



ENGINEERING

PLANNING

SURVEYING

STORMWATER DETENTION ANALYSIS
PREPARED BY: BAX ENGINEERING CO., INC.

WHITEGATE VILLAS - O'FALLON
BAX PROJECT NO. 99-10343
February 2, 2000

INTRODUCTION:

The tract of land is presently an undeveloped site located in the City of O'Fallon, Missouri. It is proposed that the tract, consisting of 14.23 acres, be developed into a residential subdivision. Two basins will be constructed for this project, one in the northwest corner and the other along the east boundary. These basins will provide detention for the development when considering the increased runoff for the site as required by the City of O'Fallon. The storage volume and outflow rates will be proportioned to insure that the peak rate of runoff leaving each watershed under post-developed conditions is less than or equal to the peak rate of runoff under pre-developed conditions for the required design storms. The basins have been analyzed for the 2, 5, 15, and 25 year frequency - 20 minute duration design storms and checked for safe passage of the 100 year frequency - 20 minute design storm.

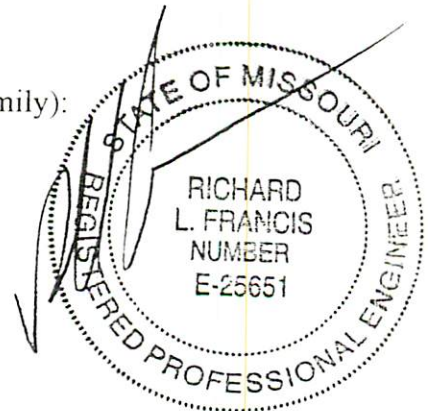
GENERAL SITE DATA AND RUNOFF CALCULATIONS:

The pre-developed P.I. factors to be used for the analysis are (assumed 5% impervious):

2 year	1.15
15 year	1.87
25 year	2.31

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

2 year	1.76
15 year	2.90
25 year	3.58
100 year	4.58



BAX ENGINEERING CO., INC.
1052 South Cloverleaf Drive
St. Peters, MO 63376-6445
636-928-5552 FAX 928-1718
e-mail: baxeng@msn.com

15

TIME OF CONCENTRATION:

North

Of the inflows to the north basin, the most remote point lies to the south near lot 16. Flows will travel approximately 130 feet overland to AI 15A then 485 feet via storm sewer to the basin. Time of concentration is estimated as follows:

$$T(\text{overland}) : L = 130 \text{ feet}$$

$$\text{Elevation difference} = 610 - 602 = 8 \text{ feet}$$

$$T(\text{overland}) = 2.0 \text{ minutes : See figure 1}$$

$$T(\text{stormpipe}) : L = 440 \text{ feet}$$

$$\text{Estimated velocity } 7 \text{ feet/second}$$

$$T(\text{stormpipe}) = 485 \text{ feet} / 7 \text{ feet/sec.}$$

$$= 69 \text{ sec. } \gg 1.0 \text{ minutes}$$

$$\text{Total time} = 3.0 \text{ use } \mathbf{3 \text{ minutes.}}$$

South

Of the inflows to the south basin, the most remote point lies to the south near lot 24. Flows will travel approximately 200 feet overland to AI 32A then 700 feet via storm sewer to the basin. Time of concentration is estimated as follows:

$$T(\text{overland}) : L = 200 \text{ feet}$$

$$\text{Elevation difference} = 624 - 614 = 10 \text{ feet}$$

$$T(\text{overland}) = 3.0 \text{ minutes : See figure 1}$$

$$T(\text{stormpipe}) : L = 700 \text{ feet}$$

$$\text{Estimated velocity } 7 \text{ feet/second}$$

$$T(\text{stormpipe}) = 700 \text{ feet} / 7 \text{ feet/sec.}$$

$$= 100 \text{ sec. } \gg 1.7 \text{ minutes}$$

$$\text{Total time} = 4.7 \text{ use } \mathbf{5 \text{ minutes.}}$$

BASIN PEAK INFLOW:

Inflows to the basin have been estimated from the drainage area map of the project. (see construction plans)

North

25 year	5.16 ac x 3.58 cfs/ac =	18.47 cfs
	2 year	9.08 cfs
	15 year	14.96 cfs
	100 year	23.63 cfs

South

25 year	6.63 ac x 3.58 cfs/ac =	23.74 cfs
	2 year	11.67 cfs
	15 year	19.23 cfs
	100 year	30.37 cfs

REQUIRED ATTENUATION:(see attached pre and post-developed drainage maps)

post-developed flow – pre-developed flow

North

25 year	[6.93 ac x 3.58 cfs/ac] – [6.61 ac x 2.31 cfs/ac]	= 9.54 cfs
	2 year	= 4.60 cfs
	15 year	= 7.74 cfs

South

25 year	[7.30 ac x 3.58 cfs/ac] – [7.62 ac x 2.31 cfs/ac]	= 8.53 cfs
	2 year	= 4.09 cfs
	15 year	= 6.92 cfs

PERMITTED RELEASE RATE:

The permitted release rate of the basin is found by subtracting the required attenuation from the peak inflow to the basin for the design storm. Inflows to the basin have been estimated from the drainage area map of the project.

	Storm	Basin Inflow cfs	- Required Attenuation cfs	Allowable Outflow cfs
North	2	9.08	4.60	4.48
	15	14.96	7.74	7.23
	25	18.47	9.54	8.93
South	2	11.67	4.09	7.58
	15	19.23	6.92	12.31
	25	23.74	8.53	15.21

STORM ROUTING CALCULATIONS AND RESULTS:

A computer program, PONDPACK, was used in routing the 20-minute design storms through the basin. As found in the routing calculations, the results are as follows:

	STORM	CALCULATED RELEASE RATE cfs	PERMITTED RELEASE RATE cfs	PEAK ELEVATION
North	2	4.06	4.48	589.71
	15	6.94	7.23	590.91
	25	8.29	8.93	591.50
South	2	4.97	7.58	597.90
	15	6.51	12.31	599.51
	25	7.26	15.21	600.44

As shown above, the calculated release rates are less than the permitted release rates.

CHECK 100-YEAR OUTFLOW

North

Area Inlet- where 100-YEAR FLOW
Q = 23.63 cfs
WEIR FLOW: $Q = C \times L \times H^{3/2}$

C = 3.00
L = 11.67 ft
H = 0.77 ft
sill = 592.00 ft
100 yr h/w = 592.77 ft

South

Area Inlet- where 100-YEAR FLOW
Q = 30.37 cfs
WEIR FLOW: $Q = C \times L \times H^{3/2}$

C = 3.00
L = 11.67 ft
H = 0.91 ft
sill = 600.50 ft
100 yr h/w = 601.41 ft

SUMMARY

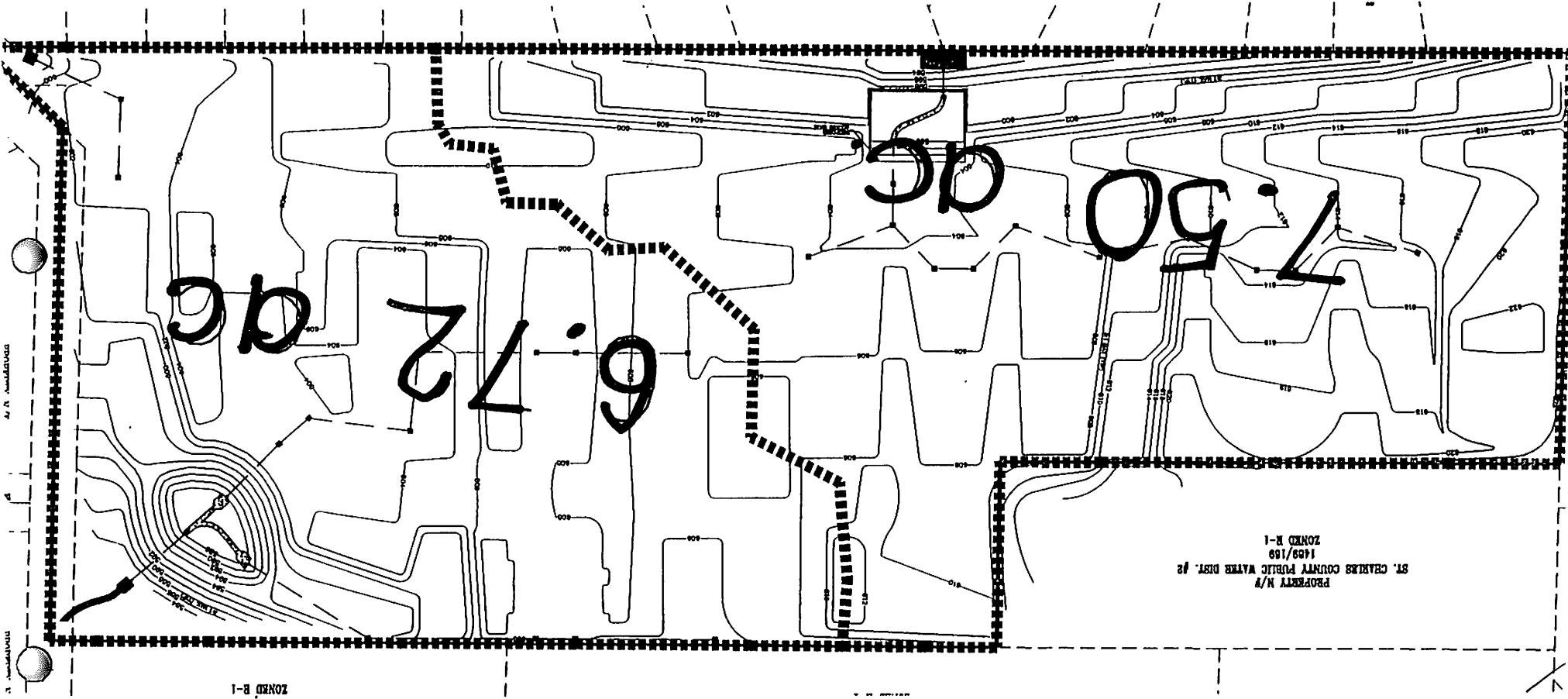
North

25 year-20min H. W	591.50 ft.
100 year-20min H. W.(low flow blocked)	592.77 ft.
LOW-FLOW OUTLET 1	8" WIDE x 10" HIGH
LOW-FLOW SILL ELEVATION	587.00 ft.
LOW-FLOW OUTLET 2	10" WIDE x 8" HIGH
LOW-FLOW SILL ELEVATION	590.00 ft.
OVERFLOW SILL ELEVATION	592.00 ft.
TOP OF BERM	594.00 ft.

South

25 year-20min H. W	600.44 ft.
100 year-20min H. W.(low flow blocked)	601.41 ft.
LOW-FLOW OUTLET 1	7" WIDE x 14" HIGH
LOW-FLOW SILL ELEVATION	595.00 ft.
OVERFLOW SILL ELEVATION	600.50 ft.
TOP OF BERM	602.50 ft.

