 year = 7.33 cfs
100 year = 9.39 cfs

Sub-basin C (15 year)
Existing Flows
1.45 acres @ 1.87 cfs/ac
Q = 2.71 cfs
Proposed Flows
0.16 acres @ 2.64 cfs/ac
Q = 0.42 cfs
Differential Runoff
Proposed – Existing
2.71 cfs – 0.42 cfs
Q = -2.29 cfs (No Detention Required)
2 year = -1.41 cfs
15 year = -2.29 cfs
25 year = -2.83 cfs
100 year = -3.61 cfs

Sub-basin D (15 year)
Existing Flows
0.97 acres @ 1.87 cfs/ac
Q = 1.81 cfs
Proposed Flows
0.38 acres @ 2.64 cfs/ac
Q = 1.00 cfs
Differential Runoff
Proposed – Existing
1.00 cfs – 1.81 cfs
Q = -0.81 cfs (No Detention Required)
2 year = -0.51 cfs
15 year = -0.81 cfs
25 year = -1.00 cfs
100 year = -1.28 cfs

BASIN PEAK INFLOWS:

Inflows to the basin have been estimated from the drainage area map included in the construction plans:

Basin A

15 year – 20 minute storm:

On Site	5.23 ac x	2.64 cfs/ac	=	13.81 cfs
Off Site	0.68 ac x	2.64 cfs/ac	=	+ 1.79 cfs
		Total	=	15.60 cfs

2 year – 20 minute storm:	9.52 cfs
15 year – 20 minute storm:	15.60 cfs
25 year – 20 minute storm:	19.27 cfs
100 year – 20 minute storm:	24.64 cfs

Basin B

15 year – 20 minute storm:

On Site	3.22 ac x	2.64 cfs/ac	=	8.51 cfs
		Total	=	8.51 cfs

2 year – 20 minute storm:	5.18 cfs
15 year – 20 minute storm:	8.51 cfs
25 year – 20 minute storm:	10.51 cfs
100 year – 20 minute storm:	13.44 cfs

PERMITTED RELEASE RATE:

The permitted release rate of the basin was found by subtracting the Differential Runoff from the peak inflow to the basin for each design storm:

Basin A

	BASIN INFLOW		DIFFERENTIAL RUNOFF		ALLOWABLE RELEASE RATE
2 year	9.52 cfs	-	4.15 cfs	=	5.37 cfs
15 year	15.60 cfs	-	6.90 cfs	=	8.70 cfs
25 years	19.27 cfs	-	8.51 cfs	=	10.75 cfs
100 year	24.64 cfs	-	10.92 cfs	=	13.73 cfs

Basin B

	BASIN INFLOW		DIFFERENTIAL RUNOFF		ALLOWABLE RELEASE RATE
2 year	5.18 cfs	-	3.61 cfs	=	1.57 cfs
15 year	8.51 cfs	-	5.94 cfs	=	2.57 cfs
25 years	10.51 cfs	-	7.33 cfs	=	3.18 cfs
100 year	13.51 cfs	-	9.39 cfs	=	4.06 cfs

STORM ROUTING CALCULATIONS AND RESULTS:

A computer program was used in routing the design 2, 15, 25 and 100 year – 20-minute storms through the basin.

Basin A

20 MIN STORM	PEAK INFLOW	PERMITTED RELEASE RATE	CALCULATED RELEASE RATE	PEAK ELEVATION
2 YR	9.52 cfs	5.37 cfs	4.30 cfs	544.90 ft
15 YR	15.60 cfs	8.70 cfs	5.45 cfs	546.23 ft
25 YR	19.27 cfs	10.75 cfs	7.76 cfs	546.87 ft
100 YR	24.64 cfs	13.73 cfs	12.17 cfs	547.59 ft

Basin B 20 MIN STORM	PEAK INFLOW	PERMITTED RELEASE RATE	CALCULATED RELEASE RATE	PEAK ELEVATION
2 YR	5.18 cfs	1.57 cfs	1.30 cfs	545.34 ft
15 YR	8.51 cfs	2.57 cfs	1.69 cfs	546.29 ft
25 YR	10.51 cfs	3.18 cfs	2.38 cfs	546.74 ft
100 YR	13.51 cfs	4.06 cfs	3.66 cfs	547.29 ft

CHECK 100-YEAR OUTFLOW: (low flow slots blocked)

Basin A

WEIR FLOW — Q = C x L x H (3/2)

Where 100-YEAR FLOW — Q = 24.64

Spillway Width — C = 3.0; L = 12.57; H = 0.75 ft

Sill = 547.80 ft
100 yr h/w = 548.55 ft

Basin B

WEIR FLOW — Q = C x L x H (3/2)

Where 100-YEAR FLOW — Q = 13.51

Spillway Width — C = 3.0; L = 12.57; H = 0.50 ft

Sill = 547.50 ft
100 yr h/w = 548.00 ft

SEDIMENT VOLUME CALCULATION:

Basin A

The basin shall be analyzed to accommodate 2 years of sediment storage.

- The Drainage area to the basin = 5.91 Acres
- Rational Method runoff coefficient 'c' = 0.6
- Annual sediment storage volume (from figure 2) = 98 ft^3/Acre
- The sediment volume and storage required =

2 years of sediment storage = 5.91 Acres (98 ft^3/Acre/Year) (2 years)

2 years of sediment storage = 1,158 ft^3

To provide for the additional sediment storage the top of the overflow sill will be set at 547.80. Volume between the 100-year high water of 547.59 and the overflow sill elevation of 547.80 is 1,425 ft^3.

1,425 ft^3 provided > 1,158 ft^3 required

Basin B

The basin shall be analyzed to accommodate 2 years of sediment storage.

- The Drainage area to the basin = 3.24 Acres
- Rational Method runoff coefficient 'c' = 0.6
- Annual sediment storage volume (from figure 2) = 99 ft^3/Acre
- The sediment volume and storage required =

2 years of sediment storage = 3.24 Acres (99 ft^3/Acre/Year) (2 years)

2 years of sediment storage = 641.52 ft^3

To provide for the additional sediment storage the top of the overflow sill will be set at 547.50. Volume between the 100-year high water of 547.29 and the overflow sill elevation of 547.50 is 1,221 ft^3.

1,221 ft^3 provided > 642 ft^3 required

SUMMARY

Basin A

2 year – 20 minute H.W.	544.90
15 year – 20 minute H.W.	546.23
25 year – 20 minute H.W.	546.87
100 year – 20 minute H.W.	547.59
100 year – 20 minute H.W. (Low Flow Blocked)	548.55
Low-Flow Slot	6.50" W x 13" H
Low-Flow Elevation	542.00
Upper-Flow Slot	1.25' W x 1.55' H
Upper-Flow Elevation	546.25
Elevation of Spillway	547.80
Top of Berm	550.10

548.55 Low Flow Blocked

Basin B

2 year – 20 minute H.W.	545.34
15 year – 20 minute H.W.	546.29
25 year – 20 minute H.W.	546.74
100 year – 20 minute H.W.	547.29
100 year – 20 minute H.W. (Low Flow Blocked)	548.00
Low-Flow Slot	3.5" W x 7" H
Low-Flow Elevation	542.50
Upper-Flow Slot	0.50' W x 1.40' H
Upper-Flow Elevation	546.10
Elevation of Spillway	547.50
Top of Berm	549.50

548.00 Low Flow Blocked

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TIME OF CONCENTRATION FOR SMALL DRAINAGE BASINS

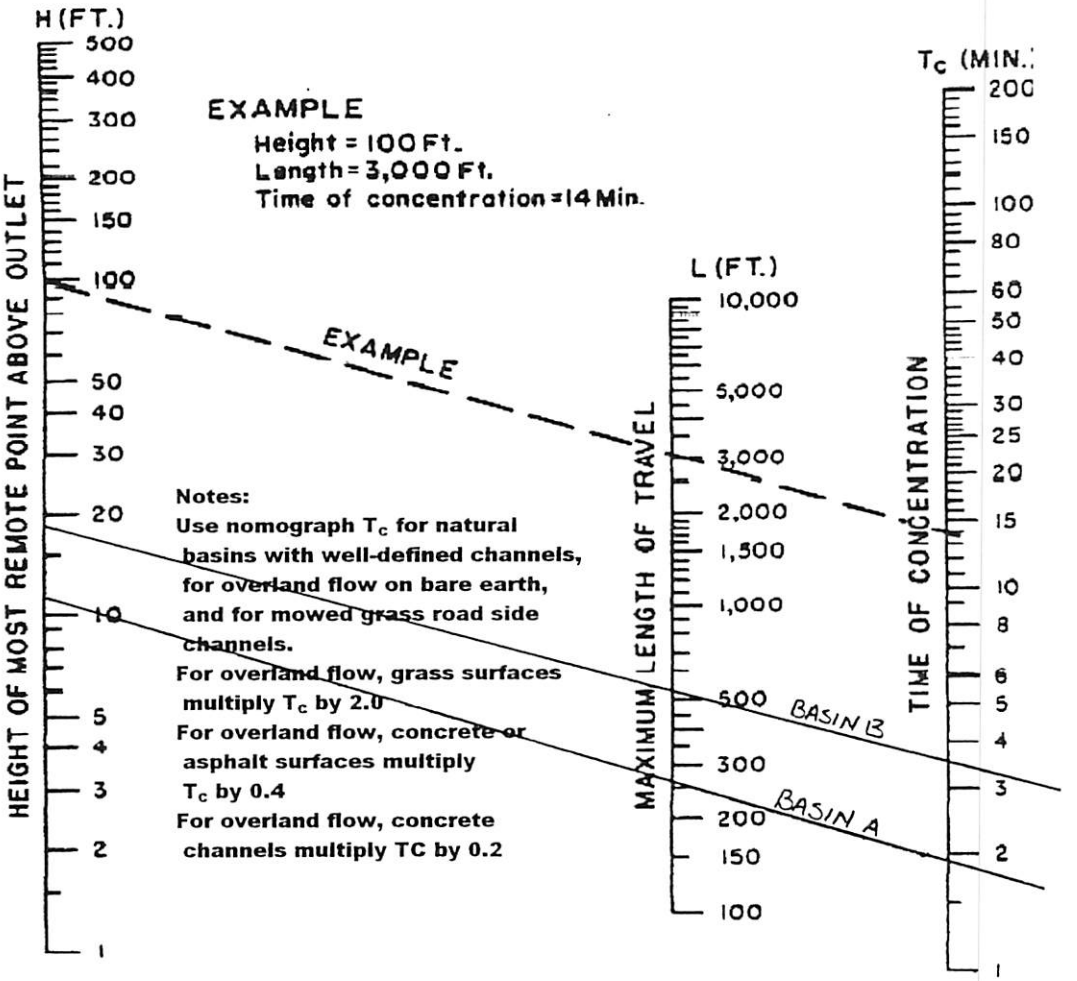


FIGURE 1

BASIN A

$L = 275'$

$\Delta H = 11'$

$t_c = 0.4(1.9) = 0.76$ MIN

BASIN B

$L = 520'$

$\Delta H = 18'$

$t_c = 3.5$ MIN

PROJECT: PARKWOOD ESTATES

DATE: 03/21/03 PROJECT NO: 02-12003

DESIGNED: JLW CHECKED:

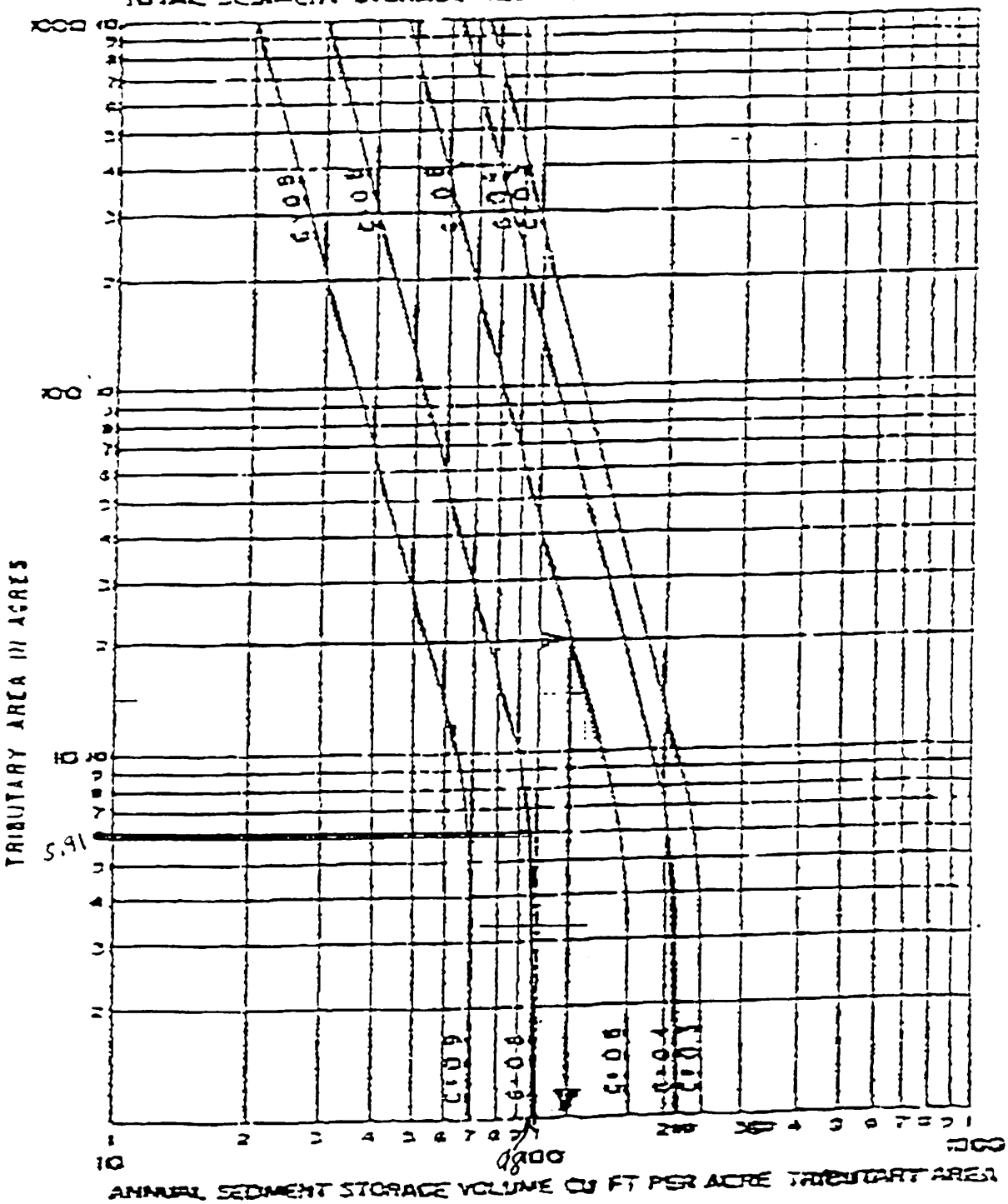
EXAMPLE:

TRIBUTARY AREA = 20 ACRES → ~~5.91 AC~~ 5.91 AC

RATIONAL METHOD RUNOFF COEFFICIENT "C" = 0.6

SEDIMENT STORAGE = 120 CU FT PER ACRE PER YEAR

TOTAL SEDIMENT STORAGE = 120 x 20 = 2400 CU. FT. PER YEAR.



BASIN A

ANNUAL SEDIMENT STORAGE

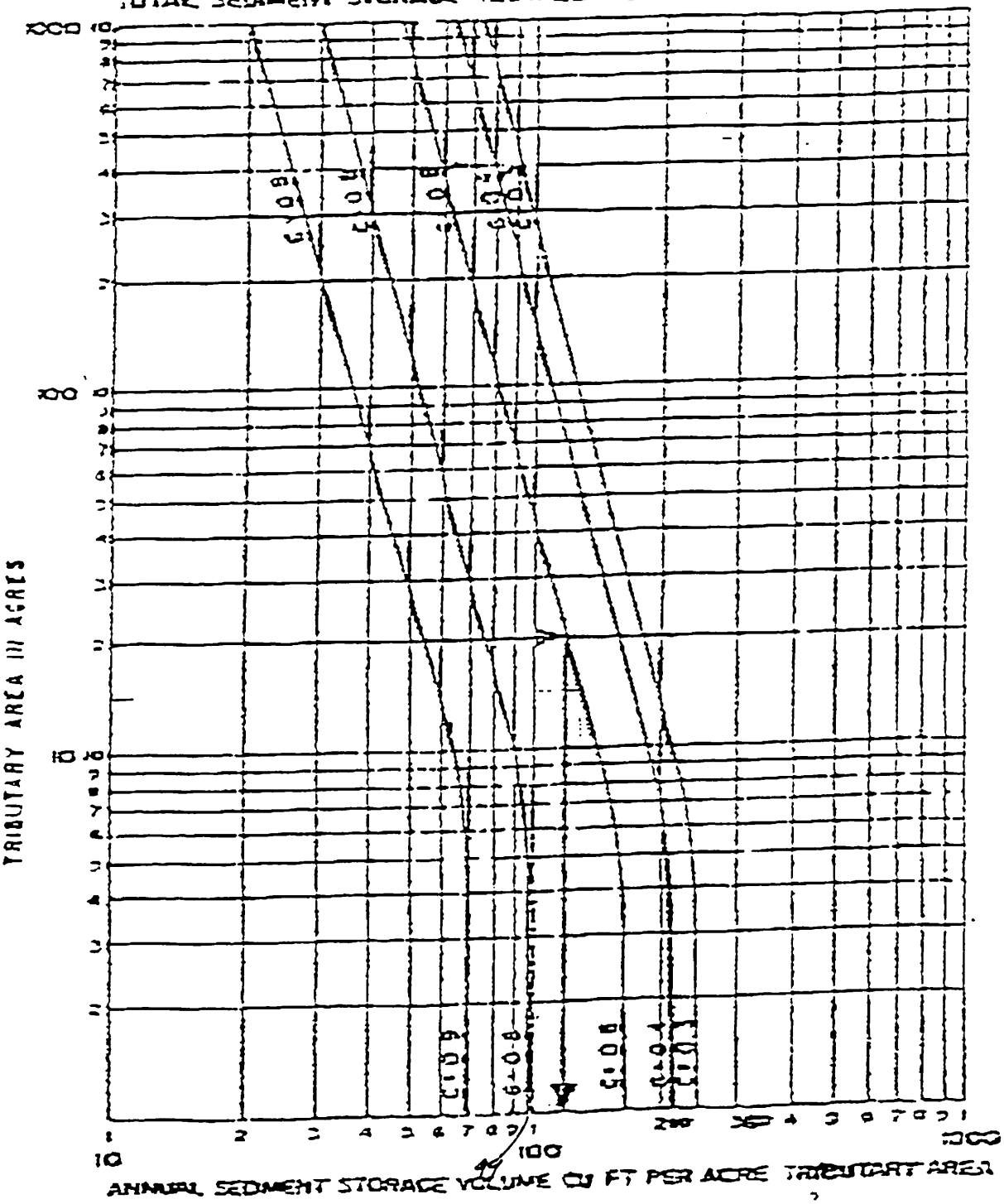
EXAMPLE:

TRIBUTARY AREA = ~~20 ACRES~~ 3.04

RATIONAL METHOD RUNOFF COEFFICIENT "C" = 0.6

SEDIMENT STORAGE = 120 CU FT PER ACRE PER YEAR

TOTAL SEDIMENT STORAGE = 120 x 20 = 2400 CU. FT. PER YEAR.