POST-DEVELOPED



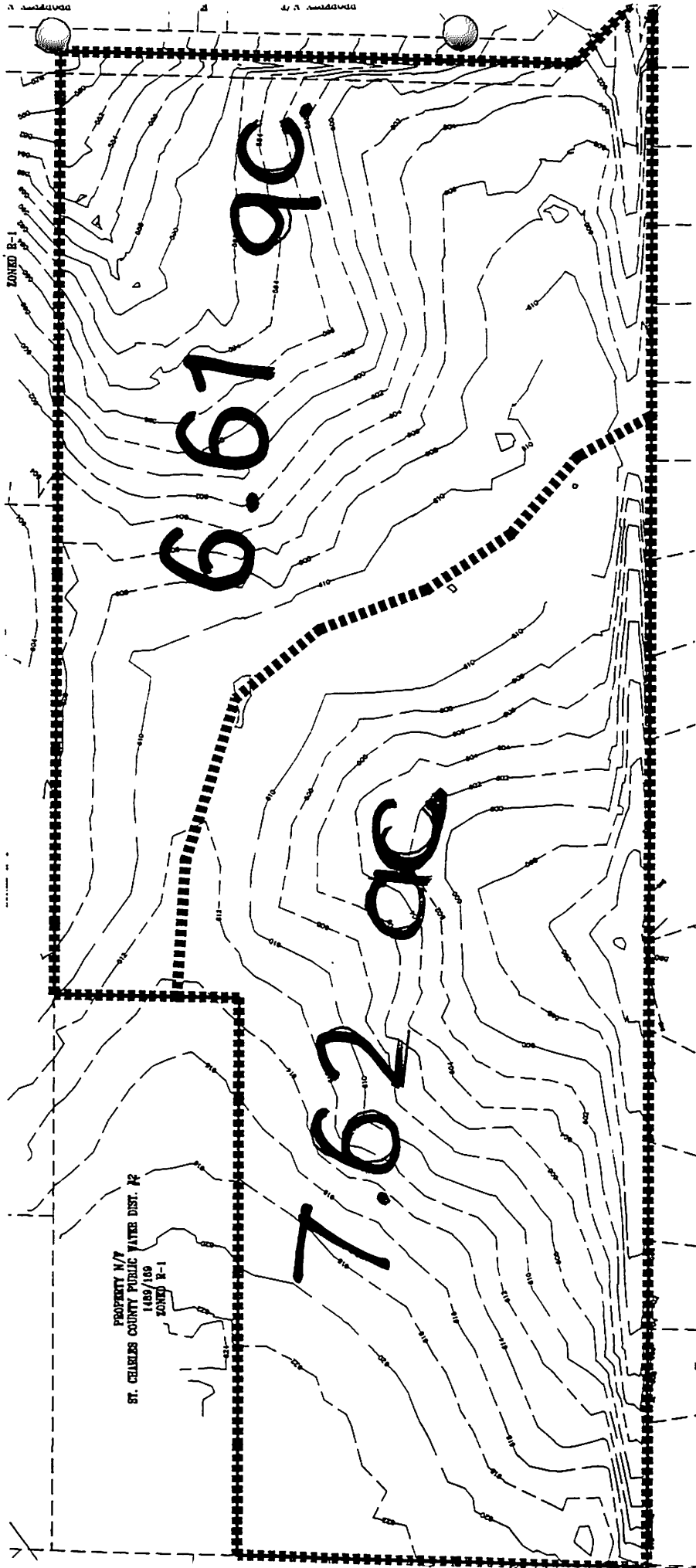
A. N. 100000000

ZONED B-1

PROPERTY M/A
ST. CHARLES COUNTY PUBLIC WATER DIST. #2
1469/169
ZONED R-1

SCALE

N



PRE-DEVELOPED

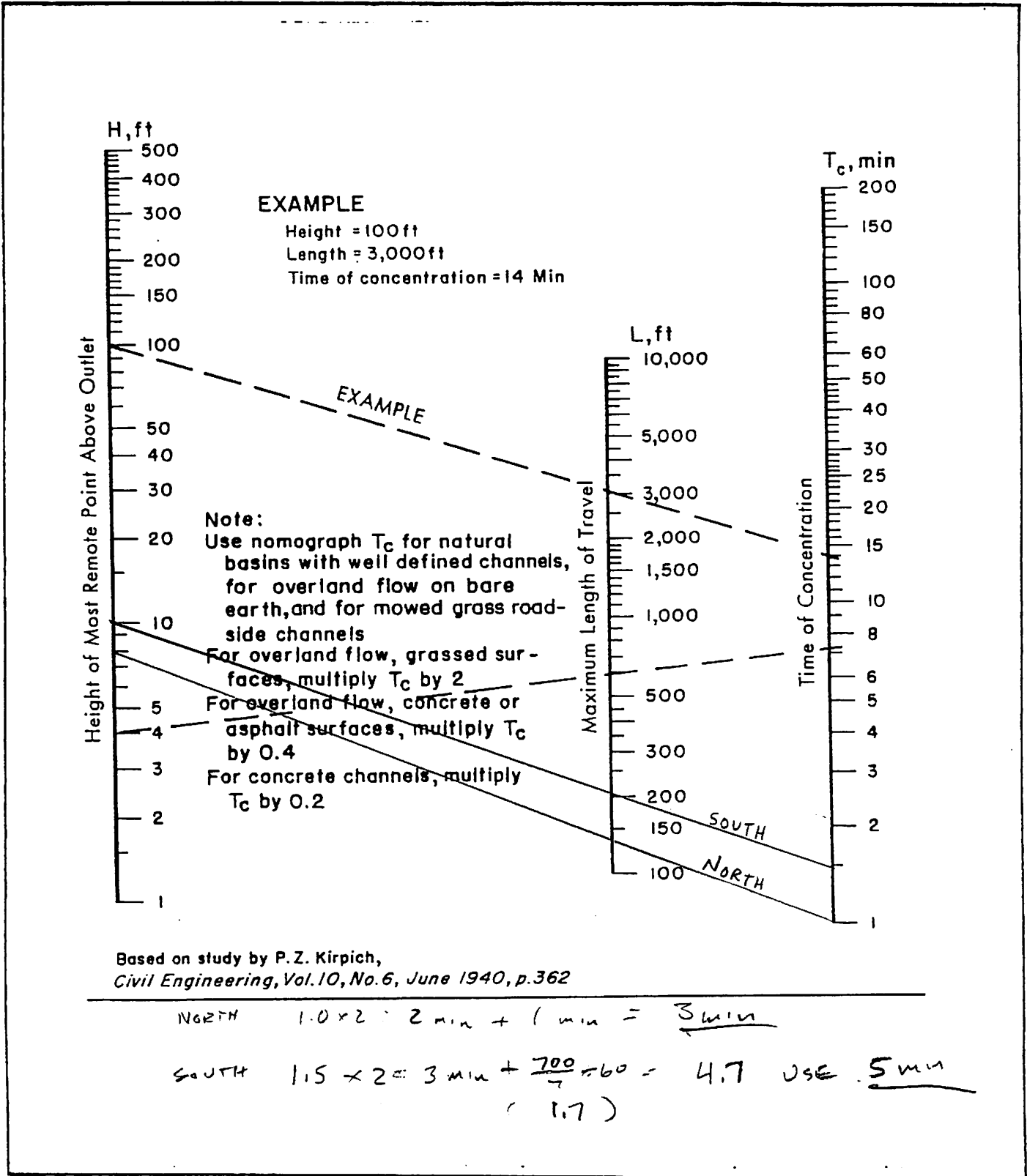


Project: WHITE GATE VLLAS

Date: _____ Project No: _____

Designed: _____ Checked: _____

FIGURE 1



WHITEGATE VILLAS
 NORTH
 BAX ENGINEERING COMPANY INCORPORATED
 JANUARY 3, 2000

CALCULATED 01-17-2000 15:58:58
 DISK FILE: c:\windows\desktop\pondpa~1\10343N .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	$A1+A2+\text{sqr}(A1*A2)$ (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
587.00	0.00	0	0	0	0
588.00	2,929.00	2,929	2,929	976	976
590.00	4,340.00	4,340	10,834	7,223	8,199
592.00	5,982.00	5,982	15,417	10,278	18,477
594.00	7,851.00	7,851	20,686	13,791	32,268

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

$$\text{Volume} = (1/3) * (\text{EL2}-\text{EL1}) * (\text{Area1} + \text{Area2} + \text{sq.rt.}(\text{Area1}*\text{Area2}))$$

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: 10343N .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

Elevation (ft)	Q (cfs)	Contributing Structures
-----	-----	-----
587.00	0.0	1
587.25	0.3	1
587.50	0.7	1
587.75	1.3	1
588.00	2.0	1
588.25	2.4	2
588.50	2.8	2
588.75	3.1	2
589.00	3.4	2
589.25	3.6	2
589.50	3.9	2
589.75	4.1	2
590.00	4.3	2 +3
590.25	4.8	2 +3
590.50	5.6	2 +3
590.75	6.5	2 +3
591.00	7.2	2 +4
591.25	7.8	2 +4
591.50	8.3	2 +4
591.75	8.8	2 +4
592.00	9.2	2 +4
592.25	9.6	2 +4
592.50	10.0	2 +4
592.75	10.3	2 +4
593.00	10.7	2 +4
593.25	11.0	2 +4
593.50	11.4	2 +4
593.75	11.7	2 +4
594.00	12.0	2 +4 +5

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outlet Structure File: c:\windows\desktop\pondpa~1\10343N .STR
Planimeter Input File: c:\windows\desktop\pondpa~1\10343N .VOL
Rating Table Output File: c:\windows\desktop\pondpa~1\10343N .PND

Min. Elev.(ft) = 587 Max. Elev.(ft) = 594 Incr.(ft) = .25

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
ORIFICE	4	? 3	-> B
WEIR-VR	5		-> 5

Outflow rating table summary was stored in file:
c:\windows\desktop\pondpa~1\10343N .PND

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	587
E2 elev.(ft)?	594.001
Weir coefficient?	3
Weir elev.(ft)?	587.00
Length (ft)?	.66667
Contracted/Suppressed (C/S)?	S

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	587.8333
E2 elev.(ft)?	594.001
Orifice coeff.?	0.6
Invert elev.(ft)?	587.000
Datum elev.(ft) ?	587.4167
Orifice area (sq ft)?	0.5555

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	590
E2 elev.(ft)?	594.001
Weir coefficient?	3.
Weir elev.(ft)?	590.00
Length (ft)?	.833333
Contracted/Suppressed (C/S)?	S

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

>>>>> Structure No. 4 <<<<<<
(Input Data)

ORIFICE
Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	590.6667
E2 elev.(ft)?	594.001
Orifice coeff.?	.6
Invert elev.(ft)?	590.00
Datum elev.(ft) ?	590.3333
Orifice area (sq ft)?	0.555555

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

>>>>> Structure No. 5 <<<<<<
(Input Data)

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	594
E2 elev.(ft)?	594.001
Weir coefficient?	3
Weir elev.(ft)?	594.00
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

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

Elevation (ft)	Q (cfs)	Computation Messages
587.00	0.0	H =0.0
587.25	0.3	H =.25
587.50	0.7	H =.5
587.75	1.3	H =.750
588.00	2.0	H =1.0
588.25	2.8	H =1.25
588.50	3.7	H =1.5
588.75	4.6	H =1.75
589.00	5.7	H =2.0
589.25	6.8	H =2.25
589.50	7.9	H =2.5
589.75	9.1	H =2.75
590.00	10.4	H =3.0
590.25	11.7	H =3.25
590.50	13.1	H =3.5
590.75	14.5	H =3.75
591.00	16.0	H =4.0
591.25	17.5	H =4.25
591.50	19.1	H =4.5
591.75	20.7	H =4.75
592.00	22.4	H =5.0
592.25	24.1	H =5.25
592.50	25.8	H =5.5
592.75	27.6	H =5.75
593.00	29.4	H =6.0
593.25	31.3	H =6.25
593.50	33.1	H =6.5
593.75	35.1	H =6.75
594.00	37.0	H =7.0

C = 3 L (ft) = .66667

H (ft) = Table elev. - Invert elev. (587 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

Elevation (ft)	Q (cfs)	Computation Messages
587.00	0.0	E < E1=587.8333
587.25	0.0	E < E1=587.8333
587.50	0.0	E < E1=587.8333
587.75	0.0	E < E1=587.8333
588.00	2.0	H =.583
588.25	2.4	H =.833
588.50	2.8	H =1.083
588.75	3.1	H =1.333
589.00	3.4	H =1.583
589.25	3.6	H =1.833
589.50	3.9	H =2.083
589.75	4.1	H =2.333
590.00	4.3	H =2.583
590.25	4.5	H =2.833
590.50	4.7	H =3.083
590.75	4.9	H =3.333
591.00	5.1	H =3.583
591.25	5.2	H =3.833
591.50	5.4	H =4.083
591.75	5.6	H =4.333
592.00	5.7	H =4.583
592.25	5.9	H =4.833
592.50	6.0	H =5.083
592.75	6.2	H =5.333
593.00	6.3	H =5.583
593.25	6.5	H =5.833
593.50	6.6	H =6.083
593.75	6.7	H =6.333
594.00	6.9	H =6.583

C = .6 A = .5555 sq.ft.

H (ft) = Table elev. - Datum elev. (587.4167 ft)

Q (cfs) = C * A * sqr(2g * H)

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

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

Elevation (ft)	Q (cfs)	Computation Messages
587.00	0.0	E < Inv.El.= 590
587.25	0.0	E < Inv.El.= 590
587.50	0.0	E < Inv.El.= 590
587.75	0.0	E < Inv.El.= 590
588.00	0.0	E < Inv.El.= 590
588.25	0.0	E < Inv.El.= 590
588.50	0.0	E < Inv.El.= 590
588.75	0.0	E < Inv.El.= 590
589.00	0.0	E < Inv.El.= 590
589.25	0.0	E < Inv.El.= 590
589.50	0.0	E < Inv.El.= 590
589.75	0.0	E < Inv.El.= 590
590.00	0.0	H =0.0
590.25	0.3	H =.25
590.50	0.9	H =.5
590.75	1.6	H =.750
591.00	2.5	H =1.0
591.25	3.5	H =1.25
591.50	4.6	H =1.5
591.75	5.8	H =1.75
592.00	7.1	H =2.0
592.25	8.4	H =2.25
592.50	9.9	H =2.5
592.75	11.4	H =2.75
593.00	13.0	H =3.0
593.25	14.6	H =3.25
593.50	16.4	H =3.5
593.75	18.2	H =3.75
594.00	20.0	H =4.0

C = 3 L (ft) = .833333

H (ft) = Table elev. - Invert elev. (590 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outflow Rating Table for Structure #4
ORIFICE Orifice - Based on Area and Datum Elevation

Elevation (ft)	Q (cfs)	Computation Messages
587.00	0.0	E < E1=590.6667
587.25	0.0	E < E1=590.6667
587.50	0.0	E < E1=590.6667
587.75	0.0	E < E1=590.6667
588.00	0.0	E < E1=590.6667
588.25	0.0	E < E1=590.6667
588.50	0.0	E < E1=590.6667
588.75	0.0	E < E1=590.6667
589.00	0.0	E < E1=590.6667
589.25	0.0	E < E1=590.6667
589.50	0.0	E < E1=590.6667
589.75	0.0	E < E1=590.6667
590.00	0.0	E < E1=590.6667
590.25	0.0	E < E1=590.6667
590.50	0.0	E < E1=590.6667
590.75	1.7	H =.417
591.00	2.2	H =.667
591.25	2.6	H =.917
591.50	2.9	H =1.167
591.75	3.2	H =1.417
592.00	3.5	H =1.667
592.25	3.7	H =1.917
592.50	3.9	H =2.167
592.75	4.2	H =2.417
593.00	4.4	H =2.667
593.25	4.6	H =2.917
593.50	4.8	H =3.167
593.75	4.9	H =3.417
594.00	5.1	H =3.667

C = .6 A = .555555 sq.ft.
H (ft) = Table elev. - Datum elev. (590.3333 ft)
Q (cfs) = C * A * sqr(2g * H)

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outflow Rating Table for Structure #5
WEIR-VR Weir - Vertical Rectangular

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

Elevation (ft)	Q (cfs)	Computation Messages
587.00	0.0	E < Inv.El. = 594
587.25	0.0	E < Inv.El. = 594
587.50	0.0	E < Inv.El. = 594
587.75	0.0	E < Inv.El. = 594
588.00	0.0	E < Inv.El. = 594
588.25	0.0	E < Inv.El. = 594
588.50	0.0	E < Inv.El. = 594
588.75	0.0	E < Inv.El. = 594
589.00	0.0	E < Inv.El. = 594
589.25	0.0	E < Inv.El. = 594
589.50	0.0	E < Inv.El. = 594
589.75	0.0	E < Inv.El. = 594
590.00	0.0	E < Inv.El. = 594
590.25	0.0	E < Inv.El. = 594
590.50	0.0	E < Inv.El. = 594
590.75	0.0	E < Inv.El. = 594
591.00	0.0	E < Inv.El. = 594
591.25	0.0	E < Inv.El. = 594
591.50	0.0	E < Inv.El. = 594
591.75	0.0	E < Inv.El. = 594
592.00	0.0	E < Inv.El. = 594
592.25	0.0	E < Inv.El. = 594
592.50	0.0	E < Inv.El. = 594
592.75	0.0	E < Inv.El. = 594
593.00	0.0	E < Inv.El. = 594
593.25	0.0	E < Inv.El. = 594
593.50	0.0	E < Inv.El. = 594
593.75	0.0	E < Inv.El. = 594
594.00	0.0	H = 0.0

C = 3 L (ft) = 11.67
H (ft) = Table elev. - Invert elev. (594 ft)
Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outflow Rating Table A
Table A = 1 ? 2

Elevation (ft)	Q (cfs)	Contributing Structures
587.00	0.0	1
587.25	0.3	1
587.50	0.7	1
587.75	1.3	1
588.00	2.0	1
588.25	2.4	2
588.50	2.8	2
588.75	3.1	2
589.00	3.4	2
589.25	3.6	2
589.50	3.9	2
589.75	4.1	2
590.00	4.3	2
590.25	4.5	2
590.50	4.7	2
590.75	4.9	2
591.00	5.1	2
591.25	5.2	2
591.50	5.4	2
591.75	5.6	2
592.00	5.7	2
592.25	5.9	2
592.50	6.0	2
592.75	6.2	2
593.00	6.3	2
593.25	6.5	2
593.50	6.6	2
593.75	6.7	2
594.00	6.9	2

Outlet Structure File: 10343N .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
NORTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outflow Rating Table B
Table B = 3 ? 4

Elevation (ft)	Q (cfs)	Contributing Structures
587.00	0.0	-
587.25	0.0	-
587.50	0.0	-
587.75	0.0	-
588.00	0.0	-
588.25	0.0	-
588.50	0.0	-
588.75	0.0	-
589.00	0.0	-
589.25	0.0	-
589.50	0.0	-
589.75	0.0	-
590.00	0.0	3
590.25	0.3	3
590.50	0.9	3
590.75	1.6	3
591.00	2.2	4
591.25	2.6	4
591.50	2.9	4
591.75	3.2	4
592.00	3.5	4
592.25	3.7	4
592.50	3.9	4
592.75	4.2	4
593.00	4.4	4
593.25	4.6	4
593.50	4.8	4
593.75	4.9	4
594.00	5.1	4

```

*****
*
*           WHITEGATE VILLAS           *
*           NORTH                       *
*   BAX ENGINEERING COMPANY INCORPORATED *
*           JANUARY 3, 1999           *
*
*****
    
```

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N02.HYD
 Rating Table file: c:\windows\desktop\pondpa~1\10343N .PND

----INITIAL CONDITIONS----
 Elevation = 587.00 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
587.00	0.0	0
587.25	0.3	15
587.50	0.7	122
587.75	1.3	412
588.00	2.0	976
588.25	2.4	1,728
588.50	2.8	2,522
588.75	3.1	3,357
589.00	3.4	4,235
589.25	3.6	5,157
589.50	3.9	6,125
589.75	4.1	7,138
590.00	4.3	8,199
590.25	4.8	9,308
590.50	5.6	10,465
590.75	6.5	11,671
591.00	7.2	12,928
591.25	7.8	14,236
591.50	8.3	15,596
591.75	8.8	17,009
592.00	9.2	18,477
592.25	9.6	20,000
592.50	10.0	21,579
592.75	10.3	23,214
593.00	10.7	24,905
593.25	11.0	26,656
593.50	11.4	28,466
593.75	11.7	30,336
594.00	12.0	32,268

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
0.5	0.8
4.1	4.8
13.7	15.0
32.5	34.5
57.6	60.0
84.1	86.9
111.9	115.0
141.2	144.6
171.9	175.5
204.2	208.1
237.9	242.0
273.3	277.6
310.3	315.1
348.8	354.4
389.0	395.5
430.9	438.1
474.5	482.3
519.9	528.2
567.0	575.8
615.9	625.1
666.7	676.3
719.3	729.3
773.8	784.1
830.2	840.9
888.5	899.5
948.9	960.3
1011.2	1022.9
1075.6	1087.6

Time increment (t) = 1.0 min.

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N02.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	587.00
1.0	2.72	2.7	1.7	2.7	0.49	587.37
2.0	6.36	9.1	8.7	10.8	1.05	587.65
3.0	9.08	15.4	20.9	24.1	1.63	587.87
4.0	9.08	18.2	34.9	39.1	2.07	588.04
5.0	9.08	18.2	48.5	53.1	2.29	588.18
6.0	9.08	18.2	61.7	66.6	2.50	588.31
7.0	9.08	18.2	74.4	79.8	2.70	588.43
8.0	9.08	18.2	86.9	92.6	2.86	588.55
9.0	9.08	18.2	99.0	105.0	2.99	588.66
10.0	9.08	18.2	110.9	117.2	3.12	588.77
11.0	9.08	18.2	122.6	129.1	3.24	588.87
12.0	9.08	18.2	134.1	140.8	3.36	588.97
13.0	9.08	18.2	145.3	152.2	3.45	589.06
14.0	9.08	18.2	156.4	163.5	3.52	589.15
15.0	9.08	18.2	167.4	174.6	3.59	589.24
16.0	9.08	18.2	178.2	185.6	3.69	589.33
17.0	9.08	18.2	188.8	196.3	3.79	589.41
18.0	9.08	18.2	199.1	206.9	3.89	589.49
19.0	9.08	18.2	209.4	217.3	3.95	589.57
20.0	9.08	18.2	219.5	227.5	4.01	589.64
21.0	6.36	15.4	226.8	235.0	4.06	589.70
22.0	2.72	9.1	227.8	235.9	4.06	589.71
23.0	0.00	2.7	222.4	230.5	4.03	589.67
24.0	0.00	0.0	214.5	222.4	3.98	589.61
25.0	0.00	0.0	206.6	214.5	3.94	589.55
26.0	0.00	0.0	198.8	206.6	3.89	589.49
27.0	0.00	0.0	191.2	198.8	3.82	589.43
28.0	0.00	0.0	183.7	191.2	3.74	589.37
29.0	0.00	0.0	176.4	183.7	3.68	589.31
30.0	0.00	0.0	169.1	176.4	3.61	589.26
31.0	0.00	0.0	162.0	169.1	3.56	589.20
32.0	0.00	0.0	155.0	162.0	3.51	589.14
33.0	0.00	0.0	148.1	155.0	3.47	589.08
34.0	0.00	0.0	141.2	148.1	3.42	589.03
35.0	0.00	0.0	134.5	141.2	3.37	588.97
36.0	0.00	0.0	127.9	134.5	3.30	588.91
37.0	0.00	0.0	121.4	127.9	3.23	588.86
38.0	0.00	0.0	115.1	121.4	3.17	588.80
39.0	0.00	0.0	108.9	115.1	3.10	588.75
40.0	0.00	0.0	102.8	108.9	3.04	588.70
41.0	0.00	0.0	96.9	102.8	2.97	588.64
42.0	0.00	0.0	91.1	96.9	2.91	588.59
43.0	0.00	0.0	85.4	91.1	2.84	588.54
44.0	0.00	0.0	79.8	85.4	2.78	588.49

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N02.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	74.4	79.8	2.70	588.43
46.0	0.00	0.0	69.2	74.4	2.61	588.38
47.0	0.00	0.0	64.1	69.2	2.54	588.34
48.0	0.00	0.0	59.2	64.1	2.46	588.29
49.0	0.00	0.0	54.4	59.2	2.39	588.24
50.0	0.00	0.0	49.8	54.4	2.31	588.20
51.0	0.00	0.0	45.3	49.8	2.24	588.15
52.0	0.00	0.0	41.0	45.3	2.17	588.11
53.0	0.00	0.0	36.8	41.0	2.10	588.06
54.0	0.00	0.0	32.7	36.8	2.04	588.02
55.0	0.00	0.0	28.8	32.7	1.93	587.98
56.0	0.00	0.0	25.3	28.8	1.80	587.93
57.0	0.00	0.0	21.9	25.3	1.67	587.88
58.0	0.00	0.0	18.8	21.9	1.55	587.84
59.0	0.00	0.0	16.0	18.8	1.44	587.80
60.0	0.00	0.0	13.3	16.0	1.33	587.76

```
*****  
*  
*          WHITEGATE VILLAS          *  
*          NORTH                     *  
*    BAX ENGINEERING COMPANY INCORPORATED *  
*          JANUARY 3, 1999          *  
*  
*****
```

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

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N02.HYD
Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N1 .HYD

Starting Pond W.S. Elevation = 587.00 ft

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

Peak Inflow = 9.08 cfs
Peak Outflow = 4.06 cfs
Peak Elevation = 589.71 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 6,956 cu-ft

Total Storage in Pond = 6,956 cu-ft

Pond File: c:\windows\desktop\pondpa~1\10343N .PND

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N02.HYD

Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N1 .HYD

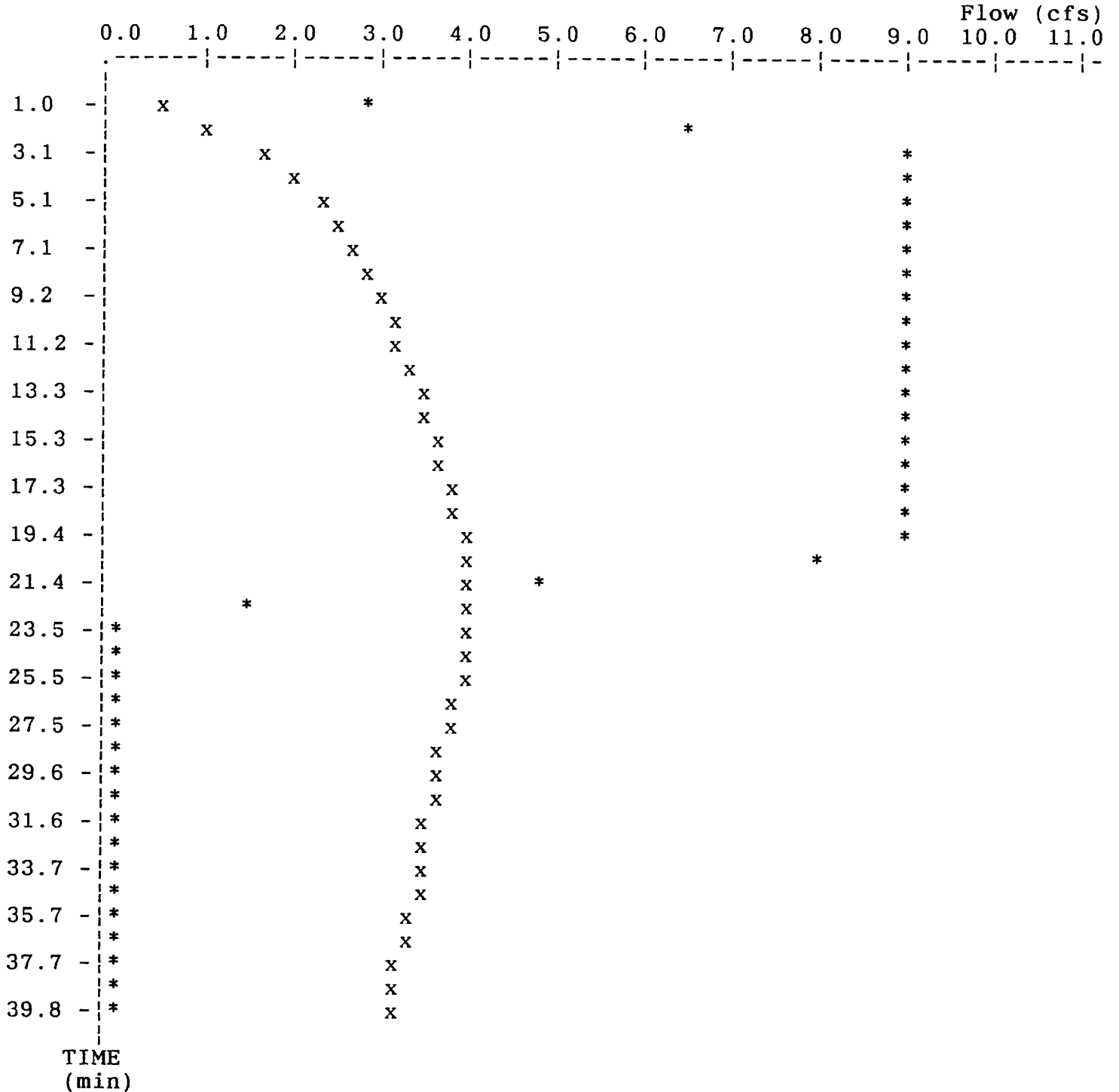
EXECUTED: 02-02-2000

Peak Inflow = 9.08 cfs

14:59:16

Peak Outflow = 4.06 cfs

Peak Elevation = 589.71 ft



x File: c:\windows\desktop\pondpa~1\10343N1 .HYD
 * File: c:\windows\desktop\pondpa~1\10343N02.HYD

Qmax = 4.1 cfs
 Qmax = 9.1 cfs

```
*****
*
*           WHITEGATE VILLAS           *
*                   NORTH              *
*   BAX ENGINEERING COMPANY INCORPORATED *
*                   JANUARY 3, 1999    *
*
*****
```

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N15.HYD
 Rating Table file: c:\windows\desktop\pondpa~1\10343N .PND

----INITIAL CONDITIONS----
 Elevation = 587.00 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 + 0 (cfs)
587.00	0.0	0	0.0	0.0
587.25	0.3	15	0.5	0.8
587.50	0.7	122	4.1	4.8
587.75	1.3	412	13.7	15.0
588.00	2.0	976	32.5	34.5
588.25	2.4	1,728	57.6	60.0
588.50	2.8	2,522	84.1	86.9
588.75	3.1	3,357	111.9	115.0
589.00	3.4	4,235	141.2	144.6
589.25	3.6	5,157	171.9	175.5
589.50	3.9	6,125	204.2	208.1
589.75	4.1	7,138	237.9	242.0
590.00	4.3	8,199	273.3	277.6
590.25	4.8	9,308	310.3	315.1
590.50	5.6	10,465	348.8	354.4
590.75	6.5	11,671	389.0	395.5
591.00	7.2	12,928	430.9	438.1
591.25	7.8	14,236	474.5	482.3
591.50	8.3	15,596	519.9	528.2
591.75	8.8	17,009	567.0	575.8
592.00	9.2	18,477	615.9	625.1
592.25	9.6	20,000	666.7	676.3
592.50	10.0	21,579	719.3	729.3
592.75	10.3	23,214	773.8	784.1
593.00	10.7	24,905	830.2	840.9
593.25	11.0	26,656	888.5	899.5
593.50	11.4	28,466	948.9	960.3
593.75	11.7	30,336	1011.2	1022.9
594.00	12.0	32,268	1075.6	1087.6

Time increment (t) = 1.0 min.

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N15.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N2 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	587.00
1.0	4.49	4.5	3.1	4.5	0.67	587.48
2.0	10.47	15.0	15.3	18.1	1.41	587.79
3.0	14.96	25.4	36.5	40.7	2.10	588.06
4.0	14.96	29.9	61.4	66.4	2.50	588.31
5.0	14.96	29.9	85.7	91.4	2.85	588.54
6.0	14.96	29.9	109.4	115.6	3.11	588.76
7.0	14.96	29.9	132.6	139.3	3.35	588.96
8.0	14.96	29.9	155.5	162.5	3.52	589.15
9.0	14.96	29.9	178.0	185.4	3.69	589.33
10.0	14.96	29.9	200.2	208.0	3.90	589.50
11.0	14.96	29.9	222.0	230.1	4.03	589.66
12.0	14.96	29.9	243.6	251.9	4.16	589.82
13.0	14.96	29.9	265.0	273.5	4.28	589.97
14.0	14.96	29.9	285.8	294.9	4.53	590.12
15.0	14.96	29.9	306.1	315.8	4.81	590.25
16.0	14.96	29.9	325.6	336.1	5.23	590.38
17.0	14.96	29.9	344.3	355.5	5.62	590.51
18.0	14.96	29.9	362.1	374.2	6.03	590.62
19.0	14.96	29.9	379.2	392.1	6.42	590.73
20.0	14.96	29.9	395.7	409.1	6.72	590.83
21.0	10.47	25.4	407.3	421.1	6.92	590.90
22.0	4.49	15.0	408.4	422.2	6.94	590.91
23.0	0.00	4.5	399.3	412.8	6.78	590.85
24.0	0.00	0.0	386.2	399.3	6.56	590.77
25.0	0.00	0.0	373.6	386.2	6.29	590.69
26.0	0.00	0.0	361.5	373.6	6.02	590.62
27.0	0.00	0.0	350.0	361.5	5.76	590.54
28.0	0.00	0.0	339.0	350.0	5.51	590.47
29.0	0.00	0.0	328.4	339.0	5.29	590.40
30.0	0.00	0.0	318.3	328.4	5.07	590.33
31.0	0.00	0.0	308.5	318.3	4.87	590.27
32.0	0.00	0.0	299.1	308.5	4.71	590.21
33.0	0.00	0.0	289.9	299.1	4.59	590.14
34.0	0.00	0.0	281.0	289.9	4.46	590.08
35.0	0.00	0.0	272.3	281.0	4.35	590.02
36.0	0.00	0.0	263.8	272.3	4.27	589.96
37.0	0.00	0.0	255.3	263.8	4.22	589.90
38.0	0.00	0.0	247.0	255.3	4.17	589.84
39.0	0.00	0.0	238.7	247.0	4.13	589.78
40.0	0.00	0.0	230.6	238.7	4.08	589.73
41.0	0.00	0.0	222.5	230.6	4.03	589.67
42.0	0.00	0.0	214.5	222.5	3.99	589.61
43.0	0.00	0.0	206.7	214.5	3.94	589.55
44.0	0.00	0.0	198.9	206.7	3.89	589.49

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N15.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N2 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	191.3	198.9	3.82	589.43
46.0	0.00	0.0	183.8	191.3	3.75	589.37
47.0	0.00	0.0	176.4	183.8	3.68	589.31
48.0	0.00	0.0	169.2	176.4	3.61	589.26
49.0	0.00	0.0	162.1	169.2	3.56	589.20
50.0	0.00	0.0	155.1	162.1	3.51	589.14
51.0	0.00	0.0	148.1	155.1	3.47	589.08
52.0	0.00	0.0	141.3	148.1	3.42	589.03
53.0	0.00	0.0	134.5	141.3	3.37	588.97
54.0	0.00	0.0	127.9	134.5	3.30	588.92
55.0	0.00	0.0	121.5	127.9	3.23	588.86
56.0	0.00	0.0	115.1	121.5	3.17	588.80
57.0	0.00	0.0	108.9	115.1	3.10	588.75
58.0	0.00	0.0	102.9	108.9	3.04	588.70
59.0	0.00	0.0	96.9	102.9	2.97	588.64
60.0	0.00	0.0	91.1	96.9	2.91	588.59

```
*****  
*  
*          WHITEGATE VILLAS          *  
*                NORTH                *  
*  BAX ENGINEERING COMPANY INCORPORATED *  
*                JANUARY 3, 1999      *  
*  
*****
```