BASIN B
ANNUAL SEDIMENT STORAGE

POND-2 Version: 5.20
S/N:

CALCULATED 04-01-2003 13:04:41
DISK FILE: e:\pondpack\12003\BASINA1 .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)
542.00	0.00	0	0	0	0
542.70	2,309.00	2,309	2,309	539	539
544.00	3,302.00	3,302	8,372	3,628	4,167
546.00	5,073.00	5,073	12,468	8,312	12,479
548.00	7,123.00	7,123	18,207	12,138	24,617
550.00	9,445.00	9,445	24,770	16,513	41,130
	Elevations With Areas Interpolated From The Closest Two Planimeter Readings				
547.59	-----	6,674	17,566	9,310	21,789
547.80	-----	6,902	17,893	10,736	23,214

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

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: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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

Elevation (ft)	Q (cfs)	Contributing Structures
542.00	0.0	1
542.20	0.1	1
542.40	0.4	1
542.60	0.8	1
542.80	1.2	1
543.00	1.6	1
543.20	2.3	2
543.40	2.6	2
543.60	2.9	2
543.80	3.2	2
544.00	3.4	2
544.20	3.6	2
544.40	3.9	2
544.60	4.1	2
544.80	4.2	2
545.00	4.4	2
545.20	4.6	2
545.40	4.8	2
545.60	4.9	2
545.80	5.1	2
546.00	5.3	2
546.20	5.4	2
546.40	5.8	2 +3
546.60	6.5	2 +3
546.80	7.4	2 +3
547.00	8.4	2 +3
547.20	9.6	2 +3
547.40	10.9	2 +3
547.60	12.2	2 +3
547.80	6.5	2
548.00	6.6	2
548.20	6.7	2
548.40	6.8	2
548.60	7.0	2
548.80	7.1	2
549.00	7.2	2
549.20	7.3	2
549.40	7.4	2
549.60	7.5	2
549.80	7.6	2
550.00	0.0	

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

Outlet Structure File: e:\pondpack\12003\BASINA1 .STR
Planimeter Input File: e:\pondpack\12003\BASINA1 .VOL
Rating Table Output File: e:\pondpack\12003\BASINA1 .PND

Min. Elev.(ft) = 542 Max. Elev.(ft) = 550 Incr.(ft) = .2

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

****
SYSTEM CONNECTIVITY
****

Structure	No.	Q Table		Q Table
WEIR-VR	1		->	1
ORIFICE	2	? 1	->	A
WEIR-VR	3		->	3

Outflow rating table summary was stored in file:
e:\pondpack\12003\BASINA1 .PND

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	542
E2 elev.(ft)?	543.083
Weir coefficient?	3
Weir elev.(ft)?	542
Length (ft)?	.542
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	543.083
E2 elev.(ft)?	550
Orifice coeff.?	.6
Invert elev.(ft)?	542
Datum elev.(ft) ?	542.542
Orifice area (sq ft)?	.587

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	546.25
E2 elev.(ft)?	547.80
Weir coefficient?	3
Weir elev.(ft)?	546.25
Length (ft)?	1.25
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

Outflow Rating Table for Structure #1
WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
542.00	0.0	H =0.0
542.20	0.1	H =.2
542.40	0.4	H =.4
542.60	0.8	H =.6
542.80	1.2	H =.8
543.00	1.6	H =1.0
543.20	0.0	E = or > E2=543.083
543.40	0.0	E = or > E2=543.083
543.60	0.0	E = or > E2=543.083
543.80	0.0	E = or > E2=543.083
544.00	0.0	E = or > E2=543.083
544.20	0.0	E = or > E2=543.083
544.40	0.0	E = or > E2=543.083
544.60	0.0	E = or > E2=543.083
544.80	0.0	E = or > E2=543.083
545.00	0.0	E = or > E2=543.083
545.20	0.0	E = or > E2=543.083
545.40	0.0	E = or > E2=543.083
545.60	0.0	E = or > E2=543.083
545.80	0.0	E = or > E2=543.083
546.00	0.0	E = or > E2=543.083
546.20	0.0	E = or > E2=543.083
546.40	0.0	E = or > E2=543.083
546.60	0.0	E = or > E2=543.083
546.80	0.0	E = or > E2=543.083
547.00	0.0	E = or > E2=543.083
547.20	0.0	E = or > E2=543.083
547.40	0.0	E = or > E2=543.083
547.60	0.0	E = or > E2=543.083
547.80	0.0	E = or > E2=543.083
548.00	0.0	E = or > E2=543.083
548.20	0.0	E = or > E2=543.083
548.40	0.0	E = or > E2=543.083
548.60	0.0	E = or > E2=543.083

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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Outflow Rating Table for Structure #1
WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
548.80	0.0	E = or > E2=543.083
549.00	0.0	E = or > E2=543.083
549.20	0.0	E = or > E2=543.083
549.40	0.0	E = or > E2=543.083
549.60	0.0	E = or > E2=543.083
549.80	0.0	E = or > E2=543.083
550.00	0.0	E = or > E2=543.083

C = 3 L (ft) = .542
H (ft) = Table elev. - Invert elev. (542 ft)
Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

Outflow Rating Table for Structure #2
ORIFICE Orifice - Based on Area and Datum Elevation

Elevation (ft)	Q (cfs)	Computation Messages
542.00	0.0	E < E1=543.083
542.20	0.0	E < E1=543.083
542.40	0.0	E < E1=543.083
542.60	0.0	E < E1=543.083
542.80	0.0	E < E1=543.083
543.00	0.0	E < E1=543.083
543.20	2.3	H =.658
543.40	2.6	H =.858
543.60	2.9	H =1.058
543.80	3.2	H =1.258
544.00	3.4	H =1.458
544.20	3.6	H =1.658
544.40	3.9	H =1.858
544.60	4.1	H =2.058
544.80	4.2	H =2.258
545.00	4.4	H =2.458
545.20	4.6	H =2.658
545.40	4.8	H =2.858
545.60	4.9	H =3.058
545.80	5.1	H =3.258
546.00	5.3	H =3.458
546.20	5.4	H =3.658
546.40	5.6	H =3.858
546.60	5.7	H =4.058
546.80	5.8	H =4.258
547.00	6.0	H =4.458
547.20	6.1	H =4.658
547.40	6.2	H =4.858
547.60	6.4	H =5.058
547.80	6.5	H =5.258
548.00	6.6	H =5.458
548.20	6.7	H =5.658
548.40	6.8	H =5.858
548.60	7.0	H =6.058

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

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Outflow Rating Table for Structure #2
ORIFICE Orifice - Based on Area and Datum Elevation

Elevation (ft)	Q (cfs)	Computation Messages
548.80	7.1	H =6.258
549.00	7.2	H =6.458
549.20	7.3	H =6.658
549.40	7.4	H =6.858
549.60	7.5	H =7.058
549.80	7.6	H =7.258
550.00	0.0	E = or > E2=550

C = .6 A = .587 sq.ft.
H (ft) = Table elev. - Datum elev. (542.542 ft)
Q (cfs) = C * A * sqr(2g * H)

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

Outflow Rating Table for Structure #3
WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
542.00	0.0	E < Inv.El.= 546.25
542.20	0.0	E < Inv.El.= 546.25
542.40	0.0	E < Inv.El.= 546.25
542.60	0.0	E < Inv.El.= 546.25
542.80	0.0	E < Inv.El.= 546.25
543.00	0.0	E < Inv.El.= 546.25
543.20	0.0	E < Inv.El.= 546.25
543.40	0.0	E < Inv.El.= 546.25
543.60	0.0	E < Inv.El.= 546.25
543.80	0.0	E < Inv.El.= 546.25
544.00	0.0	E < Inv.El.= 546.25
544.20	0.0	E < Inv.El.= 546.25
544.40	0.0	E < Inv.El.= 546.25
544.60	0.0	E < Inv.El.= 546.25
544.80	0.0	E < Inv.El.= 546.25
545.00	0.0	E < Inv.El.= 546.25
545.20	0.0	E < Inv.El.= 546.25
545.40	0.0	E < Inv.El.= 546.25
545.60	0.0	E < Inv.El.= 546.25
545.80	0.0	E < Inv.El.= 546.25
546.00	0.0	E < Inv.El.= 546.25
546.20	0.0	E < Inv.El.= 546.25
546.40	0.2	H =.15
546.60	0.8	H =.35
546.80	1.5	H =.55
547.00	2.4	H =.750
547.20	3.5	H =.95
547.40	4.6	H =1.15
547.60	5.9	H =1.35
547.80	0.0	E = or > E2=547.80
548.00	0.0	E = or > E2=547.80
548.20	0.0	E = or > E2=547.80
548.40	0.0	E = or > E2=547.80
548.60	0.0	E = or > E2=547.80

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

>>>>> CONTINUED from previous page <<<<<

Outflow Rating Table for Structure #3
WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
548.80	0.0	E = or > E2=547.80
549.00	0.0	E = or > E2=547.80
549.20	0.0	E = or > E2=547.80
549.40	0.0	E = or > E2=547.80
549.60	0.0	E = or > E2=547.80
549.80	0.0	E = or > E2=547.80
550.00	0.0	E = or > E2=547.80

C = 3 L (ft) = 1.25
H (ft) = Table elev. - Invert elev. (546.25 ft)
Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: BASINA1 .STR

POND-2 Version: 5.20 S/N:
Date Executed: Time Executed:

Outflow Rating Table A
Table A = 1 ? 2

Elevation (ft)	Q (cfs)	Contributing Structures
542.00	0.0	1
542.20	0.1	1
542.40	0.4	1
542.60	0.8	1
542.80	1.2	1
543.00	1.6	1
543.20	2.3	2
543.40	2.6	2
543.60	2.9	2
543.80	3.2	2
544.00	3.4	2
544.20	3.6	2
544.40	3.9	2
544.60	4.1	2
544.80	4.2	2
545.00	4.4	2
545.20	4.6	2
545.40	4.8	2
545.60	4.9	2
545.80	5.1	2
546.00	5.3	2
546.20	5.4	2
546.40	5.6	2
546.60	5.7	2
546.80	5.8	2
547.00	6.0	2
547.20	6.1	2
547.40	6.2	2
547.60	6.4	2
547.80	6.5	2
548.00	6.6	2
548.20	6.7	2
548.40	6.8	2
548.60	7.0	2
548.80	7.1	2
549.00	7.2	2
549.20	7.3	2
549.40	7.4	2
549.60	7.5	2
549.80	7.6	2
550.00	0.0	-

Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Rating Table file: e:\pondpack\12003\BASINA1 .PND