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

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N15.HYD
Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N2 .HYD

Starting Pond W.S. Elevation = 587.00 ft

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

Peak Inflow = 14.96 cfs
Peak Outflow = 6.94 cfs
Peak Elevation = 590.91 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 12,459 cu-ft

Total Storage in Pond = 12,459 cu-ft

Pond File: c:\windows\desktop\pondpa~1\10343N .PND

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N15.HYD

Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N2 .HYD

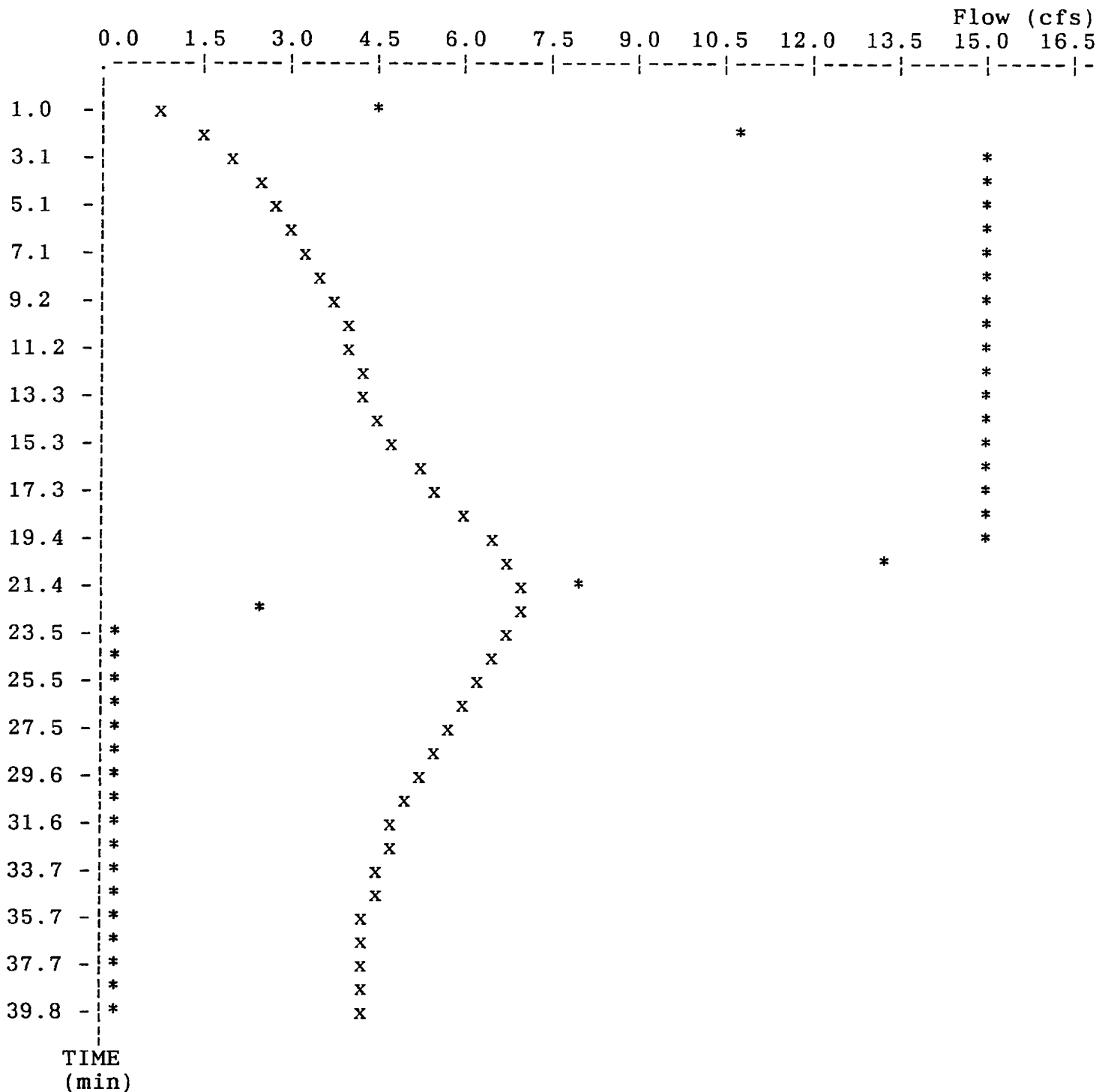
EXECUTED: 02-02-2000

Peak Inflow = 14.96 cfs

14:59:16

Peak Outflow = 6.94 cfs

Peak Elevation = 590.91 ft



x File: c:\windows\desktop\pondpa~1\10343N2 .HYD
 * File: c:\windows\desktop\pondpa~1\10343N15.HYD

Qmax = 6.9 cfs
 Qmax = 15.0 cfs

```

*****
*
*           WHITEGATE VILLAS           *
*                   NORTH              *
*   BAX ENGINEERING COMPANY INCORPORATED *
*                   JANUARY 3, 1999   *
*
*****
  
```

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N25.HYD
 Rating Table file: c:\windows\desktop\pondpa~1\10343N .PND

----INITIAL CONDITIONS----
 Elevation = 587.00 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 + 0 (cfs)
587.00	0.0	0	0.0	0.0
587.25	0.3	15	0.5	0.8
587.50	0.7	122	4.1	4.8
587.75	1.3	412	13.7	15.0
588.00	2.0	976	32.5	34.5
588.25	2.4	1,728	57.6	60.0
588.50	2.8	2,522	84.1	86.9
588.75	3.1	3,357	111.9	115.0
589.00	3.4	4,235	141.2	144.6
589.25	3.6	5,157	171.9	175.5
589.50	3.9	6,125	204.2	208.1
589.75	4.1	7,138	237.9	242.0
590.00	4.3	8,199	273.3	277.6
590.25	4.8	9,308	310.3	315.1
590.50	5.6	10,465	348.8	354.4
590.75	6.5	11,671	389.0	395.5
591.00	7.2	12,928	430.9	438.1
591.25	7.8	14,236	474.5	482.3
591.50	8.3	15,596	519.9	528.2
591.75	8.8	17,009	567.0	575.8
592.00	9.2	18,477	615.9	625.1
592.25	9.6	20,000	666.7	676.3
592.50	10.0	21,579	719.3	729.3
592.75	10.3	23,214	773.8	784.1
593.00	10.7	24,905	830.2	840.9
593.25	11.0	26,656	888.5	899.5
593.50	11.4	28,466	948.9	960.3
593.75	11.7	30,336	1011.2	1022.9
594.00	12.0	32,268	1075.6	1087.6

Time increment (t) = 1.0 min.

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N25.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N3 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	---	0.0	0.0	0.00	587.00
1.0	5.54	5.5	4.0	5.5	0.75	587.52
2.0	12.93	18.5	19.4	22.5	1.57	587.85
3.0	18.47	31.4	46.3	50.8	2.26	588.16
4.0	18.47	36.9	77.7	83.2	2.75	588.47
5.0	18.47	36.9	108.5	114.7	3.10	588.75
6.0	18.47	36.9	138.6	145.4	3.41	589.01
7.0	18.47	36.9	168.3	175.5	3.60	589.25
8.0	18.47	36.9	197.5	205.3	3.87	589.48
9.0	18.47	36.9	226.4	234.5	4.06	589.69
10.0	18.47	36.9	254.9	263.3	4.22	589.90
11.0	18.47	36.9	282.8	291.8	4.49	590.09
12.0	18.47	36.9	310.0	319.8	4.90	590.28
13.0	18.47	36.9	336.0	346.9	5.45	590.45
14.0	18.47	36.9	360.9	373.0	6.01	590.61
15.0	18.47	36.9	384.8	397.9	6.54	590.76
16.0	18.47	36.9	407.9	421.7	6.93	590.90
17.0	18.47	36.9	430.2	444.8	7.29	591.04
18.0	18.47	36.9	452.0	467.2	7.59	591.16
19.0	18.47	36.9	473.2	488.9	7.87	591.29
20.0	18.47	36.9	493.9	510.1	8.10	591.40
21.0	12.93	31.4	508.8	525.3	8.27	591.48
22.0	5.54	18.5	510.7	527.3	8.29	591.50
23.0	0.00	5.5	499.9	516.2	8.17	591.43
24.0	0.00	0.0	483.9	499.9	7.99	591.35
25.0	0.00	0.0	468.3	483.9	7.82	591.26
26.0	0.00	0.0	453.0	468.3	7.61	591.17
27.0	0.00	0.0	438.2	453.0	7.40	591.08
28.0	0.00	0.0	423.8	438.2	7.20	591.00
29.0	0.00	0.0	409.9	423.8	6.97	590.92
30.0	0.00	0.0	396.4	409.9	6.74	590.83
31.0	0.00	0.0	383.4	396.4	6.51	590.76
32.0	0.00	0.0	370.9	383.4	6.23	590.68
33.0	0.00	0.0	359.0	370.9	5.96	590.60
34.0	0.00	0.0	347.6	359.0	5.70	590.53
35.0	0.00	0.0	336.7	347.6	5.46	590.46
36.0	0.00	0.0	326.2	336.7	5.24	590.39
37.0	0.00	0.0	316.2	326.2	5.03	590.32
38.0	0.00	0.0	306.5	316.2	4.82	590.26
39.0	0.00	0.0	297.1	306.5	4.69	590.19
40.0	0.00	0.0	288.0	297.1	4.56	590.13
41.0	0.00	0.0	279.1	288.0	4.44	590.07
42.0	0.00	0.0	270.5	279.1	4.32	590.01
43.0	0.00	0.0	262.0	270.5	4.26	589.95
44.0	0.00	0.0	253.6	262.0	4.21	589.89

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N25.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N3 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	245.2	253.6	4.16	589.83
46.0	0.00	0.0	237.0	245.2	4.12	589.77
47.0	0.00	0.0	228.8	237.0	4.07	589.71
48.0	0.00	0.0	220.8	228.8	4.02	589.65
49.0	0.00	0.0	212.9	220.8	3.98	589.59
50.0	0.00	0.0	205.0	212.9	3.93	589.54
51.0	0.00	0.0	197.3	205.0	3.87	589.48
52.0	0.00	0.0	189.7	197.3	3.80	589.42
53.0	0.00	0.0	182.2	189.7	3.73	589.36
54.0	0.00	0.0	174.9	182.2	3.66	589.30
55.0	0.00	0.0	167.7	174.9	3.60	589.24
56.0	0.00	0.0	160.6	167.7	3.55	589.19
57.0	0.00	0.0	153.6	160.6	3.50	589.13
58.0	0.00	0.0	146.7	153.6	3.46	589.07
59.0	0.00	0.0	139.8	146.7	3.41	589.02
60.0	0.00	0.0	133.1	139.8	3.35	588.96

```
*****  
*  
*           WHITEGATE VILLAS           *  
*                   NORTH              *  
*   BAX ENGINEERING COMPANY INCORPORATED *  
*                   JANUARY 3, 1999    *  
*  
*****
```

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

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N25.HYD
Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N3 .HYD

Starting Pond W.S. Elevation = 587.00 ft

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

Peak Inflow = 18.47 cfs
Peak Outflow = 8.29 cfs
Peak Elevation = 591.50 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 15,569 cu-ft

Total Storage in Pond = 15,569 cu-ft

Pond File: c:\windows\desktop\pondpa~1\10343N .PND

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N25.HYD

Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N3 .HYD

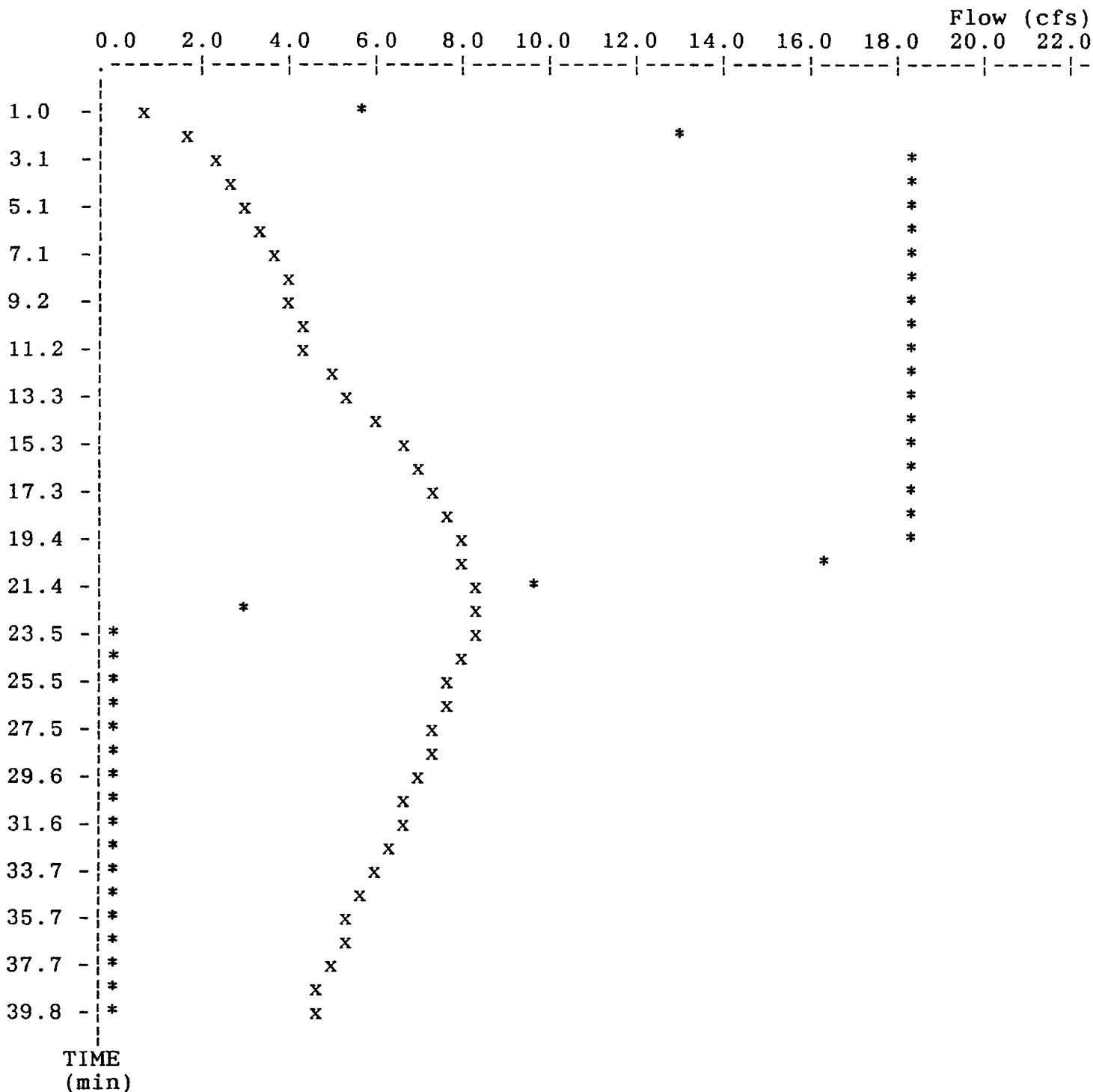
EXECUTED: 02-02-2000

14:59:16

Peak Inflow = 18.47 cfs

Peak Outflow = 8.29 cfs

Peak Elevation = 591.50 ft



x File: c:\windows\desktop\pondpa~1\10343N3 .HYD

Qmax = 8.3 cfs

* File: c:\windows\desktop\pondpa~1\10343N25.HYD

Qmax = 18.5 cfs

```
*****
*
*           WHITEGATE VILLAS           *
*           NORTH                       *
*   BAX ENGINEERING COMPANY INCORPORATED *
*           JANUARY 3, 1999           *
*
*****
```

Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N00.HYD
 Rating Table file: c:\windows\desktop\pondpa~1\10343N .PND

----INITIAL CONDITIONS----
 Elevation = 587.00 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
587.00	0.0	0
587.25	0.3	15
587.50	0.7	122
587.75	1.3	412
588.00	2.0	976
588.25	2.4	1,728
588.50	2.8	2,522
588.75	3.1	3,357
589.00	3.4	4,235
589.25	3.6	5,157
589.50	3.9	6,125
589.75	4.1	7,138
590.00	4.3	8,199
590.25	4.8	9,308
590.50	5.6	10,465
590.75	6.5	11,671
591.00	7.2	12,928
591.25	7.8	14,236
591.50	8.3	15,596
591.75	8.8	17,009
592.00	9.2	18,477
592.25	9.6	20,000
592.50	10.0	21,579
592.75	10.3	23,214
593.00	10.7	24,905
593.25	11.0	26,656
593.50	11.4	28,466
593.75	11.7	30,336
594.00	12.0	32,268

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
0.5	0.8
4.1	4.8
13.7	15.0
32.5	34.5
57.6	60.0
84.1	86.9
111.9	115.0
141.2	144.6
171.9	175.5
204.2	208.1
237.9	242.0
273.3	277.6
310.3	315.1
348.8	354.4
389.0	395.5
430.9	438.1
474.5	482.3
519.9	528.2
567.0	575.8
615.9	625.1
666.7	676.3
719.3	729.3
773.8	784.1
830.2	840.9
888.5	899.5
948.9	960.3
1011.2	1022.9
1075.6	1087.6

Time increment (t) = 1.0 min.