----INITIAL CONDITIONS----
Elevation = 542.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + O (cfs)
542.00	0.0	0	0.0	0.0
542.20	0.1	13	0.4	0.5
542.40	0.4	101	3.4	3.8
542.60	0.8	339	11.3	12.1
542.80	1.2	773	25.8	27.0
543.00	1.6	1,263	42.1	43.7
543.20	2.3	1,782	59.4	61.7
543.40	2.6	2,332	77.7	80.3
543.60	2.9	2,911	97.0	99.9
543.80	3.2	3,523	117.4	120.6
544.00	3.4	4,167	138.9	142.3
544.20	3.6	4,843	161.4	165.0
544.40	3.9	5,552	185.1	189.0
544.60	4.1	6,294	209.8	213.9
544.80	4.2	7,069	235.6	239.8
545.00	4.4	7,880	262.7	267.1
545.20	4.6	8,726	290.9	295.5
545.40	4.8	9,608	320.3	325.1
545.60	4.9	10,527	350.9	355.8
545.80	5.1	11,483	382.8	387.9
546.00	5.3	12,479	416.0	421.3
546.20	5.4	13,512	450.4	455.8
546.40	5.8	14,584	486.1	491.9
546.60	6.5	15,694	523.1	529.6
546.80	7.4	16,845	561.5	568.9
547.00	8.4	18,035	601.2	609.6
547.20	9.6	19,267	642.2	651.8
547.40	10.9	20,540	684.7	695.6
547.60	12.2	21,855	728.5	740.7
547.80	6.5	23,214	773.8	780.3
548.00	6.6	24,617	820.6	827.2

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.20	6.7	26,063
548.40	6.8	27,553
548.60	7.0	29,088
548.80	7.1	30,668
549.00	7.2	32,293
549.20	7.3	33,965
549.40	7.4	35,684
549.60	7.5	37,451
549.80	7.6	39,266

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
868.8	875.5
918.4	925.2
969.6	976.6
1022.2	1029.3
1076.4	1083.6
1132.2	1139.5
1189.5	1196.9
1248.4	1255.9
1308.9	1316.5

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .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	542.00
1.0	4.76	4.8	3.9	4.8	0.45	542.42
2.0	9.52	14.3	16.2	18.1	0.96	542.68
3.0	9.52	19.0	32.5	35.3	1.40	542.90
4.0	9.52	19.0	47.7	51.5	1.90	543.09
5.0	9.52	19.0	62.0	66.7	2.38	543.25
6.0	9.52	19.0	75.8	81.0	2.61	543.41
7.0	9.52	19.0	89.2	94.8	2.82	543.55
8.0	9.52	19.0	102.2	108.2	3.02	543.68
9.0	9.52	19.0	114.8	121.2	3.21	543.81
10.0	9.52	19.0	127.2	133.9	3.32	543.92
11.0	9.52	19.0	139.4	146.3	3.43	544.03
12.0	9.52	19.0	151.3	158.4	3.54	544.14
13.0	9.52	19.0	163.0	170.4	3.67	544.24
14.0	9.52	19.0	174.5	182.1	3.81	544.34
15.0	9.52	19.0	185.6	193.5	3.94	544.44
16.0	9.52	19.0	196.6	204.7	4.03	544.53
17.0	9.52	19.0	207.4	215.7	4.11	544.61
18.0	9.52	19.0	218.2	226.5	4.15	544.70
19.0	9.52	19.0	228.8	237.2	4.19	544.78
20.0	9.52	19.0	239.4	247.9	4.26	544.86
21.0	4.76	14.3	245.0	253.6	4.30	544.90
22.0	0.00	4.8	241.3	249.8	4.27	544.87
23.0	0.00	0.0	232.8	241.3	4.21	544.81
24.0	0.00	0.0	224.5	232.8	4.17	544.75
25.0	0.00	0.0	216.2	224.5	4.14	544.68
26.0	0.00	0.0	208.0	216.2	4.11	544.62
27.0	0.00	0.0	199.9	208.0	4.05	544.55
28.0	0.00	0.0	191.9	199.9	3.99	544.49
29.0	0.00	0.0	184.1	191.9	3.92	544.42
30.0	0.00	0.0	176.4	184.1	3.84	544.36
31.0	0.00	0.0	168.9	176.4	3.74	544.29
32.0	0.00	0.0	161.6	168.9	3.65	544.23
33.0	0.00	0.0	154.5	161.6	3.57	544.17
34.0	0.00	0.0	147.4	154.5	3.51	544.11
35.0	0.00	0.0	140.6	147.4	3.45	544.05
36.0	0.00	0.0	133.8	140.6	3.38	543.98
37.0	0.00	0.0	127.1	133.8	3.32	543.92
38.0	0.00	0.0	120.6	127.1	3.26	543.86
39.0	0.00	0.0	114.2	120.6	3.20	543.80
40.0	0.00	0.0	108.0	114.2	3.11	543.74
41.0	0.00	0.0	102.0	108.0	3.02	543.68
42.0	0.00	0.0	96.1	102.0	2.93	543.62
43.0	0.00	0.0	90.4	96.1	2.84	543.56
44.0	0.00	0.0	84.9	90.4	2.75	543.50

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .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	79.6	84.9	2.67	543.45
46.0	0.00	0.0	74.4	79.6	2.59	543.39
47.0	0.00	0.0	69.4	74.4	2.50	543.34
48.0	0.00	0.0	64.6	69.4	2.42	543.28
49.0	0.00	0.0	59.9	64.6	2.35	543.23
50.0	0.00	0.0	55.4	59.9	2.23	543.18
51.0	0.00	0.0	51.3	55.4	2.05	543.13
52.0	0.00	0.0	47.5	51.3	1.89	543.08
53.0	0.00	0.0	44.0	47.5	1.75	543.04
54.0	0.00	0.0	40.8	44.0	1.61	543.00
55.0	0.00	0.0	37.7	40.8	1.53	542.97
56.0	0.00	0.0	34.8	37.7	1.46	542.93
57.0	0.00	0.0	32.0	34.8	1.39	542.89
58.0	0.00	0.0	29.4	32.0	1.32	542.86
59.0	0.00	0.0	26.9	29.4	1.26	542.83
60.0	0.00	0.0	24.5	26.9	1.20	542.80
61.0	0.00	0.0	22.2	24.5	1.13	542.77
62.0	0.00	0.0	20.1	22.2	1.07	542.74
63.0	0.00	0.0	18.0	20.1	1.01	542.71
64.0	0.00	0.0	16.1	18.0	0.96	542.68
65.0	0.00	0.0	14.3	16.1	0.91	542.65
66.0	0.00	0.0	12.6	14.3	0.86	542.63
67.0	0.00	0.0	11.0	12.6	0.81	542.61
68.0	0.00	0.0	9.5	11.0	0.75	542.57
69.0	0.00	0.0	8.1	9.5	0.67	542.54
70.0	0.00	0.0	6.9	8.1	0.61	542.50
71.0	0.00	0.0	5.8	6.9	0.55	542.48
72.0	0.00	0.0	4.8	5.8	0.50	542.45
73.0	0.00	0.0	3.9	4.8	0.45	542.43
74.0	0.00	0.0	3.1	3.9	0.41	542.40
75.0	0.00	0.0	2.4	3.1	0.34	542.36
76.0	0.00	0.0	1.9	2.4	0.28	542.32
77.0	0.00	0.0	1.4	1.9	0.22	542.28
78.0	0.00	0.0	1.0	1.4	0.18	542.26
79.0	0.00	0.0	0.8	1.0	0.15	542.23
80.0	0.00	0.0	0.5	0.8	0.12	542.21
81.0	0.00	0.0	0.3	0.5	0.10	542.20
82.0	0.00	0.0	0.2	0.3	0.06	542.12
83.0	0.00	0.0	0.1	0.2	0.04	542.07
84.0	0.00	0.0	0.1	0.1	0.02	542.05
85.0	0.00	0.0	0.0	0.1	0.01	542.03
86.0	0.00	0.0	0.0	0.0	0.01	542.02
87.0	0.00	0.0	0.0	0.0	0.01	542.01
88.0	0.00	0.0	0.0	0.0	0.00	542.01
89.0	0.00	0.0	0.0	0.0	0.00	542.00
90.0	0.00	0.0	0.0	0.0	0.00	542.00

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	0.0	0.0	0.00	542.00
92.0	0.00	0.0	0.0	0.0	0.00	542.00
93.0	0.00	0.0	0.0	0.0	0.00	542.00
94.0	0.00	0.0	0.0	0.0	0.00	542.00
95.0	0.00	0.0	0.0	0.0	0.00	542.00
96.0	0.00	0.0	0.0	0.0	0.00	542.00
97.0	0.00	0.0	0.0	0.0	0.00	542.00
98.0	0.00	0.0	0.0	0.0	0.00	542.00
99.0	0.00	0.0	0.0	0.0	0.00	542.00
100.0	0.00	0.0	0.0	0.0	0.00	542.00
101.0	0.00	0.0	0.0	0.0	0.00	542.00
102.0	0.00	0.0	0.0	0.0	0.00	542.00
103.0	0.00	0.0	0.0	0.0	0.00	542.00
104.0	0.00	0.0	0.0	0.0	0.00	542.00
105.0	0.00	0.0	0.0	0.0	0.00	542.00
106.0	0.00	0.0	0.0	0.0	0.00	542.00
107.0	0.00	0.0	0.0	0.0	0.00	542.00
108.0	0.00	0.0	0.0	0.0	0.00	542.00
109.0	0.00	0.0	0.0	0.0	0.00	542.00
110.0	0.00	0.0	0.0	0.0	0.00	542.00
111.0	0.00	0.0	0.0	0.0	0.00	542.00
112.0	0.00	0.0	0.0	0.0	0.00	542.00
113.0	0.00	0.0	0.0	0.0	0.00	542.00
114.0	0.00	0.0	0.0	0.0	0.00	542.00
115.0	0.00	0.0	0.0	0.0	0.00	542.00
116.0	0.00	0.0	0.0	0.0	0.00	542.00
117.0	0.00	0.0	0.0	0.0	0.00	542.00
118.0	0.00	0.0	0.0	0.0	0.00	542.00
119.0	0.00	0.0	0.0	0.0	0.00	542.00
120.0	0.00	0.0	0.0	0.0	0.00	542.00
121.0	0.00	0.0	0.0	0.0	0.00	542.00
122.0	0.00	0.0	0.0	0.0	0.00	542.00
123.0	0.00	0.0	0.0	0.0	0.00	542.00
124.0	0.00	0.0	0.0	0.0	0.00	542.00
125.0	0.00	0.0	0.0	0.0	0.00	542.00
126.0	0.00	0.0	0.0	0.0	0.00	542.00
127.0	0.00	0.0	0.0	0.0	0.00	542.00
128.0	0.00	0.0	0.0	0.0	0.00	542.00
129.0	0.00	0.0	0.0	0.0	0.00	542.00
130.0	0.00	0.0	0.0	0.0	0.00	542.00
131.0	0.00	0.0	0.0	0.0	0.00	542.00
132.0	0.00	0.0	0.0	0.0	0.00	542.00
133.0	0.00	0.0	0.0	0.0	0.00	542.00
134.0	0.00	0.0	0.0	0.0	0.00	542.00
135.0	0.00	0.0	0.0	0.0	0.00	542.00
136.0	0.00	0.0	0.0	0.0	0.00	542.00