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N00.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N4 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	587.00
1.0	7.09	7.1	5.4	7.1	0.84	587.56
2.0	16.54	23.6	25.4	29.0	1.80	587.93
3.0	23.63	40.2	60.6	65.6	2.48	588.30
4.0	23.63	47.3	101.9	107.9	3.02	588.69
5.0	23.63	47.3	142.3	149.1	3.43	589.04
6.0	23.63	47.3	182.1	189.5	3.73	589.36
7.0	23.63	47.3	221.3	229.3	4.03	589.66
8.0	23.63	47.3	260.0	268.5	4.25	589.94
9.0	23.63	47.3	297.9	307.3	4.70	590.20
10.0	23.63	47.3	334.3	345.2	5.41	590.44
11.0	23.63	47.3	369.2	381.6	6.19	590.67
12.0	23.63	47.3	402.8	416.5	6.84	590.87
13.0	23.63	47.3	435.3	450.0	7.36	591.07
14.0	23.63	47.3	467.0	482.6	7.80	591.25
15.0	23.63	47.3	497.9	514.2	8.15	591.42
16.0	23.63	47.3	528.2	545.2	8.48	591.59
17.0	23.63	47.3	557.9	575.5	8.80	591.75
18.0	23.63	47.3	587.1	605.2	9.04	591.90
19.0	23.63	47.3	615.8	634.3	9.27	592.05
20.0	23.63	47.3	644.1	663.1	9.50	592.19
21.0	16.54	40.2	664.9	684.2	9.66	592.29
22.0	7.09	23.6	669.2	688.5	9.69	592.31
23.0	0.00	7.1	657.1	676.3	9.60	592.25
24.0	0.00	0.0	638.2	657.1	9.45	592.16
25.0	0.00	0.0	619.5	638.2	9.30	592.06
26.0	0.00	0.0	601.2	619.5	9.15	591.97
27.0	0.00	0.0	583.2	601.2	9.01	591.88
28.0	0.00	0.0	565.5	583.2	8.86	591.79
29.0	0.00	0.0	548.1	565.5	8.69	591.70
30.0	0.00	0.0	531.1	548.1	8.51	591.60
31.0	0.00	0.0	514.4	531.1	8.33	591.52
32.0	0.00	0.0	498.1	514.4	8.15	591.43
33.0	0.00	0.0	482.2	498.1	7.97	591.34
34.0	0.00	0.0	466.6	482.2	7.80	591.25
35.0	0.00	0.0	451.4	466.6	7.59	591.16
36.0	0.00	0.0	436.7	451.4	7.38	591.08
37.0	0.00	0.0	422.3	436.7	7.18	590.99
38.0	0.00	0.0	408.4	422.3	6.94	590.91
39.0	0.00	0.0	395.0	408.4	6.71	590.83
40.0	0.00	0.0	382.0	395.0	6.49	590.75
41.0	0.00	0.0	369.6	382.0	6.20	590.67
42.0	0.00	0.0	357.8	369.6	5.93	590.59
43.0	0.00	0.0	346.4	357.8	5.67	590.52
44.0	0.00	0.0	335.5	346.4	5.44	590.45

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N00.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N4 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	325.1	335.5	5.22	590.38
46.0	0.00	0.0	315.1	325.1	5.00	590.31
47.0	0.00	0.0	305.5	315.1	4.80	590.25
48.0	0.00	0.0	296.2	305.5	4.67	590.19
49.0	0.00	0.0	287.1	296.2	4.55	590.12
50.0	0.00	0.0	278.2	287.1	4.43	590.06
51.0	0.00	0.0	269.6	278.2	4.31	590.00
52.0	0.00	0.0	261.1	269.6	4.25	589.94
53.0	0.00	0.0	252.7	261.1	4.21	589.88
54.0	0.00	0.0	244.3	252.7	4.16	589.82
55.0	0.00	0.0	236.1	244.3	4.11	589.77
56.0	0.00	0.0	228.0	236.1	4.07	589.71
57.0	0.00	0.0	220.0	228.0	4.02	589.65
58.0	0.00	0.0	212.0	220.0	3.97	589.59
59.0	0.00	0.0	204.2	212.0	3.92	589.53
60.0	0.00	0.0	196.4	204.2	3.86	589.47

```
*****  
*  
*           WHITEGATE VILLAS           *  
*           NORTH                       *  
* BAX ENGINEERING COMPANY INCORPORATED *  
*           JANUARY 3, 1999            *  
*  
*****
```

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

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N00.HYD
Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N4 .HYD

Starting Pond W.S. Elevation = 587.00 ft

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

Peak Inflow = 23.63 cfs
Peak Outflow = 9.69 cfs
Peak Elevation = 592.31 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 20,366 cu-ft

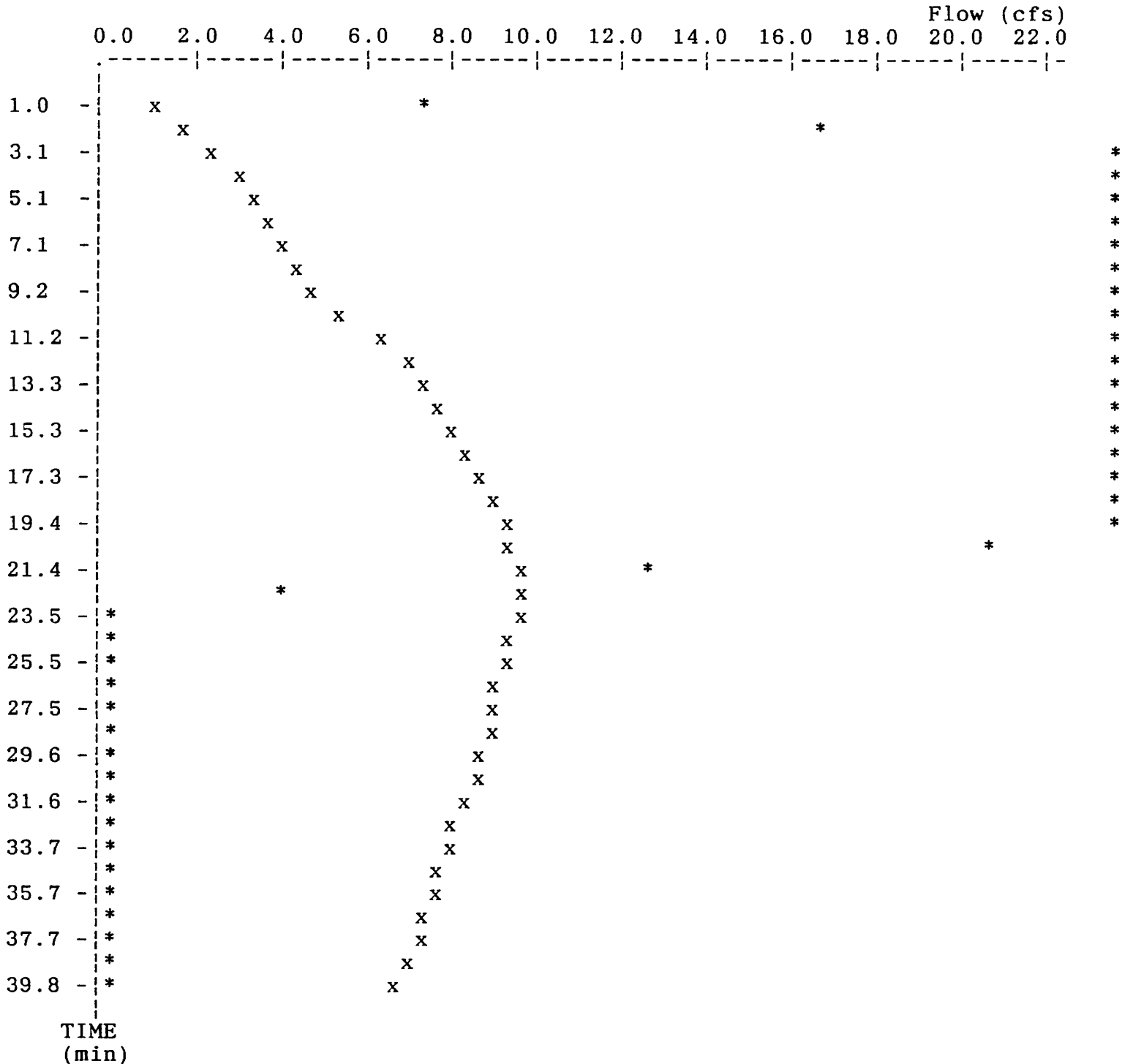
Total Storage in Pond = 20,366 cu-ft

Pond File: c:\windows\desktop\pondpa~1\10343N .PND
 Inflow Hydrograph: c:\windows\desktop\pondpa~1\10343N00.HYD
 Outflow Hydrograph: c:\windows\desktop\pondpa~1\10343N4 .HYD

EXECUTED: 02-02-2000

14:59:16

Peak Inflow = 23.63 cfs
 Peak Outflow = 9.69 cfs
 Peak Elevation = 592.31 ft



x File: c:\windows\desktop\pondpa~1\10343N4 .HYD Qmax = 9.7 cfs
 * File: c:\windows\desktop\pondpa~1\10343N00.HYD Qmax = 23.6 cfs

POND-2 Version: 5.20
S/N:

WHITEGATE VILLAS
SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

CALCULATED 01-17-2000 11:22:53
DISK FILE: c:\windows\desktop\pondpa`1\10343S .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sq ^r (A1*A2) (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
595.00	0.00	0	0	0	0
596.00	3,934.00	3,934	3,934	1,311	1,311
598.00	4,456.00	4,456	12,577	8,385	9,696
600.00	4,978.00	4,978	14,144	9,429	19,125
602.00	5,500.00	5,500	15,710	10,474	29,599

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

$$\text{Volume} = (1/3) * (\text{EL2}-\text{EL1}) * (\text{Areal} + \text{Area2} + \text{sq.rt.}(\text{Areal}*\text{Area2}))$$

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

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

Elevation (ft)	Q (cfs)	Contributing Structures
-----	-----	-----
595.00	0.0	1
595.25	0.2	1
595.50	0.6	1
595.75	1.1	1
596.00	1.7	1
596.25	2.4	1
596.50	3.1	2
596.75	3.5	2
597.00	3.9	2
597.25	4.2	2
597.50	4.5	2
597.75	4.8	2
598.00	5.1	2
598.25	5.4	2
598.50	5.6	2
598.75	5.8	2
599.00	6.1	2
599.25	6.3	2
599.50	6.5	2
599.75	6.7	2
600.00	6.9	2
600.25	7.1	2
600.50	7.3	2 +3
600.75	11.8	2 +3
601.00	20.0	2 +3
601.25	30.5	2 +3
601.50	43.0	2 +3
601.75	57.1	2 +3
602.00	72.6	2 +3

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outlet Structure File: c:\pondpack\10343\south\10343S .STR
Planimeter Input File: c:\pondpack\10343\south\10343S .VOL
Rating Table Output File: c:\pondpack\10343\south\10343S .PND

Min. Elev.(ft) = 595 Max. Elev.(ft) = 602 Incr.(ft) = .25

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:
c:\pondpack\10343\south\10343S .PND

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	595
E2 elev.(ft)?	602.001
Weir coefficient?	3
Weir elev.(ft)?	595.00
Length (ft)?	.58333
Contracted/Suppressed (C/S)?	S

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

ORIFICE

Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	596.1667
E2 elev.(ft)?	602.001
Orifice coeff.?	0.6
Invert elev.(ft)?	595.000
Datum elev.(ft) ?	595.583
Orifice area (sq ft)?	.680555

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

WEIR-VR
Weir - Vertical Rectangular

E1 elev.(ft)?	600.5
E2 elev.(ft)?	602.001
Weir coefficient?	3
Weir elev.(ft)?	600.50
Length (ft)?	11.67
Contracted/Suppressed (C/S)?	S

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

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

Elevation (ft)	Q (cfs)	Computation Messages
595.00	0.0	H =0.0
595.25	0.2	H =.25
595.50	0.6	H =.5
595.75	1.1	H =.750
596.00	1.7	H =1.0
596.25	2.4	H =1.25
596.50	3.2	H =1.5
596.75	4.1	H =1.75
597.00	4.9	H =2.0
597.25	5.9	H =2.25
597.50	6.9	H =2.5
597.75	8.0	H =2.75
598.00	9.1	H =3.0
598.25	10.3	H =3.25
598.50	11.5	H =3.5
598.75	12.7	H =3.75
599.00	14.0	H =4.0
599.25	15.3	H =4.25
599.50	16.7	H =4.5
599.75	18.1	H =4.75
600.00	19.6	H =5.0
600.25	21.1	H =5.25
600.50	22.6	H =5.5
600.75	24.1	H =5.75
601.00	25.7	H =6.0
601.25	27.3	H =6.25
601.50	29.0	H =6.5
601.75	30.7	H =6.75
602.00	32.4	H =7.0

C = 3 L (ft) = .58333

H (ft) = Table elev. - Invert elev. (595 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

Elevation (ft)	Q (cfs)	Computation Messages
595.00	0.0	E < E1=596.1667
595.25	0.0	E < E1=596.1667
595.50	0.0	E < E1=596.1667
595.75	0.0	E < E1=596.1667
596.00	0.0	E < E1=596.1667
596.25	2.7	H =.667
596.50	3.1	H =.917
596.75	3.5	H =1.167
597.00	3.9	H =1.417
597.25	4.2	H =1.667
597.50	4.5	H =1.917
597.75	4.8	H =2.167
598.00	5.1	H =2.417
598.25	5.4	H =2.667
598.50	5.6	H =2.917
598.75	5.8	H =3.167
599.00	6.1	H =3.417
599.25	6.3	H =3.667
599.50	6.5	H =3.917
599.75	6.7	H =4.167
600.00	6.9	H =4.417
600.25	7.1	H =4.667
600.50	7.3	H =4.917
600.75	7.4	H =5.167
601.00	7.6	H =5.417
601.25	7.8	H =5.667
601.50	8.0	H =5.917
601.75	8.1	H =6.167
602.00	8.3	H =6.417

C = .6 A = .680555 sq.ft.
H (ft) = Table elev. - Datum elev. (595.583 ft)
Q (cfs) = C * A * sqr(2g * H)

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

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

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

Elevation (ft)	Q (cfs)	Computation Messages
595.00	0.0	E < Inv.El. = 600.5
595.25	0.0	E < Inv.El. = 600.5
595.50	0.0	E < Inv.El. = 600.5
595.75	0.0	E < Inv.El. = 600.5
596.00	0.0	E < Inv.El. = 600.5
596.25	0.0	E < Inv.El. = 600.5
596.50	0.0	E < Inv.El. = 600.5
596.75	0.0	E < Inv.El. = 600.5
597.00	0.0	E < Inv.El. = 600.5
597.25	0.0	E < Inv.El. = 600.5
597.50	0.0	E < Inv.El. = 600.5
597.75	0.0	E < Inv.El. = 600.5
598.00	0.0	E < Inv.El. = 600.5
598.25	0.0	E < Inv.El. = 600.5
598.50	0.0	E < Inv.El. = 600.5
598.75	0.0	E < Inv.El. = 600.5
599.00	0.0	E < Inv.El. = 600.5
599.25	0.0	E < Inv.El. = 600.5
599.50	0.0	E < Inv.El. = 600.5
599.75	0.0	E < Inv.El. = 600.5
600.00	0.0	E < Inv.El. = 600.5
600.25	0.0	E < Inv.El. = 600.5
600.50	0.0	H = 0.0
600.75	4.4	H = .25
601.00	12.4	H = .5
601.25	22.7	H = .750
601.50	35.0	H = 1.0
601.75	48.9	H = 1.25
602.00	64.3	H = 1.5

C = 3 L (ft) = 11.67

H (ft) = Table elev. - Invert elev. (600.5 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: 10343S .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

WHITEGATE VILLAS
WEST SOUTH
BAX ENGINEERING COMPANY INCORPORATED
JANUARY 3, 2000

Outflow Rating Table A
Table A = 1 ? 2

Elevation (ft)	Q (cfs)	Contributing Structures
595.00	0.0	1
595.25	0.2	1
595.50	0.6	1
595.75	1.1	1
596.00	1.7	1
596.25	2.4	1
596.50	3.1	2
596.75	3.5	2
597.00	3.9	2
597.25	4.2	2
597.50	4.5	2
597.75	4.8	2
598.00	5.1	2
598.25	5.4	2
598.50	5.6	2
598.75	5.8	2
599.00	6.1	2
599.25	6.3	2
599.50	6.5	2
599.75	6.7	2
600.00	6.9	2
600.25	7.1	2
600.50	7.3	2
600.75	7.4	2
601.00	7.6	2
601.25	7.8	2
601.50	8.0	2
601.75	8.1	2
602.00	8.3	2

```

*****
*
*           WHITEGATE VILLAS
*           SOUTH
*   BAX ENGINEERING COMPANY INCORPORATED
*           JANUARY 3, 1999
*
*****
    
```

Inflow Hydrograph: c:\pondpack\10343\south\10343S02.HYD
 Rating Table file: c:\pondpack\10343\south\10343S .PND

----INITIAL CONDITIONS----
 Elevation = 595.00 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 + 0 (cfs)
595.00	0.0	0	0.0	0.0
595.25	0.2	20	0.7	0.9
595.50	0.6	164	5.5	6.1
595.75	1.1	553	18.4	19.5
596.00	1.7	1,311	43.7	45.4
596.25	2.4	2,303	76.8	79.2
596.50	3.1	3,310	110.3	113.4
596.75	3.5	4,333	144.4	147.9
597.00	3.9	5,373	179.1	183.0
597.25	4.2	6,429	214.3	218.5
597.50	4.5	7,501	250.0	254.5
597.75	4.8	8,590	286.3	291.1
598.00	5.1	9,696	323.2	328.3
598.25	5.4	10,818	360.6	366.0
598.50	5.6	11,956	398.5	404.1
598.75	5.8	13,110	437.0	442.8
599.00	6.1	14,280	476.0	482.1
599.25	6.3	15,466	515.5	521.8
599.50	6.5	16,670	555.7	562.2
599.75	6.7	17,889	596.3	603.0
600.00	6.9	19,125	637.5	644.4
600.25	7.1	20,377	679.2	686.3
600.50	7.3	21,646	721.5	728.8
600.75	11.8	22,930	764.3	776.1
601.00	20.0	24,232	807.7	827.7
601.25	30.5	25,548	851.6	882.1
601.50	43.0	26,882	896.1	939.1
601.75	57.1	28,232	941.1	998.2
602.00	72.6	29,599	986.6	1059.2

Time increment (t) = 1.0 min.

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S02.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	595.00
1.0	2.33	2.3	1.7	2.3	0.31	595.32
2.0	4.67	7.0	7.3	8.7	0.70	595.55
3.0	7.00	11.7	16.8	19.0	1.08	595.74
4.0	9.34	16.3	30.3	33.2	1.42	595.88
5.0	11.67	21.0	47.7	51.3	1.82	596.04
6.0	11.67	23.3	66.6	71.0	2.23	596.19
7.0	11.67	23.3	84.7	89.9	2.62	596.33
8.0	11.67	23.3	102.0	108.0	2.99	596.46
9.0	11.67	23.3	118.9	125.4	3.24	596.59
10.0	11.67	23.3	135.4	142.2	3.43	596.71
11.0	11.67	23.3	151.5	158.7	3.62	596.83
12.0	11.67	23.3	167.2	174.8	3.81	596.94
13.0	11.67	23.3	182.6	190.5	3.96	597.05
14.0	11.67	23.3	197.8	205.9	4.09	597.16
15.0	11.67	23.3	212.7	221.1	4.22	597.27
16.0	11.67	23.3	227.3	236.0	4.35	597.37
17.0	11.67	23.3	241.7	250.6	4.47	597.47
18.0	11.67	23.3	255.9	265.0	4.59	597.57
19.0	11.67	23.3	269.8	279.2	4.70	597.67
20.0	11.67	23.3	283.5	293.1	4.82	597.76
21.0	9.34	21.0	294.7	304.5	4.91	597.84
22.0	7.00	16.3	301.1	311.1	4.96	597.88
23.0	4.67	11.7	302.8	312.8	4.97	597.90
24.0	2.33	7.0	299.9	309.8	4.95	597.88
25.0	0.00	2.3	292.5	302.3	4.89	597.82
26.0	0.00	0.0	282.9	292.5	4.81	597.76
27.0	0.00	0.0	273.4	282.9	4.73	597.69
28.0	0.00	0.0	264.1	273.4	4.65	597.63
29.0	0.00	0.0	254.9	264.1	4.58	597.57
30.0	0.00	0.0	245.9	254.9	4.50	597.50
31.0	0.00	0.0	237.1	245.9	4.43	597.44
32.0	0.00	0.0	228.4	237.1	4.35	597.38
33.0	0.00	0.0	219.8	228.4	4.28	597.32
34.0	0.00	0.0	211.4	219.8	4.21	597.26
35.0	0.00	0.0	203.1	211.4	4.14	597.20
36.0	0.00	0.0	195.0	203.1	4.07	597.14
37.0	0.00	0.0	187.0	195.0	4.00	597.08
38.0	0.00	0.0	179.1	187.0	3.93	597.03
39.0	0.00	0.0	171.4	179.1	3.86	596.97
40.0	0.00	0.0	163.9	171.4	3.77	596.92
41.0	0.00	0.0	156.5	163.9	3.68	596.86
42.0	0.00	0.0	149.3	156.5	3.60	596.81
43.0	0.00	0.0	142.3	149.3	3.52	596.76
44.0	0.00	0.0	135.4	142.3	3.43	596.71

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S02.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	128.7	135.4	3.35	596.66
46.0	0.00	0.0	122.1	128.7	3.28	596.61
47.0	0.00	0.0	115.7	122.1	3.20	596.56
48.0	0.00	0.0	109.5	115.7	3.13	596.52
49.0	0.00	0.0	103.4	109.5	3.02	596.47
50.0	0.00	0.0	97.6	103.4	2.90	596.43
51.0	0.00	0.0	92.1	97.6	2.78	596.38
52.0	0.00	0.0	86.8	92.1	2.66	596.34
53.0	0.00	0.0	81.7	86.8	2.56	596.31
54.0	0.00	0.0	76.8	81.7	2.45	596.27
55.0	0.00	0.0	72.1	76.8	2.35	596.23
56.0	0.00	0.0	67.5	72.1	2.25	596.20
57.0	0.00	0.0	63.2	67.5	2.16	596.16
58.0	0.00	0.0	59.1	63.2	2.07	596.13
59.0	0.00	0.0	55.1	59.1	1.98	596.10
60.0	0.00	0.0	51.3	55.1	1.90	596.07

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

Pond File: c:\pondpack\10343\south\10343S .PND
Inflow Hydrograph: c:\pondpack\10343\south\10343S02.HYD
Outflow Hydrograph: c:\pondpack\10343\south\10343S1 .HYD

Starting Pond W.S. Elevation = 595.00 ft

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

Peak Inflow = 11.67 cfs
Peak Outflow = 4.97 cfs
Peak Elevation = 597.90 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 9,235 cu-ft

Total Storage in Pond = 9,235 cu-ft

Pond File: c:\pondpack\10343\south\10343S .PND

Inflow Hydrograph: c:\pondpack\10343\south\10343S02.HYD

Outflow Hydrograph: c:\pondpack\10343\south\10343S1 .HYD

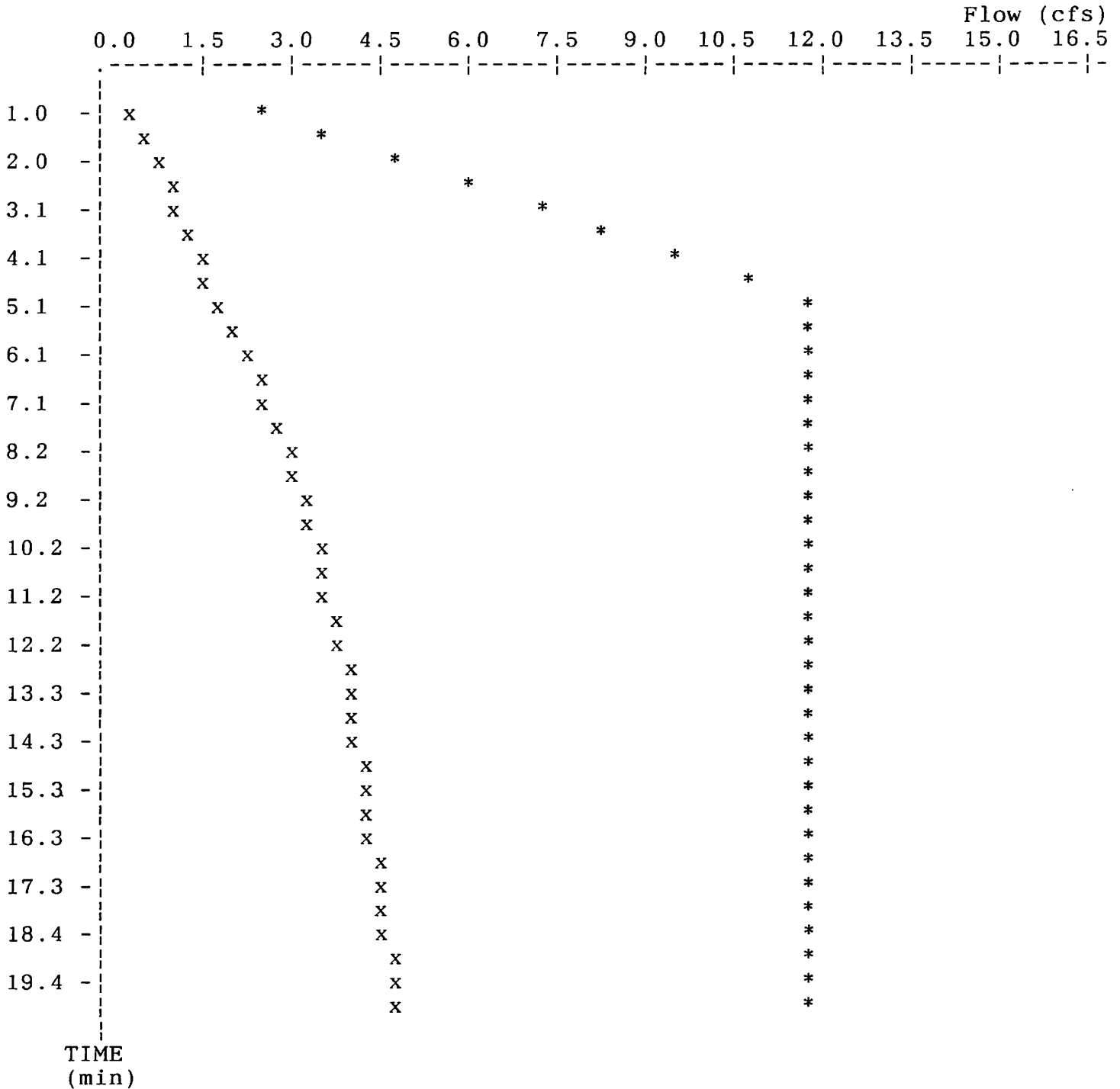
EXECUTED: 03-01-2000

Peak Inflow = 11.67 cfs

14:37:44

Peak Outflow = 4.97 cfs

Peak Elevation = 597.90 ft



x File: c:\pondpack\10343\south\10343S1 .HYD Qmax = 5.0 cfs
 * File: c:\pondpack\10343\south\10343S02.HYD Qmax = 11.7 cfs

```
*****
*
*           WHITEGATE VILLAS           *
*           SOUTH                       *
*   BAX ENGINEERING COMPANY INCORPORATED *
*           JANUARY 3, 1999            *
*
*****
```

Inflow Hydrograph: c:\pondpack\10343\south\10343S15.HYD
 Rating Table file: c:\pondpack\10343\south\10343S .PND

----INITIAL CONDITIONS----
 Elevation = 595.00 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 + 0 (cfs)
595.00	0.0	0	0.0	0.0
595.25	0.2	20	0.7	0.9
595.50	0.6	164	5.5	6.1
595.75	1.1	553	18.4	19.5
596.00	1.7	1,311	43.7	45.4
596.25	2.4	2,303	76.8	79.2
596.50	3.1	3,310	110.3	113.4
596.75	3.5	4,333	144.4	147.9
597.00	3.9	5,373	179.1	183.0
597.25	4.2	6,429	214.3	218.5
597.50	4.5	7,501	250.0	254.5
597.75	4.8	8,590	286.3	291.1
598.00	5.1	9,696	323.2	328.3
598.25	5.4	10,818	360.6	366.0
598.50	5.6	11,956	398.5	404.1
598.75	5.8	13,110	437.0	442.8
599.00	6.1	14,280	476.0	482.1
599.25	6.3	15,466	515.5	521.8
599.50	6.5	16,670	555.7	562.2
599.75	6.7	17,889	596.3	603.0
600.00	6.9	19,125	637.5	644.4
600.25	7.1	20,377	679.2	686.3
600.50	7.3	21,646	721.5	728.8
600.75	11.8	22,930	764.3	776.1
601.00	20.0	24,232	807.7	827.7
601.25	30.5	25,548	851.6	882.1
601.50	43.0	26,882	896.1	939.1
601.75	57.1	28,232	941.1	998.2
602.00	72.6	29,599	986.6	1059.2

Time increment (t) = 1.0 min.