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	0.0	0.0	0.00	542.00
138.0	0.00	0.0	0.0	0.0	0.00	542.00
139.0	0.00	0.0	0.0	0.0	0.00	542.00
140.0	0.00	0.0	0.0	0.0	0.00	542.00
141.0	0.00	0.0	0.0	0.0	0.00	542.00
142.0	0.00	0.0	0.0	0.0	0.00	542.00
143.0	0.00	0.0	0.0	0.0	0.00	542.00
144.0	0.00	0.0	0.0	0.0	0.00	542.00
145.0	0.00	0.0	0.0	0.0	0.00	542.00
146.0	0.00	0.0	0.0	0.0	0.00	542.00
147.0	0.00	0.0	0.0	0.0	0.00	542.00
148.0	0.00	0.0	0.0	0.0	0.00	542.00
149.0	0.00	0.0	0.0	0.0	0.00	542.00
150.0	0.00	0.0	0.0	0.0	0.00	542.00
151.0	0.00	0.0	0.0	0.0	0.00	542.00

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

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .HYD

Starting Pond W.S. Elevation = 542.00 ft

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

Peak Inflow	=	9.52 cfs
Peak Outflow	=	4.30 cfs
Peak Elevation	=	544.90 ft

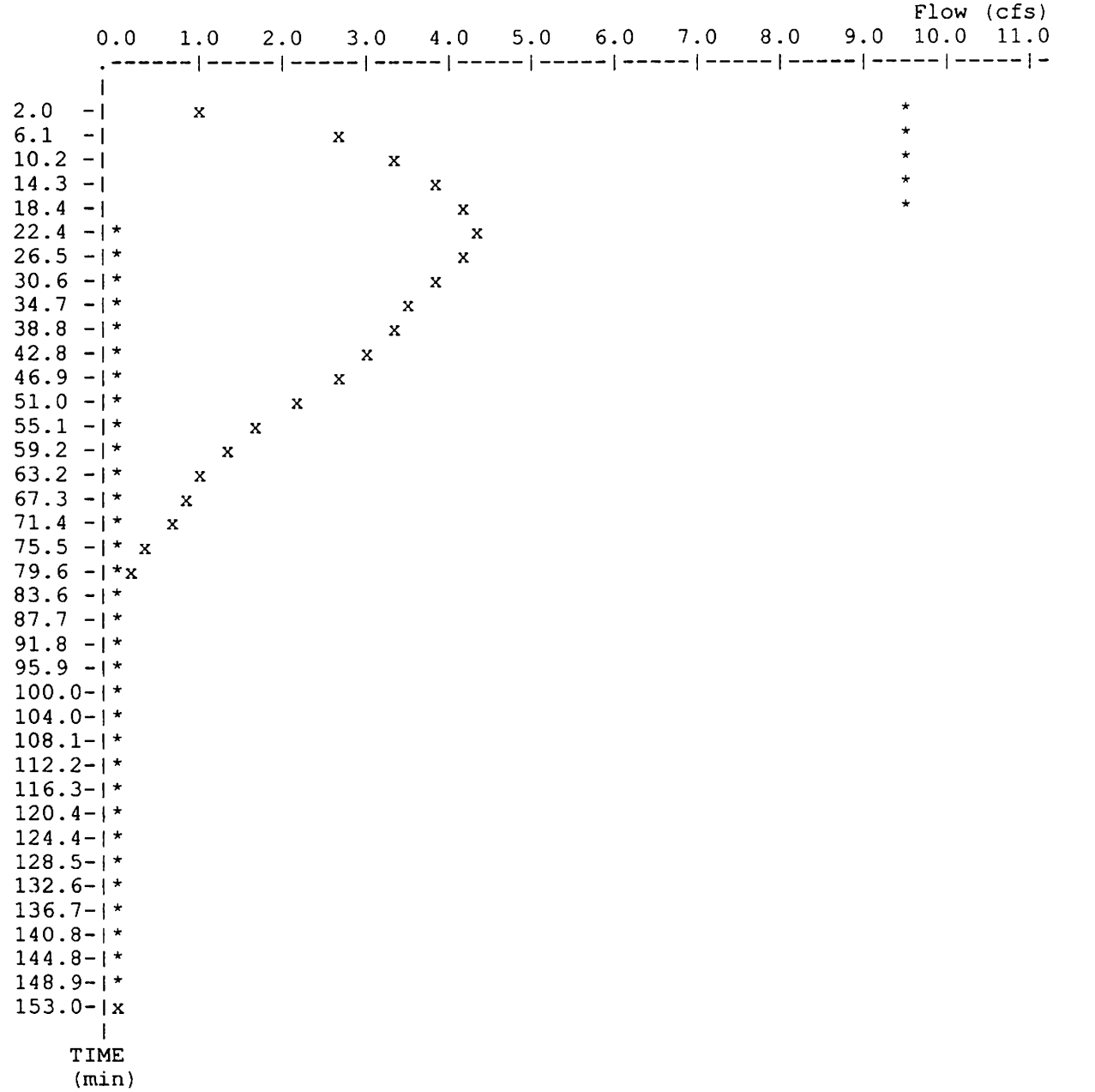
***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	7,480 cu-ft
Total Storage in Pond	=	7,480 cu-ft

2 Return Freq: 2 years

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\2-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2-OUT1 .HYD
EXECUTED: 04-01-2003 13:21:05

Peak Inflow = 9.52 cfs
Peak Outflow = 4.30 cfs
Peak Elevation = 544.90 ft



x File: e:\pondpack\12003\2-OUT1 .HYD Qmax = 4.3 cfs
* File: e:\pondpack\12003\2-IN .HYD Qmax = 9.5 cfs

Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Rating Table file: e:\pondpack\12003\BASINA1 .PND

----INITIAL CONDITIONS----
Elevation = 542.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
542.00	0.0	0
542.20	0.1	13
542.40	0.4	101
542.60	0.8	339
542.80	1.2	773
543.00	1.6	1,263
543.20	2.3	1,782
543.40	2.6	2,332
543.60	2.9	2,911
543.80	3.2	3,523
544.00	3.4	4,167
544.20	3.6	4,843
544.40	3.9	5,552
544.60	4.1	6,294
544.80	4.2	7,069
545.00	4.4	7,880
545.20	4.6	8,726
545.40	4.8	9,608
545.60	4.9	10,527
545.80	5.1	11,483
546.00	5.3	12,479
546.20	5.4	13,512
546.40	5.8	14,584
546.60	6.5	15,694
546.80	7.4	16,845
547.00	8.4	18,035
547.20	9.6	19,267
547.40	10.9	20,540
547.60	12.2	21,855
547.80	6.5	23,214
548.00	6.6	24,617

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
0.0	0.0
0.4	0.5
3.4	3.8
11.3	12.1
25.8	27.0
42.1	43.7
59.4	61.7
77.7	80.3
97.0	99.9
117.4	120.6
138.9	142.3
161.4	165.0
185.1	189.0
209.8	213.9
235.6	239.8
262.7	267.1
290.9	295.5
320.3	325.1
350.9	355.8
382.8	387.9
416.0	421.3
450.4	455.8
486.1	491.9
523.1	529.6
561.5	568.9
601.2	609.6
642.2	651.8
684.7	695.6
728.5	740.7
773.8	780.3
820.6	827.2

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.20	6.7	26,063
548.40	6.8	27,553
548.60	7.0	29,088
548.80	7.1	30,668
549.00	7.2	32,293
549.20	7.3	33,965
549.40	7.4	35,684
549.60	7.5	37,451
549.80	7.6	39,266

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
868.8	875.5
918.4	925.2
969.6	976.6
1022.2	1029.3
1076.4	1083.6
1132.2	1139.5
1189.5	1196.9
1248.4	1255.9
1308.9	1316.5

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .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	542.00
1.0	7.80	7.8	6.6	7.8	0.59	542.50
2.0	15.60	23.4	27.5	30.0	1.27	542.84
3.0	15.60	31.2	54.3	58.7	2.18	543.17
4.0	15.60	31.2	80.1	85.5	2.68	543.45
5.0	15.60	31.2	105.2	111.3	3.07	543.71
6.0	15.60	31.2	129.7	136.4	3.35	543.95
7.0	15.60	31.2	153.8	160.9	3.56	544.16
8.0	15.60	31.2	177.3	185.0	3.85	544.37
9.0	15.60	31.2	200.4	208.5	4.06	544.56
10.0	15.60	31.2	223.2	231.6	4.17	544.74
11.0	15.60	31.2	245.8	254.4	4.31	544.91
12.0	15.60	31.2	268.1	277.0	4.47	545.07
13.0	15.60	31.2	290.0	299.3	4.63	545.23
14.0	15.60	31.2	311.7	321.2	4.77	545.37
15.0	15.60	31.2	333.2	342.9	4.86	545.52
16.0	15.60	31.2	354.5	364.4	4.95	545.65
17.0	15.60	31.2	375.5	385.7	5.09	545.79
18.0	15.60	31.2	396.3	406.7	5.21	545.91
19.0	15.60	31.2	416.8	427.5	5.32	546.04
20.0	15.60	31.2	437.3	448.0	5.38	546.15
21.0	7.80	23.4	449.8	460.7	5.45	546.23
22.0	0.00	7.8	446.7	457.6	5.42	546.21
23.0	0.00	0.0	436.0	446.7	5.37	546.15
24.0	0.00	0.0	425.3	436.0	5.34	546.09
25.0	0.00	0.0	414.7	425.3	5.31	546.02
26.0	0.00	0.0	404.2	414.7	5.26	545.96
27.0	0.00	0.0	393.8	404.2	5.20	545.90
28.0	0.00	0.0	383.5	393.8	5.14	545.84
29.0	0.00	0.0	373.3	383.5	5.07	545.77
30.0	0.00	0.0	363.3	373.3	5.01	545.71
31.0	0.00	0.0	353.4	363.3	4.95	545.65
32.0	0.00	0.0	343.6	353.4	4.89	545.58
33.0	0.00	0.0	333.9	343.6	4.86	545.52
34.0	0.00	0.0	324.3	333.9	4.83	545.46
35.0	0.00	0.0	314.7	324.3	4.79	545.39
36.0	0.00	0.0	305.2	314.7	4.73	545.33
37.0	0.00	0.0	295.9	305.2	4.67	545.27
38.0	0.00	0.0	286.7	295.9	4.60	545.20
39.0	0.00	0.0	277.6	286.7	4.54	545.14
40.0	0.00	0.0	268.7	277.6	4.47	545.07
41.0	0.00	0.0	259.8	268.7	4.41	545.01
42.0	0.00	0.0	251.1	259.8	4.35	544.95
43.0	0.00	0.0	242.6	251.1	4.28	544.88
44.0	0.00	0.0	234.1	242.6	4.22	544.82

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .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	225.8	234.1	4.18	544.76
46.0	0.00	0.0	217.5	225.8	4.15	544.69
47.0	0.00	0.0	209.3	217.5	4.11	544.63
48.0	0.00	0.0	201.1	209.3	4.06	544.56
49.0	0.00	0.0	193.1	201.1	4.00	544.50
50.0	0.00	0.0	185.3	193.1	3.93	544.43
51.0	0.00	0.0	177.6	185.3	3.85	544.37
52.0	0.00	0.0	170.0	177.6	3.76	544.30
53.0	0.00	0.0	162.7	170.0	3.66	544.24
54.0	0.00	0.0	155.6	162.7	3.58	544.18
55.0	0.00	0.0	148.5	155.6	3.52	544.12
56.0	0.00	0.0	141.6	148.5	3.45	544.05
57.0	0.00	0.0	134.8	141.6	3.39	543.99
58.0	0.00	0.0	128.2	134.8	3.33	543.93
59.0	0.00	0.0	121.6	128.2	3.27	543.87
60.0	0.00	0.0	115.2	121.6	3.21	543.81
61.0	0.00	0.0	109.0	115.2	3.12	543.75
62.0	0.00	0.0	102.9	109.0	3.03	543.69
63.0	0.00	0.0	97.0	102.9	2.94	543.63
64.0	0.00	0.0	91.3	97.0	2.86	543.57
65.0	0.00	0.0	85.8	91.3	2.77	543.51
66.0	0.00	0.0	80.4	85.8	2.68	543.46
67.0	0.00	0.0	75.2	80.4	2.60	543.40
68.0	0.00	0.0	70.2	75.2	2.52	543.34
69.0	0.00	0.0	65.3	70.2	2.44	543.29
70.0	0.00	0.0	60.6	65.3	2.36	543.24
71.0	0.00	0.0	56.1	60.6	2.26	543.19
72.0	0.00	0.0	51.9	56.1	2.08	543.14
73.0	0.00	0.0	48.1	51.9	1.92	543.09
74.0	0.00	0.0	44.5	48.1	1.77	543.05
75.0	0.00	0.0	41.3	44.5	1.63	543.01
76.0	0.00	0.0	38.2	41.3	1.54	542.97
77.0	0.00	0.0	35.2	38.2	1.47	542.93
78.0	0.00	0.0	32.5	35.2	1.40	542.90
79.0	0.00	0.0	29.8	32.5	1.33	542.87
80.0	0.00	0.0	27.3	29.8	1.27	542.83
81.0	0.00	0.0	24.8	27.3	1.21	542.80
82.0	0.00	0.0	22.6	24.8	1.14	542.77
83.0	0.00	0.0	20.4	22.6	1.08	542.74
84.0	0.00	0.0	18.3	20.4	1.02	542.71
85.0	0.00	0.0	16.4	18.3	0.97	542.68
86.0	0.00	0.0	14.6	16.4	0.92	542.66
87.0	0.00	0.0	12.8	14.6	0.87	542.63
88.0	0.00	0.0	11.2	12.8	0.82	542.61
89.0	0.00	0.0	9.7	11.2	0.76	542.58
90.0	0.00	0.0	8.3	9.7	0.68	542.54

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	7.1	8.3	0.62	542.51
92.0	0.00	0.0	6.0	7.1	0.56	542.48
93.0	0.00	0.0	5.0	6.0	0.51	542.45
94.0	0.00	0.0	4.0	5.0	0.46	542.43
95.0	0.00	0.0	3.2	4.0	0.41	542.41
96.0	0.00	0.0	2.5	3.2	0.35	542.37
97.0	0.00	0.0	1.9	2.5	0.29	542.32
98.0	0.00	0.0	1.5	1.9	0.23	542.29
99.0	0.00	0.0	1.1	1.5	0.19	542.26
100.0	0.00	0.0	0.8	1.1	0.15	542.24
101.0	0.00	0.0	0.5	0.8	0.13	542.22
102.0	0.00	0.0	0.3	0.5	0.10	542.20
103.0	0.00	0.0	0.2	0.3	0.07	542.13
104.0	0.00	0.0	0.1	0.2	0.04	542.08
105.0	0.00	0.0	0.1	0.1	0.02	542.05
106.0	0.00	0.0	0.0	0.1	0.02	542.03
107.0	0.00	0.0	0.0	0.0	0.01	542.02
108.0	0.00	0.0	0.0	0.0	0.01	542.01
109.0	0.00	0.0	0.0	0.0	0.00	542.01
110.0	0.00	0.0	0.0	0.0	0.00	542.00
111.0	0.00	0.0	0.0	0.0	0.00	542.00
112.0	0.00	0.0	0.0	0.0	0.00	542.00
113.0	0.00	0.0	0.0	0.0	0.00	542.00
114.0	0.00	0.0	0.0	0.0	0.00	542.00
115.0	0.00	0.0	0.0	0.0	0.00	542.00
116.0	0.00	0.0	0.0	0.0	0.00	542.00
117.0	0.00	0.0	0.0	0.0	0.00	542.00
118.0	0.00	0.0	0.0	0.0	0.00	542.00
119.0	0.00	0.0	0.0	0.0	0.00	542.00
120.0	0.00	0.0	0.0	0.0	0.00	542.00
121.0	0.00	0.0	0.0	0.0	0.00	542.00
122.0	0.00	0.0	0.0	0.0	0.00	542.00
123.0	0.00	0.0	0.0	0.0	0.00	542.00
124.0	0.00	0.0	0.0	0.0	0.00	542.00
125.0	0.00	0.0	0.0	0.0	0.00	542.00
126.0	0.00	0.0	0.0	0.0	0.00	542.00
127.0	0.00	0.0	0.0	0.0	0.00	542.00
128.0	0.00	0.0	0.0	0.0	0.00	542.00
129.0	0.00	0.0	0.0	0.0	0.00	542.00
130.0	0.00	0.0	0.0	0.0	0.00	542.00
131.0	0.00	0.0	0.0	0.0	0.00	542.00
132.0	0.00	0.0	0.0	0.0	0.00	542.00
133.0	0.00	0.0	0.0	0.0	0.00	542.00
134.0	0.00	0.0	0.0	0.0	0.00	542.00
135.0	0.00	0.0	0.0	0.0	0.00	542.00
136.0	0.00	0.0	0.0	0.0	0.00	542.00

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	0.0	0.0	0.00	542.00
138.0	0.00	0.0	0.0	0.0	0.00	542.00
139.0	0.00	0.0	0.0	0.0	0.00	542.00
140.0	0.00	0.0	0.0	0.0	0.00	542.00
141.0	0.00	0.0	0.0	0.0	0.00	542.00
142.0	0.00	0.0	0.0	0.0	0.00	542.00
143.0	0.00	0.0	0.0	0.0	0.00	542.00
144.0	0.00	0.0	0.0	0.0	0.00	542.00
145.0	0.00	0.0	0.0	0.0	0.00	542.00
146.0	0.00	0.0	0.0	0.0	0.00	542.00
147.0	0.00	0.0	0.0	0.0	0.00	542.00
148.0	0.00	0.0	0.0	0.0	0.00	542.00
149.0	0.00	0.0	0.0	0.0	0.00	542.00
150.0	0.00	0.0	0.0	0.0	0.00	542.00
151.0	0.00	0.0	0.0	0.0	0.00	542.00