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S15.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S2 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	---	0.0	0.0	0.00	595.00
1.0	3.85	3.9	3.0	3.9	0.43	595.39
2.0	7.69	11.5	12.7	14.5	0.91	595.66
3.0	11.54	19.2	29.2	31.9	1.39	595.87
4.0	15.38	26.9	52.2	56.1	1.92	596.08
5.0	19.23	34.6	81.7	86.8	2.56	596.31
6.0	19.23	38.5	113.8	120.2	3.18	596.55
7.0	19.23	38.5	145.2	152.3	3.55	596.78
8.0	19.23	38.5	175.8	183.7	3.91	597.00
9.0	19.23	38.5	206.0	214.3	4.16	597.22
10.0	19.23	38.5	235.6	244.4	4.42	597.43
11.0	19.23	38.5	264.7	274.1	4.66	597.63
12.0	19.23	38.5	293.4	303.2	4.90	597.83
13.0	19.23	38.5	321.6	331.9	5.13	598.02
14.0	19.23	38.5	349.4	360.1	5.35	598.21
15.0	19.23	38.5	376.8	387.8	5.51	598.39
16.0	19.23	38.5	403.9	415.3	5.66	598.57
17.0	19.23	38.5	430.8	442.4	5.80	598.75
18.0	19.23	38.5	457.3	469.3	6.00	598.92
19.0	19.23	38.5	483.4	495.7	6.17	599.09
20.0	19.23	38.5	509.2	521.8	6.30	599.25
21.0	15.38	34.6	531.0	543.9	6.41	599.39
22.0	11.54	26.9	545.0	558.0	6.48	599.47
23.0	7.69	19.2	551.2	564.2	6.51	599.51
24.0	3.85	11.5	549.7	562.7	6.50	599.50
25.0	0.00	3.9	540.7	553.6	6.46	599.45
26.0	0.00	0.0	527.9	540.7	6.39	599.37
27.0	0.00	0.0	515.2	527.9	6.33	599.29
28.0	0.00	0.0	502.7	515.2	6.27	599.21
29.0	0.00	0.0	490.3	502.7	6.20	599.13
30.0	0.00	0.0	478.0	490.3	6.14	599.05
31.0	0.00	0.0	465.9	478.0	6.07	598.97
32.0	0.00	0.0	453.9	465.9	5.98	598.90
33.0	0.00	0.0	442.1	453.9	5.88	598.82
34.0	0.00	0.0	430.6	442.1	5.80	598.75
35.0	0.00	0.0	419.1	430.6	5.74	598.67
36.0	0.00	0.0	407.7	419.1	5.68	598.60
37.0	0.00	0.0	396.5	407.7	5.62	598.52
38.0	0.00	0.0	385.4	396.5	5.56	598.45
39.0	0.00	0.0	374.4	385.4	5.50	598.38
40.0	0.00	0.0	363.5	374.4	5.44	598.30
41.0	0.00	0.0	352.7	363.5	5.38	598.23
42.0	0.00	0.0	342.1	352.7	5.29	598.16
43.0	0.00	0.0	331.7	342.1	5.21	598.09
44.0	0.00	0.0	321.5	331.7	5.13	598.02

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S15.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S2 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	311.4	321.5	5.04	597.95
46.0	0.00	0.0	301.4	311.4	4.96	597.89
47.0	0.00	0.0	291.7	301.4	4.88	597.82
48.0	0.00	0.0	282.1	291.7	4.80	597.75
49.0	0.00	0.0	272.6	282.1	4.73	597.69
50.0	0.00	0.0	263.3	272.6	4.65	597.62
51.0	0.00	0.0	254.2	263.3	4.57	597.56
52.0	0.00	0.0	245.2	254.2	4.50	597.50
53.0	0.00	0.0	236.3	245.2	4.42	597.44
54.0	0.00	0.0	227.6	236.3	4.35	597.37
55.0	0.00	0.0	219.1	227.6	4.28	597.31
56.0	0.00	0.0	210.7	219.1	4.20	597.25
57.0	0.00	0.0	202.4	210.7	4.13	597.19
58.0	0.00	0.0	194.3	202.4	4.06	597.14
59.0	0.00	0.0	186.3	194.3	4.00	597.08
60.0	0.00	0.0	178.4	186.3	3.93	597.02

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

Pond File: c:\pondpack\10343\south\10343S .PND
Inflow Hydrograph: c:\pondpack\10343\south\10343S15.HYD
Outflow Hydrograph: c:\pondpack\10343\south\10343S2 .HYD

Starting Pond W.S. Elevation = 595.00 ft

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

Peak Inflow = 19.23 cfs
Peak Outflow = 6.51 cfs
Peak Elevation = 599.51 ft

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

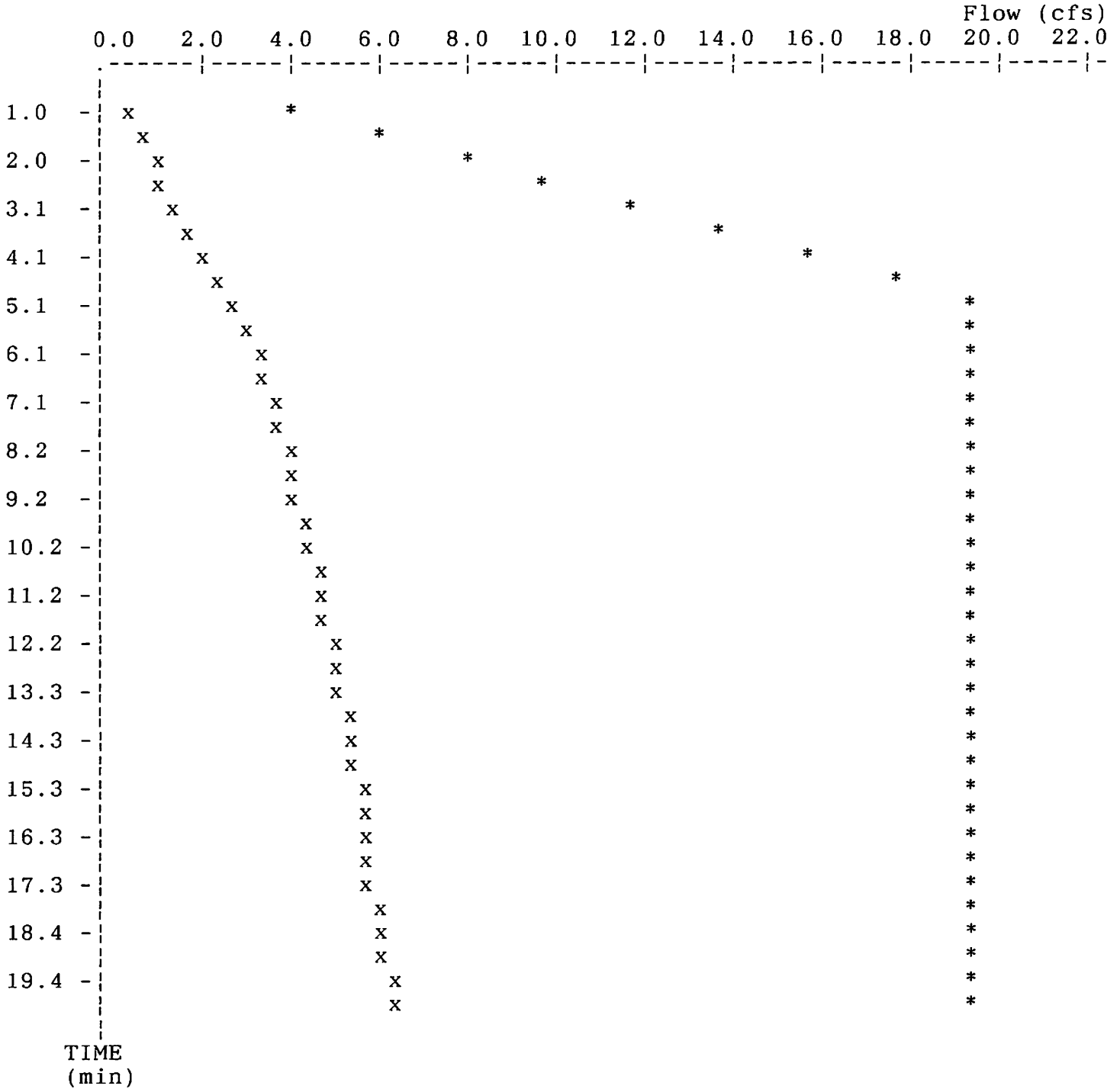
Initial Storage = 0 cu-ft
Peak Storage From Storm = 16,731 cu-ft

Total Storage in Pond = 16,731 cu-ft

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S15.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S2 .HYD

EXECUTED: 03-01-2000
 14:37:44

Peak Inflow = 19.23 cfs
 Peak Outflow = 6.51 cfs
 Peak Elevation = 599.51 ft



x File: c:\pondpack\10343\south\10343S2 .HYD Qmax = 6.5 cfs
 * File: c:\pondpack\10343\south\10343S15.HYD Qmax = 19.2 cfs

```

*****
*
*           WHITEGATE VILLAS           *
*           SOUTH                       *
*   BAX ENGINEERING COMPANY INCORPORATED *
*           JANUARY 3, 1999           *
*
*****
  
```

Inflow Hydrograph: c:\pondpack\10343\south\10343S25.HYD
 Rating Table file: c:\pondpack\10343\south\10343S .PND

----INITIAL CONDITIONS----
 Elevation = 595.00 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
595.00	0.0	0
595.25	0.2	20
595.50	0.6	164
595.75	1.1	553
596.00	1.7	1,311
596.25	2.4	2,303
596.50	3.1	3,310
596.75	3.5	4,333
597.00	3.9	5,373
597.25	4.2	6,429
597.50	4.5	7,501
597.75	4.8	8,590
598.00	5.1	9,696
598.25	5.4	10,818
598.50	5.6	11,956
598.75	5.8	13,110
599.00	6.1	14,280
599.25	6.3	15,466
599.50	6.5	16,670
599.75	6.7	17,889
600.00	6.9	19,125
600.25	7.1	20,377
600.50	7.3	21,646
600.75	11.8	22,930
601.00	20.0	24,232
601.25	30.5	25,548
601.50	43.0	26,882
601.75	57.1	28,232
602.00	72.6	29,599

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
0.0	0.0
0.7	0.9
5.5	6.1
18.4	19.5
43.7	45.4
76.8	79.2
110.3	113.4
144.4	147.9
179.1	183.0
214.3	218.5
250.0	254.5
286.3	291.1
323.2	328.3
360.6	366.0
398.5	404.1
437.0	442.8
476.0	482.1
515.5	521.8
555.7	562.2
596.3	603.0
637.5	644.4
679.2	686.3
721.5	728.8
764.3	776.1
807.7	827.7
851.6	882.1
896.1	939.1
941.1	998.2
986.6	1059.2

Time increment (t) = 1.0 min.

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S25.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S3 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	595.00
1.0	4.75	4.8	3.8	4.8	0.50	595.44
2.0	9.50	14.3	15.9	18.0	1.04	595.72
3.0	14.24	23.7	36.5	39.7	1.57	595.94
4.0	18.99	33.2	65.3	69.8	2.21	596.18
5.0	23.74	42.7	102.1	108.1	2.99	596.46
6.0	23.74	47.5	142.5	149.6	3.52	596.76
7.0	23.74	47.5	182.1	190.0	3.96	597.05
8.0	23.74	47.5	221.0	229.6	4.29	597.33
9.0	23.74	47.5	259.2	268.5	4.61	597.60
10.0	23.74	47.5	296.9	306.7	4.93	597.85
11.0	23.74	47.5	333.9	344.4	5.23	598.11
12.0	23.74	47.5	370.4	381.4	5.48	598.35
13.0	23.74	47.5	406.6	417.9	5.67	598.59
14.0	23.74	47.5	442.3	454.0	5.89	598.82
15.0	23.74	47.5	477.5	489.7	6.14	599.05
16.0	23.74	47.5	512.3	524.9	6.32	599.27
17.0	23.74	47.5	546.8	559.8	6.49	599.49
18.0	23.74	47.5	581.0	594.3	6.66	599.70
19.0	23.74	47.5	614.8	628.5	6.82	599.90
20.0	23.74	47.5	648.3	662.3	6.99	600.11
21.0	18.99	42.7	676.8	691.1	7.12	600.28
22.0	14.24	33.2	695.6	710.0	7.21	600.39
23.0	9.50	23.7	704.8	719.4	7.26	600.44
24.0	4.75	14.3	704.6	719.1	7.25	600.44
25.0	0.00	4.8	694.9	709.3	7.21	600.39
26.0	0.00	0.0	680.6	694.9	7.14	600.30
27.0	0.00	0.0	666.5	680.6	7.07	600.22
28.0	0.00	0.0	652.5	666.5	7.01	600.13
29.0	0.00	0.0	638.6	652.5	6.94	600.05
30.0	0.00	0.0	624.9	638.6	6.87	599.97
31.0	0.00	0.0	611.3	624.9	6.81	599.88
32.0	0.00	0.0	597.8	611.3	6.74	599.80
33.0	0.00	0.0	584.4	597.8	6.67	599.72
34.0	0.00	0.0	571.2	584.4	6.61	599.64
35.0	0.00	0.0	558.1	571.2	6.54	599.56
36.0	0.00	0.0	545.2	558.1	6.48	599.47
37.0	0.00	0.0	532.3	545.2	6.42	599.39
38.0	0.00	0.0	519.6	532.3	6.35	599.32
39.0	0.00	0.0	507.0	519.6	6.29	599.24
40.0	0.00	0.0	494.6	507.0	6.23	599.16
41.0	0.00	0.0	482.3	494.6	6.16	599.08
42.0	0.00	0.0	470.1	482.3	6.10	599.00
43.0	0.00	0.0	458.0	470.1	6.01	598.92
44.0	0.00	0.0	446.2	458.0	5.92	598.85

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S25.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S3 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	434.6	446.2	5.83	598.77
46.0	0.00	0.0	423.0	434.6	5.76	598.70
47.0	0.00	0.0	411.7	423.0	5.70	598.62
48.0	0.00	0.0	400.4	411.7	5.64	598.55
49.0	0.00	0.0	389.2	400.4	5.58	598.48
50.0	0.00	0.0	378.2	389.2	5.52	598.40
51.0	0.00	0.0	367.2	378.2	5.46	598.33
52.0	0.00	0.0	356.4	367.2	5.41	598.26
53.0	0.00	0.0	345.8	356.4	5.32	598.19
54.0	0.00	0.0	335.3	345.8	5.24	598.12
55.0	0.00	0.0	325.0	335.3	5.16	598.05
56.0	0.00	0.0	314.8	325.0	5.07	597.98
57.0	0.00	0.0	304.9	314.8	4.99	597.91
58.0	0.00	0.0	295.0	304.9	4.91	597.84
59.0	0.00	0.0	285.4	295.0	4.83	597.78
60.0	0.00	0.0	275.9	285.4	4.75	597.71

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

Pond File: c:\pondpack\10343\south\10343S .PND
Inflow Hydrograph: c:\pondpack\10343\south\10343S25.HYD
Outflow Hydrograph: c:\pondpack\10343\south\10343S3 .HYD