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

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .HYD

Starting Pond W.S. Elevation = 542.00 ft

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

Peak Inflow	=	15.60 cfs
Peak Outflow	=	5.45 cfs
Peak Elevation	=	546.23 ft

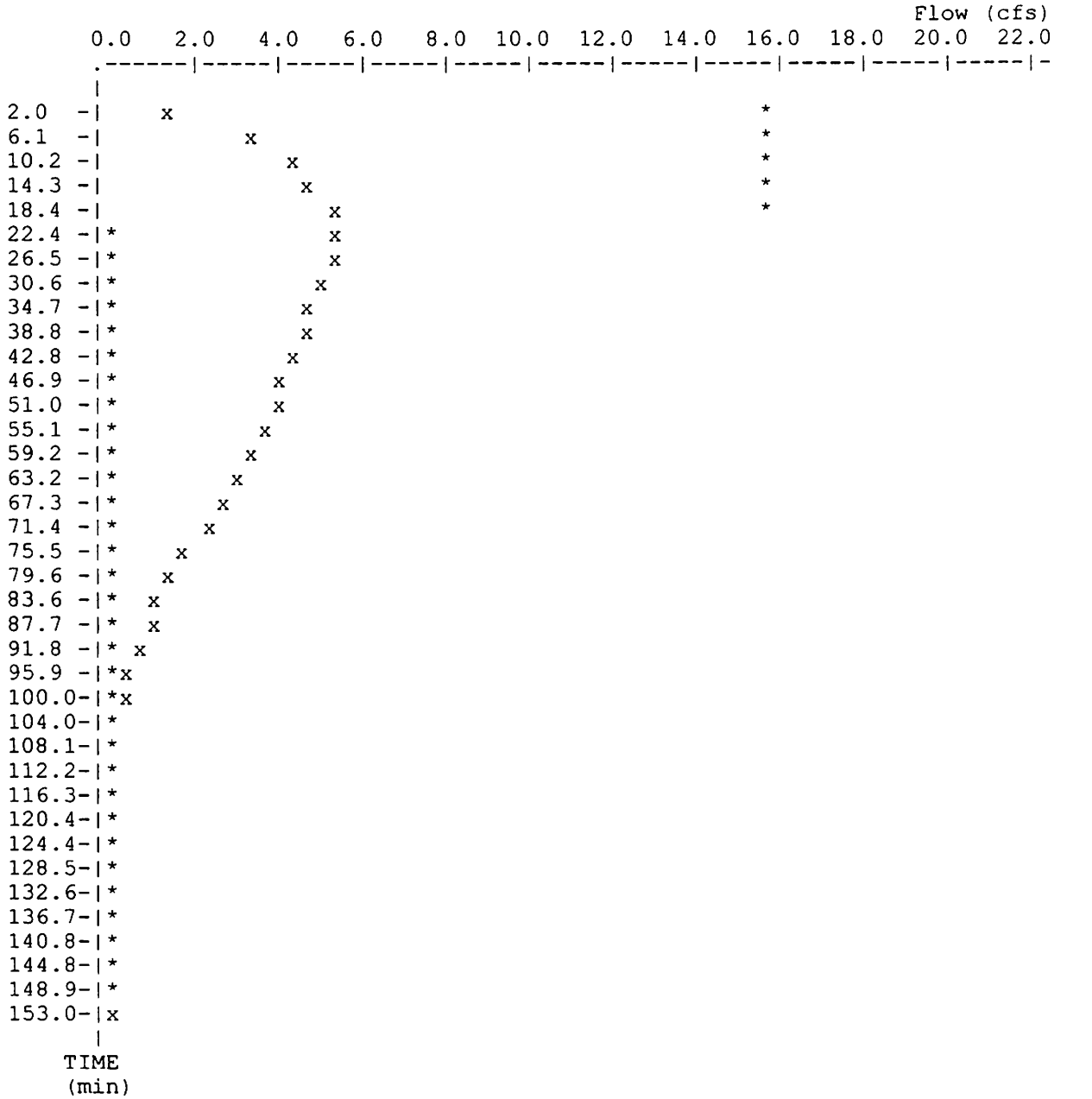
***** Summary of Approximate Peak Storage *****

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	13,657 cu-ft
Total Storage in Pond	=	13,657 cu-ft

15 Return Freq: 15 years

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\15-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15-OUT1 .HYD
EXECUTED: 04-01-2003 13:21:05

Peak Inflow = 15.60 cfs
Peak Outflow = 5.45 cfs
Peak Elevation = 546.23 ft



x File: e:\pondpack\12003\15-OUT1 .HYD Qmax = 5.4 cfs
* File: e:\pondpack\12003\15-IN .HYD Qmax = 15.6 cfs

Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Rating Table file: e:\pondpack\12003\BASINA1 .PND

----INITIAL CONDITIONS----
Elevation = 542.00 ft
Outflow = 0.00 cfs
Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + O (cfs)
542.00	0.0	0	0.0	0.0
542.20	0.1	13	0.4	0.5
542.40	0.4	101	3.4	3.8
542.60	0.8	339	11.3	12.1
542.80	1.2	773	25.8	27.0
543.00	1.6	1,263	42.1	43.7
543.20	2.3	1,782	59.4	61.7
543.40	2.6	2,332	77.7	80.3
543.60	2.9	2,911	97.0	99.9
543.80	3.2	3,523	117.4	120.6
544.00	3.4	4,167	138.9	142.3
544.20	3.6	4,843	161.4	165.0
544.40	3.9	5,552	185.1	189.0
544.60	4.1	6,294	209.8	213.9
544.80	4.2	7,069	235.6	239.8
545.00	4.4	7,880	262.7	267.1
545.20	4.6	8,726	290.9	295.5
545.40	4.8	9,608	320.3	325.1
545.60	4.9	10,527	350.9	355.8
545.80	5.1	11,483	382.8	387.9
546.00	5.3	12,479	416.0	421.3
546.20	5.4	13,512	450.4	455.8
546.40	5.8	14,584	486.1	491.9
546.60	6.5	15,694	523.1	529.6
546.80	7.4	16,845	561.5	568.9
547.00	8.4	18,035	601.2	609.6
547.20	9.6	19,267	642.2	651.8
547.40	10.9	20,540	684.7	695.6
547.60	12.2	21,855	728.5	740.7
547.80	6.5	23,214	773.8	780.3
548.00	6.6	24,617	820.6	827.2

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.20	6.7	26,063
548.40	6.8	27,553
548.60	7.0	29,088
548.80	7.1	30,668
549.00	7.2	32,293
549.20	7.3	33,965
549.40	7.4	35,684
549.60	7.5	37,451
549.80	7.6	39,266

INTERMEDIATE ROUTING COMPUTATIONS

2S/t (cfs)	2S/t + O (cfs)
868.8	875.5
918.4	925.2
969.6	976.6
1022.2	1029.3
1076.4	1083.6
1132.2	1139.5
1189.5	1196.9
1248.4	1255.9
1308.9	1316.5

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .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	542.00
1.0	9.64	9.6	8.3	9.6	0.68	542.54
2.0	19.27	28.9	34.3	37.2	1.44	542.92
3.0	19.27	38.5	67.9	72.8	2.48	543.32
4.0	19.27	38.5	100.4	106.4	2.99	543.66
5.0	19.27	38.5	132.2	139.0	3.37	543.97
6.0	19.27	38.5	163.4	170.8	3.67	544.25
7.0	19.27	38.5	194.0	202.0	4.00	544.50
8.0	19.27	38.5	224.2	232.5	4.17	544.74
9.0	19.27	38.5	254.0	262.7	4.37	544.97
10.0	19.27	38.5	283.3	292.5	4.58	545.18
11.0	19.27	38.5	312.3	321.9	4.78	545.38
12.0	19.27	38.5	341.1	350.9	4.88	545.57
13.0	19.27	38.5	369.5	379.6	5.05	545.75
14.0	19.27	38.5	397.6	408.1	5.22	545.92
15.0	19.27	38.5	425.5	436.2	5.34	546.09
16.0	19.27	38.5	453.0	464.0	5.49	546.25
17.0	19.27	38.5	480.0	491.6	5.80	546.40
18.0	19.27	38.5	505.9	518.5	6.29	546.54
19.0	19.27	38.5	530.8	544.5	6.84	546.68
20.0	19.27	38.5	554.5	569.3	7.41	546.80
21.0	9.64	28.9	567.9	583.4	7.76	546.87
22.0	0.00	9.6	562.3	577.6	7.61	546.84
23.0	0.00	0.0	547.8	562.3	7.25	546.77
24.0	0.00	0.0	534.0	547.8	6.92	546.69
25.0	0.00	0.0	520.8	534.0	6.60	546.62
26.0	0.00	0.0	508.1	520.8	6.34	546.55
27.0	0.00	0.0	495.9	508.1	6.10	546.49
28.0	0.00	0.0	484.2	495.9	5.87	546.42
29.0	0.00	0.0	472.8	484.2	5.71	546.36
30.0	0.00	0.0	461.6	472.8	5.59	546.29
31.0	0.00	0.0	450.6	461.6	5.46	546.23
32.0	0.00	0.0	439.9	450.6	5.39	546.17
33.0	0.00	0.0	429.2	439.9	5.35	546.11
34.0	0.00	0.0	418.5	429.2	5.32	546.05
35.0	0.00	0.0	408.0	418.5	5.28	545.98
36.0	0.00	0.0	397.5	408.0	5.22	545.92
37.0	0.00	0.0	387.2	397.5	5.16	545.86
38.0	0.00	0.0	377.0	387.2	5.10	545.80
39.0	0.00	0.0	366.9	377.0	5.03	545.73
40.0	0.00	0.0	357.0	366.9	4.97	545.67
41.0	0.00	0.0	347.2	357.0	4.91	545.61
42.0	0.00	0.0	337.4	347.2	4.87	545.54
43.0	0.00	0.0	327.8	337.4	4.84	545.48
44.0	0.00	0.0	318.1	327.8	4.81	545.42

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .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	308.6	318.1	4.75	545.35
46.0	0.00	0.0	299.3	308.6	4.69	545.29
47.0	0.00	0.0	290.0	299.3	4.63	545.23
48.0	0.00	0.0	280.9	290.0	4.56	545.16
49.0	0.00	0.0	271.9	280.9	4.50	545.10
50.0	0.00	0.0	263.0	271.9	4.43	545.03
51.0	0.00	0.0	254.3	263.0	4.37	544.97
52.0	0.00	0.0	245.7	254.3	4.31	544.91
53.0	0.00	0.0	237.2	245.7	4.24	544.84
54.0	0.00	0.0	228.8	237.2	4.19	544.78
55.0	0.00	0.0	220.5	228.8	4.16	544.71
56.0	0.00	0.0	212.2	220.5	4.13	544.65
57.0	0.00	0.0	204.1	212.2	4.09	544.59
58.0	0.00	0.0	196.0	204.1	4.02	544.52
59.0	0.00	0.0	188.1	196.0	3.96	544.46
60.0	0.00	0.0	180.3	188.1	3.89	544.39
61.0	0.00	0.0	172.7	180.3	3.79	544.33
62.0	0.00	0.0	165.4	172.7	3.70	544.26
63.0	0.00	0.0	158.1	165.4	3.60	544.20
64.0	0.00	0.0	151.1	158.1	3.54	544.14
65.0	0.00	0.0	144.1	151.1	3.48	544.08
66.0	0.00	0.0	137.3	144.1	3.42	544.02
67.0	0.00	0.0	130.6	137.3	3.35	543.95
68.0	0.00	0.0	124.0	130.6	3.29	543.89
69.0	0.00	0.0	117.5	124.0	3.23	543.83
70.0	0.00	0.0	111.2	117.5	3.16	543.77
71.0	0.00	0.0	105.1	111.2	3.06	543.71
72.0	0.00	0.0	99.1	105.1	2.97	543.65
73.0	0.00	0.0	93.4	99.1	2.89	543.59
74.0	0.00	0.0	87.8	93.4	2.80	543.53
75.0	0.00	0.0	82.3	87.8	2.71	543.48
76.0	0.00	0.0	77.1	82.3	2.63	543.42
77.0	0.00	0.0	72.0	77.1	2.55	543.37
78.0	0.00	0.0	67.1	72.0	2.47	543.31
79.0	0.00	0.0	62.3	67.1	2.39	543.26
80.0	0.00	0.0	57.7	62.3	2.31	543.21
81.0	0.00	0.0	53.4	57.7	2.14	543.15
82.0	0.00	0.0	49.4	53.4	1.98	543.11
83.0	0.00	0.0	45.8	49.4	1.82	543.06
84.0	0.00	0.0	42.4	45.8	1.68	543.02
85.0	0.00	0.0	39.3	42.4	1.57	542.98
86.0	0.00	0.0	36.3	39.3	1.49	542.95
87.0	0.00	0.0	33.4	36.3	1.42	542.91
88.0	0.00	0.0	30.7	33.4	1.35	542.88
89.0	0.00	0.0	28.2	30.7	1.29	542.84
90.0	0.00	0.0	25.7	28.2	1.23	542.81