Starting Pond W.S. Elevation = 595.00 ft

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

Peak Inflow = 23.74 cfs
Peak Outflow = 7.26 cfs
Peak Elevation = 600.44 ft

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

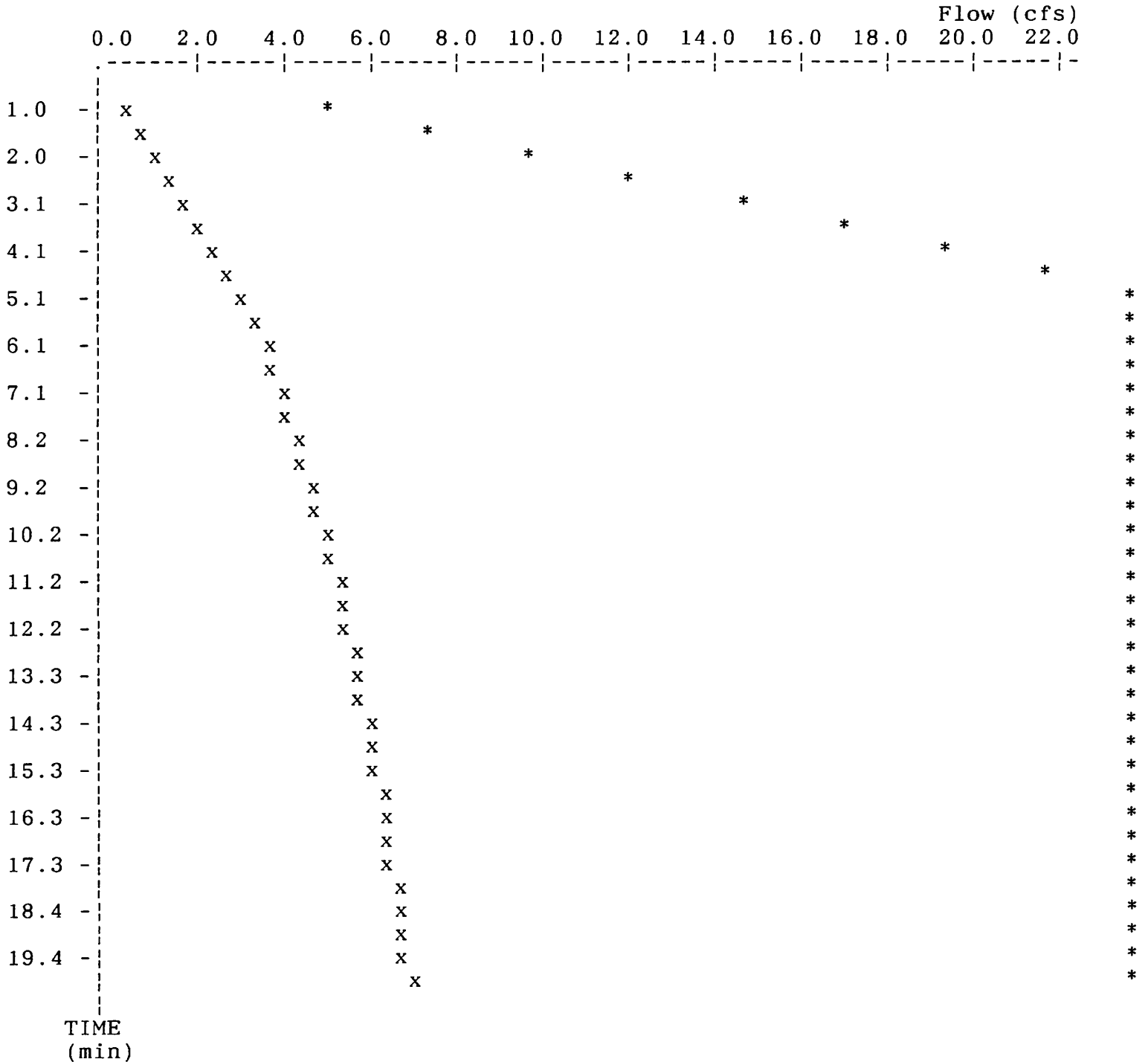
Initial Storage = 0 cu-ft
Peak Storage From Storm = 21,363 cu-ft

Total Storage in Pond = 21,363 cu-ft

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S25.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S3 .HYD

EXECUTED: 03-01-2000
 14:37:44

Peak Inflow = 23.74 cfs
 Peak Outflow = 7.26 cfs
 Peak Elevation = 600.44 ft



x File: c:\pondpack\10343\south\10343S3 .HYD Qmax = 7.3 cfs
 * File: c:\pondpack\10343\south\10343S25.HYD Qmax = 23.7 cfs

```

*****
*
*           WHITEGATE VILLAS
*           SOUTH
*   BAX ENGINEERING COMPANY INCORPORATED
*           JANUARY 3, 1999
*
*****
    
```

Inflow Hydrograph: c:\pondpack\10343\south\10343S00.HYD
 Rating Table file: c:\pondpack\10343\south\10343S .PND

----INITIAL CONDITIONS----
 Elevation = 595.00 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 + 0 (cfs)
595.00	0.0	0	0.0	0.0
595.25	0.2	20	0.7	0.9
595.50	0.6	164	5.5	6.1
595.75	1.1	553	18.4	19.5
596.00	1.7	1,311	43.7	45.4
596.25	2.4	2,303	76.8	79.2
596.50	3.1	3,310	110.3	113.4
596.75	3.5	4,333	144.4	147.9
597.00	3.9	5,373	179.1	183.0
597.25	4.2	6,429	214.3	218.5
597.50	4.5	7,501	250.0	254.5
597.75	4.8	8,590	286.3	291.1
598.00	5.1	9,696	323.2	328.3
598.25	5.4	10,818	360.6	366.0
598.50	5.6	11,956	398.5	404.1
598.75	5.8	13,110	437.0	442.8
599.00	6.1	14,280	476.0	482.1
599.25	6.3	15,466	515.5	521.8
599.50	6.5	16,670	555.7	562.2
599.75	6.7	17,889	596.3	603.0
600.00	6.9	19,125	637.5	644.4
600.25	7.1	20,377	679.2	686.3
600.50	7.3	21,646	721.5	728.8
600.75	11.8	22,930	764.3	776.1
601.00	20.0	24,232	807.7	827.7
601.25	30.5	25,548	851.6	882.1
601.50	43.0	26,882	896.1	939.1
601.75	57.1	28,232	941.1	998.2
602.00	72.6	29,599	986.6	1059.2

Time increment (t) = 1.0 min.

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S00.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S4 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	595.00
1.0	6.07	6.1	4.9	6.1	0.60	595.50
2.0	12.15	18.2	20.7	23.1	1.18	595.78
3.0	18.22	30.4	47.5	51.1	1.82	596.04
4.0	24.30	42.5	84.7	90.0	2.62	596.33
5.0	30.37	54.7	132.6	139.4	3.40	596.69
6.0	30.37	60.7	185.4	193.3	3.99	597.07
7.0	30.37	60.7	237.3	246.1	4.43	597.44
8.0	30.37	60.7	288.3	298.0	4.86	597.80
9.0	30.37	60.7	338.5	349.0	5.26	598.14
10.0	30.37	60.7	388.1	399.2	5.57	598.47
11.0	30.37	60.7	437.1	448.8	5.85	598.79
12.0	30.37	60.7	485.5	497.9	6.18	599.10
13.0	30.37	60.7	533.4	546.3	6.42	599.40
14.0	30.37	60.7	580.8	594.1	6.66	599.70
15.0	30.37	60.7	627.8	641.6	6.89	599.98
16.0	30.37	60.7	674.3	688.5	7.11	600.26
17.0	30.37	60.7	719.3	735.1	7.89	600.53
18.0	30.37	60.7	755.2	780.0	12.42	600.77
19.0	30.37	60.7	779.7	815.9	18.13	600.94
20.0	30.37	60.7	795.5	840.4	22.45	601.06
21.0	24.30	54.7	801.5	850.2	24.34	601.10
22.0	18.22	42.5	797.7	844.0	23.15	601.07
23.0	12.15	30.4	788.0	828.1	20.07	601.00
24.0	6.07	18.2	773.0	806.2	16.57	600.90
25.0	0.00	6.1	754.6	779.1	12.27	600.76
26.0	0.00	0.0	735.1	754.6	9.75	600.64
27.0	0.00	0.0	719.3	735.1	7.89	600.53
28.0	0.00	0.0	704.8	719.3	7.26	600.44
29.0	0.00	0.0	690.4	704.8	7.19	600.36
30.0	0.00	0.0	676.2	690.4	7.12	600.27
31.0	0.00	0.0	662.1	676.2	7.05	600.19
32.0	0.00	0.0	648.1	662.1	6.98	600.11
33.0	0.00	0.0	634.2	648.1	6.92	600.02
34.0	0.00	0.0	620.5	634.2	6.85	599.94
35.0	0.00	0.0	607.0	620.5	6.78	599.86
36.0	0.00	0.0	593.5	607.0	6.72	599.77
37.0	0.00	0.0	580.2	593.5	6.65	599.69
38.0	0.00	0.0	567.1	580.2	6.59	599.61
39.0	0.00	0.0	554.0	567.1	6.52	599.53
40.0	0.00	0.0	541.1	554.0	6.46	599.45
41.0	0.00	0.0	528.3	541.1	6.40	599.37
42.0	0.00	0.0	515.6	528.3	6.33	599.29
43.0	0.00	0.0	503.1	515.6	6.27	599.21
44.0	0.00	0.0	490.7	503.1	6.21	599.13

Pond File: c:\pondpack\10343\south\10343S .PND
 Inflow Hydrograph: c:\pondpack\10343\south\10343S00.HYD
 Outflow Hydrograph: c:\pondpack\10343\south\10343S4 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	478.4	490.7	6.14	599.05
46.0	0.00	0.0	466.3	478.4	6.07	598.98
47.0	0.00	0.0	454.3	466.3	5.98	598.90
48.0	0.00	0.0	442.5	454.3	5.89	598.82
49.0	0.00	0.0	430.9	442.5	5.80	598.75
50.0	0.00	0.0	419.4	430.9	5.74	598.67
51.0	0.00	0.0	408.1	419.4	5.68	598.60
52.0	0.00	0.0	396.8	408.1	5.62	598.53
53.0	0.00	0.0	385.7	396.8	5.56	598.45
54.0	0.00	0.0	374.7	385.7	5.50	598.38
55.0	0.00	0.0	363.8	374.7	5.45	598.31
56.0	0.00	0.0	353.1	363.8	5.38	598.24
57.0	0.00	0.0	342.5	353.1	5.30	598.16
58.0	0.00	0.0	332.0	342.5	5.21	598.09
59.0	0.00	0.0	321.8	332.0	5.13	598.02
60.0	0.00	0.0	311.7	321.8	5.05	597.96

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

Pond File: c:\pondpack\10343\south\10343S .PND
Inflow Hydrograph: c:\pondpack\10343\south\10343S00.HYD
Outflow Hydrograph: c:\pondpack\10343\south\10343S4 .HYD

Starting Pond W.S. Elevation = 595.00 ft

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

Peak Inflow = 30.37 cfs
Peak Outflow = 24.34 cfs
Peak Elevation = 601.10 ft

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

Initial Storage = 0 cu-ft
Peak Storage From Storm = 24,776 cu-ft

Total Storage in Pond = 24,776 cu-ft

Pond File: c:\pondpack\10343\south\10343S .PND

Inflow Hydrograph: c:\pondpack\10343\south\10343S00.HYD

Outflow Hydrograph: c:\pondpack\10343\south\10343S4 .HYD

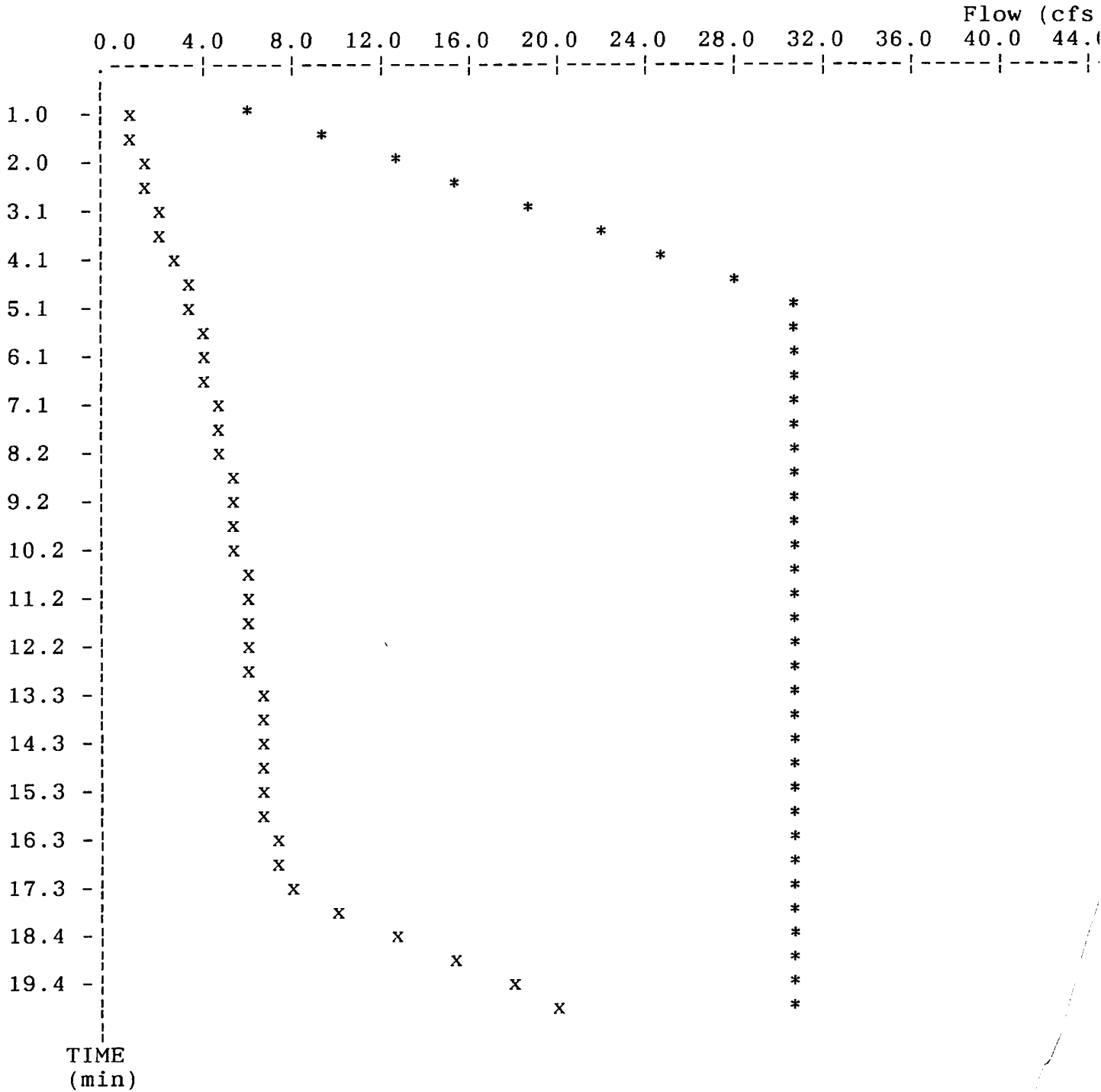
EXECUTED: 03-01-2000

Peak Inflow = 30.37 cfs

14:37:4

Peak Outflow = 24.34 cfs

Peak Elevation = 601.10 ft



x File: c:\pondpack\10343\south\10343S4 .HYD
 * File: c:\pondpack\10343\south\10343S00.HYD

Qmax = 24.3 cfs
 Qmax = 30.4 cfs