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	23.4	25.7	1.17	542.78
92.0	0.00	0.0	21.2	23.4	1.10	542.75
93.0	0.00	0.0	19.1	21.2	1.04	542.72
94.0	0.00	0.0	17.1	19.1	0.99	542.69
95.0	0.00	0.0	15.2	17.1	0.93	542.67
96.0	0.00	0.0	13.5	15.2	0.88	542.64
97.0	0.00	0.0	11.8	13.5	0.84	542.62
98.0	0.00	0.0	10.2	11.8	0.78	542.59
99.0	0.00	0.0	8.8	10.2	0.71	542.55
100.0	0.00	0.0	7.5	8.8	0.64	542.52
101.0	0.00	0.0	6.4	7.5	0.58	542.49
102.0	0.00	0.0	5.3	6.4	0.52	542.46
103.0	0.00	0.0	4.4	5.3	0.47	542.44
104.0	0.00	0.0	3.5	4.4	0.43	542.41
105.0	0.00	0.0	2.7	3.5	0.38	542.38
106.0	0.00	0.0	2.1	2.7	0.31	542.34
107.0	0.00	0.0	1.6	2.1	0.25	542.30
108.0	0.00	0.0	1.2	1.6	0.20	542.27
109.0	0.00	0.0	0.9	1.2	0.17	542.24
110.0	0.00	0.0	0.6	0.9	0.13	542.22
111.0	0.00	0.0	0.4	0.6	0.11	542.21
112.0	0.00	0.0	0.3	0.4	0.08	542.16
113.0	0.00	0.0	0.2	0.3	0.05	542.10
114.0	0.00	0.0	0.1	0.2	0.03	542.06
115.0	0.00	0.0	0.1	0.1	0.02	542.04
116.0	0.00	0.0	0.0	0.1	0.01	542.02
117.0	0.00	0.0	0.0	0.0	0.01	542.01
118.0	0.00	0.0	0.0	0.0	0.00	542.01
119.0	0.00	0.0	0.0	0.0	0.00	542.01
120.0	0.00	0.0	0.0	0.0	0.00	542.00
121.0	0.00	0.0	0.0	0.0	0.00	542.00
122.0	0.00	0.0	0.0	0.0	0.00	542.00
123.0	0.00	0.0	0.0	0.0	0.00	542.00
124.0	0.00	0.0	0.0	0.0	0.00	542.00
125.0	0.00	0.0	0.0	0.0	0.00	542.00
126.0	0.00	0.0	0.0	0.0	0.00	542.00
127.0	0.00	0.0	0.0	0.0	0.00	542.00
128.0	0.00	0.0	0.0	0.0	0.00	542.00
129.0	0.00	0.0	0.0	0.0	0.00	542.00
130.0	0.00	0.0	0.0	0.0	0.00	542.00
131.0	0.00	0.0	0.0	0.0	0.00	542.00
132.0	0.00	0.0	0.0	0.0	0.00	542.00
133.0	0.00	0.0	0.0	0.0	0.00	542.00
134.0	0.00	0.0	0.0	0.0	0.00	542.00
135.0	0.00	0.0	0.0	0.0	0.00	542.00
136.0	0.00	0.0	0.0	0.0	0.00	542.00

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .HYD

INFLOW HYDROGRAPH		ROUTING COMPUTATIONS				
TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	0.0	0.0	0.00	542.00
138.0	0.00	0.0	0.0	0.0	0.00	542.00
139.0	0.00	0.0	0.0	0.0	0.00	542.00
140.0	0.00	0.0	0.0	0.0	0.00	542.00
141.0	0.00	0.0	0.0	0.0	0.00	542.00
142.0	0.00	0.0	0.0	0.0	0.00	542.00
143.0	0.00	0.0	0.0	0.0	0.00	542.00
144.0	0.00	0.0	0.0	0.0	0.00	542.00
145.0	0.00	0.0	0.0	0.0	0.00	542.00
146.0	0.00	0.0	0.0	0.0	0.00	542.00
147.0	0.00	0.0	0.0	0.0	0.00	542.00
148.0	0.00	0.0	0.0	0.0	0.00	542.00
149.0	0.00	0.0	0.0	0.0	0.00	542.00
150.0	0.00	0.0	0.0	0.0	0.00	542.00
151.0	0.00	0.0	0.0	0.0	0.00	542.00

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

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .HYD

Starting Pond W.S. Elevation = 542.00 ft

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

Peak Inflow	=	19.27 cfs
Peak Outflow	=	7.76 cfs
Peak Elevation	=	546.87 ft

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

Initial Storage	=	0 cu-ft
Peak Storage From Storm	=	17,270 cu-ft
Total Storage in Pond	=	17,270 cu-ft

25 Return Freq: 250 years

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\25-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25-OUT1 .HYD

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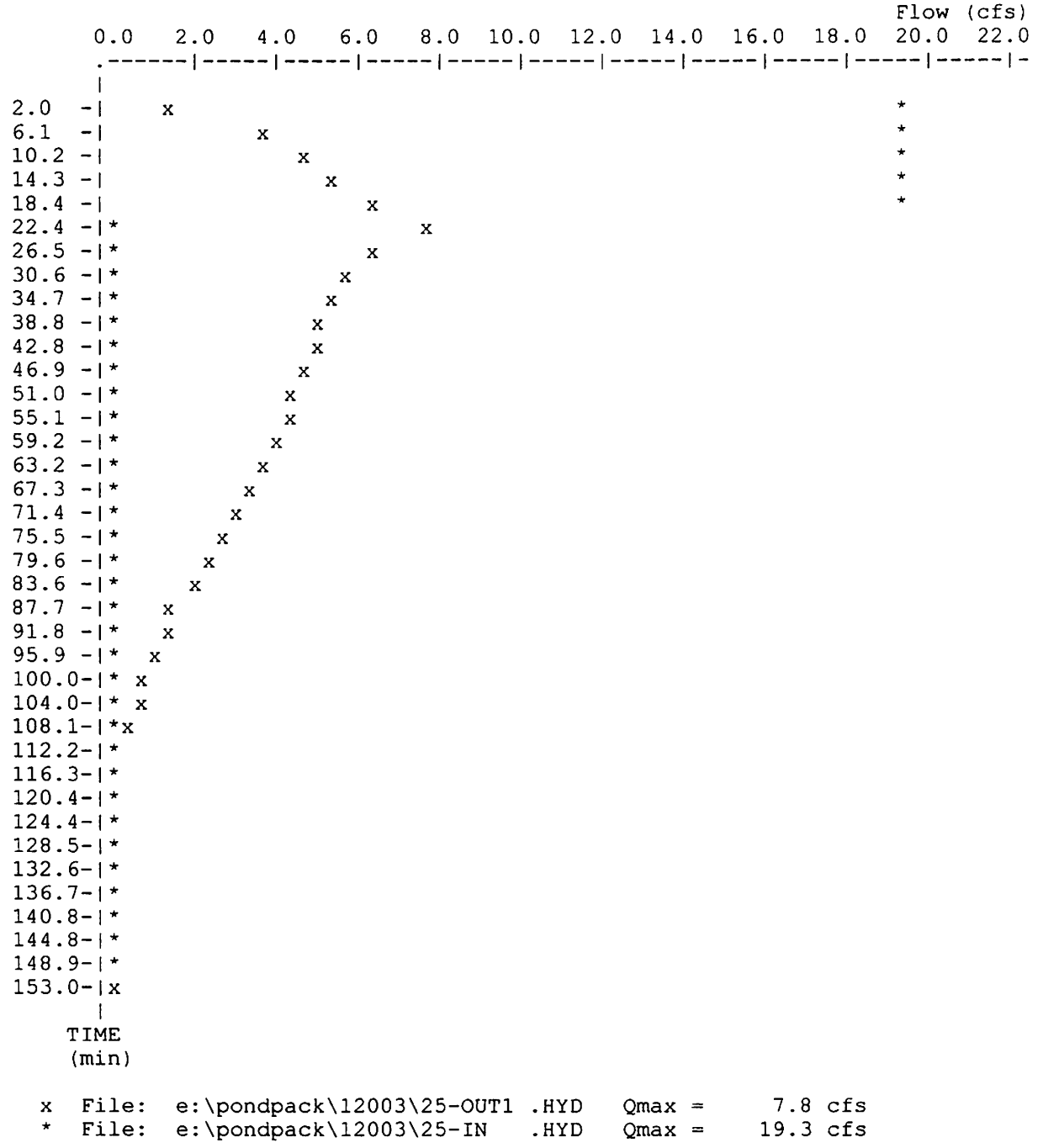
Peak Inflow = 19.27 cfs
Peak Outflow = 7.76 cfs
Peak Elevation = 546.87 ft



x File: e:\pondpack\12003\25-OUT1 .HYD Qmax = 7.8 cfs
* File: e:\pondpack\12003\25-IN .HYD Qmax = 19.3 cfs